

Part 4: EVALUATION

EVALUATING PRIMARY PREVENTION PROGRAMS: MODELS AND MEASURES

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Accountability has become one of the watchwords of the 1980's. In this climate, program evaluation assumes a high priority. Taxpayers, funding agencies and skeptics wish to know if programs "work" and how much they cost. Another group—program advocates and program practitioners—also need to know if programs work. Their questions are somewhat different: they are interested not only in whether or not a program makes a difference, but which components of it account for the difference, how results of the evaluation can be transmitted to the program in order to make it more effective, and how the insights gained from evaluating a program contribute to an understanding of mental health.

To date, evaluation in the mental health field has proven disappointing. While it may have been useful in convincing funding bodies to preserve some programs or in justifying continuing expenditures, its potential for providing data useful for program feed-back or theory-building has been seldom realized.

When their data fail to exert an impact on programs, disgruntled evaluators often blame program personnel; the blaming takes the form of emphasizing the notorious resistance of institutions to change. More charitable evaluators modify this criticism by suggesting that, even when the will is present, fiscal and political realities constrain attempts to change. These factors may, however, be only part of the story.

To always blame systems for failing to adjust or to make use of evaluations is a bit like always blaming the patient for failure in psychotherapy. Sometimes patients are not motivated, and psychotherapy fails. However, psychotherapeutic failure is often due to the forcing of inappropriate models upon patients rather than to the latter's lack of motivation. Rather than trying to force all patients to accept a prescribed mode of psychotherapy, some innovative people have attempted to alter the model itself in order to better meet the patient on his or her own grounds (see for example Orne, 1968; Acosta, 1980). With suitable accommodation of the model of psychotherapy it is surprising how often people deemed "resistant to therapy" can be converted to psychotherapeutic

success stories.

An analogy exists in the field of evaluation. To many experts, the goal attainment model, derived from the experimental model revered in the physical and behavioral sciences, represents the ideal of evaluation. The use of any other model amounts to sacrificing scientific integrity, to being "soft" rather than "hard". However, people working in preventive mental health often require information not readily obtainable through the goal attainment model. Furthermore, satisfying the dictates of this model often becomes difficult in the action setting of mental health programs.

Program needs should determine the approach to evaluation. Rather than espousing one model of evaluation, the evaluator may need to employ a variety of models based on a combination of (i) the products of evaluation envisaged and (ii) the most appropriate methods to be used to obtain these products.

The bulk of this paper addresses the problem of models and how practitioners and evaluators might work together to effect a better fit between program needs and methods of evaluation. It is a call for flexibility and for creativity. The second part of the paper is concerned with another area which calls for the creative collaboration of practitioners and evaluators. This is the determination of measures. It focuses attention on the desired end-products of preventive programs. In this new era of prevention, what is it we wish to change or modify about human behavior? For examples of problems and of potential, I have drawn as much as possible upon American Indian and Alaska Native mental health programs of treatment and prevention.

MODELS: WHICH ARE APPROPRIATE FOR EVALUATING PROGRAMS IN PRIMARY PREVENTION?

The goal-attainment paradigm of evaluation, dominant in the field of evaluation research (Weiss, 1972; Bloom, 1977) rests on two assumptions: 1) that programs are designed and operated to achieve specific pre-determined objectives and 2) the best way to determine whether these objectives are being met is by extending research techniques developed in the experimental laboratory into natural social settings. According to the ideal, evaluation research proceeds by:

- a) having program personnel define the program's goals;
 - b) translating the goals into measurable indicators of success;
 - c) setting up experimental and control situations and collecting equivalent data for participants in each situation; and
 - d) comparing results for experimental and control groups.
- To the extent that differences in the predicted direction are found, the program can then be judged a success.

While it has proven useful in evaluating some mental health treatment (see Hammer et al., 1976) and prevention programs (Glidewell et al., 1973), this model has often proved unsatisfactory. There are many reasons for this. For one thing, specifying goals is a difficult enterprise. Prevention and treatment programs are complex, often pursuing multiple goals simultaneously. The goals most amenable to measurement and, therefore, supportive of elegant design, may be trivial to the entire enterprise. Practitioners often articulate goals in operations terms; whereas evaluators require them in the jargon of output; different levels of staff may have different definitions of goals. Secondly, from a methodological point of view, it is always difficult, sometimes impossible, to create in complex community settings, conditions which will approximate a true controlled experiment. Thirdly, even if, after an intervention, one can demonstrate differences between "experimental" and "control" groups, it may still be difficult to establish that the specific intervention is the cause of the change.

As a way of resolving the dilemma of models, I will suggest that evaluators and practitioners must first define what they expect from an evaluation, then let the expected product determine the methods to be used. The evaluation models presented in Figure 1 consist of the expected products of an evaluation exercise together with the methods most likely to achieve these products.

Figure 1

PRODUCTS	MODELS
1. Implementation Statements	Naturalistic Observation Descriptive Data
2. Formative Statements	Descriptive Data Naturalistic Observation
3. Summative Statements	Experimental

Products are classified as implementation, formative, and summative. Implementation products are answers to questions such as: "If one has a choice between alternative programs designed to achieve a given end, why should one select one over the others?" Here, we are interested in evaluating strategy. "Formative" evaluations, described by Scriven (1967) in the evaluation of education programs, produce information that is fed back during the development of a program in order to help improve it. Formative evaluation is an evaluation of effort. "Summative" evaluation, also described by Scriven, takes place after a program has been completed, providing

information about how effective the program has been in bringing about a desired change. This, in other words, is an evaluation of results.

No hierarchy of value can be attributed to these evaluation products. Some may be more useful than others to certain types of people, some more useful at a particular stage of program development than at another. For example, implementation and formative statements may be particularly useful to a program coordinator working in the field, while an administrator concerned with a policy decision about whether this program should be adopted for use by all health centers in his jurisdiction will ask for summative data.

Attaining diverse products in evaluation research calls for flexibility in the use of research methods. The product should determine the method; sometimes the achievement of a specific end-product will call for the simultaneous use of multiple methods of evaluation.

Calling for flexibility of method does not mean allowing "soft" approaches to supplant "hard" ones. Although it is beyond the scope of this paper, it is important to point out that naturalistic or "case" studies need be no less scientific than experimental approaches. Naturalistic studies must be judged according to criteria of excellence which, although different from the standards for experimental approaches, are no less well defined (see for example Diesing, 1971; Bromley, 1977).

Implementation Products: Evaluating Strategy

Implementation products take the form of answers to questions such as: Who should constitute the "target group" for prevention? What is the rationale for choosing a particular program over others?

Two evaluation studies of the Indian Health Service (I.H.S.) Mental Health Program, Mental Health Branch focus attention on specific target groups for prevention and also suggest program rationales. The first study, which took place during 1972 and 1973 (Attneave & Beiser, 1975, Beiser & Attneave, 1981), utilized the case study approach described by Diesing (1971) and Bromley (1977). Bromley describes the case study as a quasi-judicial process, in which data collected from diverse sources are examined for congruence and credibility. Inferences and hypotheses drawn from the evidence are then tested against new evidence or in an action setting. In this study, our methods included participant observation "on-site" in various I.H.S. settings, interviews with selected staff, a review of archival data and examination of existing quantitative data describing case loads and patient characteristics.

One year after the completion of the case study, Beiser and Att-

neave conducted an extensive series of analyses of patient contacts within the Indian Health Service Mental Health Branch for calendar year 1974 (see Beiser & Attneave, 1977). The automated record-keeping system instituted in 1974 stores information about each patient contact, including the patient's age, sex, presenting problems and type of service provided. These data lend themselves to certain quantitative-descriptive analyses.

Target Groups

Beiser and Attneave's studies reveal that children and adolescents constitute a high priority group for preventive services. Even though Indian children use mental health services at a higher rate than their non-Indian counterparts (Beiser & Attneave, in press), they still take a disproportionately small amount of mental health service time compared to adults. Only 14% of the 1974 outpatient mental health population was under the age of 15. By contrast, children under the age of 15 made up 45% of the reservation population as a whole. Do children require fewer services than adults? Probably not. Roy et al. (1970), in a survey of 10 Saskatchewan reservations, found a prevalence of mental disorder of 27.3 cases per 1,000 population. Children under 14 constituted one third of the active cases identified. If we can extrapolate from Roy's data to the I.H.S. utilization data, we would conclude that, if children's needs were met as well as those of adults, then the proportion of treatment contacts for children should be about 33%. Instead, it is 14%.

Not only do children make up a disproportionately small number of the service contacts within the Indian Health Service, they are also less apt to receive ongoing service than an adult who comes in contact with the Mental Health Branch. A child under the age of 15, having been seen one time, is less apt to be seen again than is a young or middle-aged adult (Beiser & Attneave, 1977, 1981).

Why do children receive fewer services than adults? The quantitative and naturalistic data, taken together, provide some clues. Interviews carried out with a variety of program personnel in mental health programs throughout the Indian Health Service revealed that, while staff perceived a high rate of mental health problems among children, they felt, on the whole, ill-equipped by training and by a lack of resources, to deal with them (Attneave & Beiser, 1975). Thus, epidemiological-descriptive data and naturalistic observations converge on a major point. Currently existing services for American Indian and Alaska Native children do not begin to address the extent of need; furthermore, staff feel poorly equipped to handle the problems of children who do come to their attention.

Other data, suggesting certain high-risk age periods for the development of emotional disturbance among American Indian and Alaska Native children, provide suggestions for preventive inter-

vention. At about age 10, Indian boys and girls appear at mental health facilities at a rate exceeding that for children aged 5 to 9. One tentative hypothesis is that Indian children, like some other minority groups, begin to experience difficulties in the school system at this age. This hypothesis is supported by the problem-oriented check list used by mental health personnel to account for each patient contact. Staff attribute a large number of contacts with children aged 10–14 to “learning difficulties”.

By late adolescence, more than a third of Indian children have left school (Bank Street College of Education, 1976). They enter the mental health treatment system—at an explosive rate—largely because of antisocial behaviour. For example, the rate of alcoholism among Indian adolescents is two to three times that of the general population (Jensen et al., 1979; Cockerham, 1975). Suicidal behavior, an admittedly imperfect measure of mental health risk, nevertheless again focuses attention on late adolescence. The completed suicide rate among Indians aged 15 to 19 is 19.2 per 100,000 population; for the general population of late adolescents it is 4.3 per 100,000 (Ogden, Spector, & Hill, 1970). These data suggest that ages 9 to 10 and ages 14 to 15 constitute critical periods for the timing of preventive interventions.

Using similar data derived from the Beiser and Attneave studies, one could create an argument that Indian elderly constitute another high-risk group (see Beiser & Attneave, 1977; Rhoades et al., 1980).

Which programs?

Having defined the target groups for preventive efforts, program planners and communities must still choose among a number of options. How can one justify the choice of one program over a number of other competing possibilities? Choice must rest on a combination of theory and values. While these two factors usually act as covert determinants of the decision to adopt a given program, there is utility in making them as explicit a part of the process as possible.

Theory. Returning, for example, to the question of programs for children aged 9 or 10, a body of theory and of associated research findings directs attention to the school as a setting for preventive action. Michael Rutter's work strongly implicates the school in creating a condition of risk. In London, Rutter followed 10-year old children during four years of secondary schooling. Since the mental health status of the children had been measured prior to entry to the secondary schools, Rutter could, on this basis, estimate the proportions of deviant and emotionally handicapped children who would be expected to appear among the populations of each secondary school. Follow-up results did not conform to expectations. Some schools, for example, produced as many as twice the number of deviant children as expected (Rutter, 1977).

A measure of academic potential at age 10—Children's Verbal Reasoning Ability—was also related to outcome. As might be expected, this measure proved to be a powerful predictor of academic attainment in secondary school. Schools differed, however, in their levels of exam results even after controlling for variations in ability of the children at the time of entry. Although verbal reasoning measured at age 10 was the strongest predictor of academic success at age 14, a factor which Rutter calls "school ethos" made independent and significant contributions to predicting school success. Factors included among the school ethos were the expectations that teachers held regarding their pupils' chances of success in examinations, the degree of academic emphasis in schools, the use of praise as incentive, role-modelling by teachers, the availability of teachers for activities that were not strictly academic, and the presence of a high proportion of children in the school who possessed at least average academic ability.

Rutter discerned a strong relationship between emotional difficulties and reading retardation, similarly between emotional problems and lowered mean scores on arithmetic ability. Over time, these relationships became stronger: children whose disorders persisted throughout the four years of the study showed more reading retardation than children whose disorders remitted or those who developed emotional disorders subsequent to age 10. Trends for mathematical ability were similar. However, the mean IQ scores of children with emotional disorders fell in the normal range (Rutter 1977, 1979).

At about age 9, Indian children begin to exhibit the well-known "crossover phenomenon" (Fuchs & Havighurst, 1972; Saslow & Harrover, 1968). Whereas, prior to age 9 or thereabouts, Indian children perform academically as well as White children, their performance begins to deteriorate at the Grade 3 level. After this, they fall behind White children. The common interpretation is that Indian children have less well-developed reading and English-language verbal skills than White children (Bank Street College of Education, 1976). Since at Grade 3 reading becomes a critical skill in school, the disadvantage of Indian children begins to manifest itself at this time.

It is equally possible that Indian children perform more poorly than Whites because they suffer a higher prevalence of emotional disturbances. In other words, poor school performance may be an effect, rather than a cause of mental disorders. Kleinfeld and Bloom (1977), for example, report that 75% of children in an Alaskan boarding school had school-related social or emotional problems. Saslow and Harrover (1968) found that children with low achievement scores exhibited anomie and low self-esteem. These studies suggest a scenario in which Indian children, reared in nurturant surroundings, enter schools which expose them to cultural discrepancies. Under these pressured conditions, they mature either into older chil-

dren who are viewed by the majority culture as shy, non-competitive and non-learning or as older rebellious youth who are rude, aggressive and destructive.

Quite apart from having to perform with inadequately developed verbal skills, potential sources of emotional stress for Indian children in schools include: a lack of culturally appropriate role models, school curricula that are often at odds with the child's cultural orientation, and a special set of damaging circumstances prevalent in Indian boarding schools.

Indian children have little chance of being exposed to Indian teachers who can act as role models for academic achievement. Approximately 85,000 Indian children currently attend the Bureau of Indian Affairs' schools, which include boarding schools and public schools operating on or contiguous to a reservation. In these schools, only 15% of teachers are Indian. Most other Indian children attend public schools on or close to reservations where the population of Indian teachers is even lower (Havighurst, 1978). Within the schools, Indian children are often exposed to material, particularly in history and social studies texts, which presents a devalued image of the Indian (Havighurst, 1978).

It is also possible that non-Indian teachers, who feel a sense of social and emotional distance from their Indian students (Galloway & Mickelson, 1970; Hammerschlag et al., 1973), are more apt to resort to the mental health system to control intolerable behavior than they would if dealing with White children.

Forty thousand children attend BIA-run boarding schools whose characteristics, which create a mental health risk for children, have been long known and previously described (Kleinfeld & Bloom, 1977; Havighurst, 1978; Beiser, 1973).

While none of these studies definitively demonstrate cause and effect, the problems are so pressing that action needs to be taken even before all the evidence is in. The Chinese expression *moi sui* applies to prevention. It means literally "to touch, to feel, to grope around." In prevention, we usually operate with partial knowledge, utilizing it to develop innovative and creative action, evaluating the results of that action as we go along.

In the field of children's mental health, partial knowledge would seem to dictate a consideration of school-based preventive mental health programs. Within the school, certain elements should be considered as targets for change, among them working with teacher attitudes towards children paying attention to the context of school curricula, optimizing opportunities for role modelling and assuring reading readiness. Programs could be devised to alter these elements singly or in combination, in order to permit systematic evaluation of effects under conditions which could approximate an experimental design.

Mid-adolescence is another high-risk period. Not only is there an explosion in the rate of referrals to mental health services for the 15 to 19 age group, but also distressingly high rates of substance abuse and suicidal behavior. A considerable body of research and theory (Erikson, 1939, 1950; Saslow & Harrover, 1968) suggests that this is the age at which young people become exposed to the stress of cultural conflict, when they experience maximal difficulty integrating traditional values with those of the majority society.

The research of Polgar (1960) and McFee (1968) illustrates that cultural conflict does not inevitably result in personal break-down. As McFee points out, living with a foot in each of two cultures creates opportunity as well as risk. For good reason, McFee called a person who mastered the situation the "150 percent man". The "150 percent man" not only maintains personal equilibrium, but becomes a resilient innovator, a person who moves with comfort between cultures, incorporating elements from each which, in the long term, are useful to him.¹

Polgar's (1960) research, as well as those of others (Beiser & Collomb, 1981), identify some aspects of successful biculturation. According to Polgar, Mesquakie teenagers who, as younger children, had lived away from their home reservations for a time in supportive circumstances, were better able to adapt when they were later called upon to live off-reservation than teenagers who had not had this experience. While not directly translatable into a mental health prevention program, the principle derived from this research could, with some creativity, yield guidelines for future action.

Values. The "values" in evaluation usually refer to objectives. Programs try to achieve certain objectives which are valued by mental health experts and/or communities. The degree to which a program achieves these objectives is a measure of its "goodness" (see also Suchman, 1967).

While the role that values play in determining program objectives is fairly explicit, the influence of values on the selection of programs to attain these objectives usually remains covert. However, just as the objectives of certain programs may be seen as possessing a higher value than others, different values can also be attached to the means utilized to attain these ends. For example, that a program should be "cost-effective" is so widely accepted that it may seem odd to point out that this constitutes a value-statement. But, if two programs prove equally potent in attaining a desired goal, the one which costs less will, thereby, be more highly valued.

Cost is not the only value criterion by which programs are assessed. In the long run, the cheaper program may not become the chosen one. It is rare, however, to see program-related values—other than cost—clearly explicated.

I would like to suggest another value by means of which program operations can be assessed. Simply stated—since values are affective as well as cognitive formulations they lend themselves to simplicity—I propose that, to the extent that mental health programs build upon, or utilize the strengths within traditional cultures they be considered “good”.

The much-praised Plateau Indian Tribal Youth Home offers a case in point (see Shore and Keepers in this volume). Prior to the opening of the facility in the reservation, 28% of all children under the age of 18 had been removed from their family homes following complaints of neglect or abandonment to be placed in off-reservation facilities. Under the auspices of the tribe and with mental health consultation from the Indian Health Service, a group home was opened providing short-term sheltered care, long-term placement counselling and minor medical treatment for Indian children ranging in age from one year to 18.

No evaluation of the program which would satisfy a methodological purist has ever been conducted. For example, one approach to measuring outcome of success could be to study whether, as a result of the program, the incidence of antisocial behavior among reservation teenagers was reduced or whether long-term adjustment among children housed in the tribal group home was superior to that of children who had, in former times, been placed in off-reservation settings. It is also possible to imagine a quasi-experiment in which the results among Plateau reservation teenagers could be compared with similar reservations where no tribal group home exists.

From a strict goal-attainment model perspective, the most that can be said is that the Plateau program has achieved certain intermediate goals: the rate of off-reservation referrals for delinquent children has dropped dramatically, the length of time children apprehended by the law spent in reservation jails has decreased and more parents whose children are apprehended are now receiving mental health counselling (Shore & Nicholls, 1975). Despite the lack of goal-attainment evaluative data, the program is widely hailed as a success.

The reason for this, I believe, is that the intermediate program goals and the program activities themselves possess such high intrinsic value. For one thing, keeping children who require care physically close to their parents, while at the same time involving the parents by out-reach programs, reinforces the family, which is a highly valued institution in Indian culture. Off-reservation placement, on the other hand, destroys the integrity of the family. The intermediate goals of the Plateau program—to maintain the integrity of the family—are consonant with Indian values. Their attainment means, to many people, that the program has been a success regardless of the lack of outcome data.

The activities of the program provide another level of cultural reinforcement. This is because the tribe conceptualizes the group home as a new form of an old tribal tradition—the Whipper Man. In former days, the Whipper Man, chosen by tribal leaders, disciplined unruly or disrespectful children. “The child care center was seen as taking up the Whipper Man’s role in the village as a non-family participant in child-rearing practices who was sanctioned by the community” (Shore & Nicholls, 1975, p. 454). Thus, from two perspectives—intermediate goals and program activities, both of which are seen to possess intrinsic value—the Plateau program is judged a success, despite the lack of end-product goal-attainment data.

In another context, Eisenberg (1977, 1981) points out that, in prevention, if one can attain intermediate goals which in themselves are highly valued, it is not necessary to await the outcome of studies of more distant outcome goals in order to justify a program. Eisenberg’s example is malnutrition in children. Long-term data demonstrating that nutritional supplementation contributes to better cognitive development or that it prevents the occurrence of mental disorder are not necessary in order to justify programs which attempt to feed children better.

Zimiles (1977) also discusses the role of values in evaluation. He makes the point that, in many human endeavors, value-consonant activities justify themselves, and are maintained even in the absence of outcome data:

We have very little systematic, experimentally controlled data regarding the efficacy of any of our most important activities or institutions. We do not know if going to a museum or library or concert really makes a difference nor do we have sound evidence regarding the value of making a trip to Europe; yet we ungrudgingly spend large sums of money on such ventures. If we are selecting a camp for our child, we do not ask for data informing us about the average swimming speed improvement, nor would we be very much influenced by such data were it (sic) available (p. 69).

Judgements about the value quotient of program activities or outcomes should not become substitutes for other kinds of program assessment. However, value judgements forced into an explicit framework, provide an additional dimension to evaluation. Besides asking “Has a given program attained its stated objectives?”, we could also ask: “How much does it cost to achieve these objectives?” and “In attaining the objectives does the program build upon and thereby reinforce community and cultural strengths?”

Formative Evaluation: Evaluating Effort

Formative evaluation is concerned with process. Data which are generated can be fed back to an agency or institution in order to

aid it in assessing its success in instituting or maintaining a program. Research of this nature concerns itself with issues such as whether or not services are reaching a specified target population and how program personnel are deployed. Descriptive analyses based on data collected in standardized fashion are the most frequently used methods. Case studies may also be useful.

The already-cited (1977) study by Beiser and Attneave based on the Indian Health Service's automated record-keeping system provides an example of this model of evaluation as it pertains to treatment systems. The example has implications for prevention as well. The study examined the proportion of time spent in various program activities by different categories of staff. The most frequent types of activities included individual, family and group therapy; consultation with community agencies, and cooperative case management with other community agencies. Program personnel included psychologists, psychiatrists, nurses, social workers and paraprofessional (mainly Indian) social work aides and mental health workers. According to our analyses of these data, the most highly trained mental health personnel spent the greatest proportion of their time in individual patient contact. The psychiatrists, for example, devoted most of their service time to individual psychotherapy, medication review and writing prescriptions. Paraprofessionals, on the other hand, performed most of the collaborative and consultative duties. One could question whether this particular sequestration of personnel is, in the long run, in the best interest of service. In addition, it raises important issues regarding prevention.

Prevention—particularly if it must be targeted to children and the elderly as previous analyses suggest it should—must, in some way or another involve agencies outside the mental health stream itself. The analysis of I.H.S. personnel activities suggest that the most highly trained mental health personnel are preoccupied with treatment activities, leaving whatever preventive efforts occur in the hands of paraprofessionals. Our case data indicate that paraprofessionals feel ill-equipped for this responsibility and frequently feel a lack of back-up expertise for their efforts.

These data raise another concern. If the role model for less highly trained personnel is that of someone administering individual therapy (what the professionals do), will service activities inevitably shift in this direction as paraprofessionals begin to emulate the more highly trained personnel possessing greater prestige? In the face of present-day affirmation of primary prevention, do the current structure and day-to-day activities of the Indian Health Service militate against this principle?

Summative Evaluation: Evaluating Outcomes

The goal-attainment model, already described, is the model par excellence for answering the question of whether or not a program has reached its defined objectives. Obviously, it is not enough to establish that a damaging set of conditions creates mental health risk. One must be able to demonstrate that altering the conditions results in removing the risk.

For instance, referring again to the relationship between the school environment and the mental health of children, Eisenberg (1981) has this to say:

The demonstration of the powerful impact of schools on pupils' behavior has important implications for mental health promotion via the upgrading of schooling. The decisive 'controlled clinical trial' remains to be done: is it possible to intervene in the less successful schools to incorporate the desired school characteristics and to demonstrate that these lead to better pupil outcomes? (p. 8)

Ironically, something approaching Eisenberg's "decisive 'controlled clinical trial' " has, in fact, been carried out. It is a Navajo boarding school program which has escaped the attention it merits.

In 1969, what has come to be known as the Model Dormitory project began in a boarding school at Toyey, Arizona. Years of accumulated evidence had implicated the boarding school as an environment deleterious to the mental health of Indian children. Taking this evidence as their point of departure, the Toyey school board, the Bureau of Indian Affairs and the mental health program of the Indian Health Service undertook a joint program to evaluate whether certain alterations could convert this environment to one conducive to mental well-being. The design of the program was simple. Only the dormitory staff was changed; no facilities were constructed or remodelled, and no changes were made in classrooms. The number of staff was increased. Whereas formerly the child to adult staff ratio in Toyey was, as in most boarding schools, 80:1, under the terms of the program, it was lowered to 12:1. One of the assumptions of the program was that Navajo children are best cared for by Navajo people. Therefore, the houseparents chosen were all Navajo rather than—as in most places—predominantly Anglo. Mental health consultation was made available to staff.

Using the experimental paradigm, a control school was chosen whose baseline characteristics closely matched those of Toyey. Well-designed instruments were used to assess the achievement of program objectives in three major areas—intellectual development, emotional adjustment and physical development.

Unfortunately—and the word is too mild—apart from scattered,

anecdotal reports, results from this important effort have never been published. We have been assured (Goldstein, 1974) that children in the Toyei model dormitory performed better than control children in all areas of assessment. However, until this study has been reported in sufficient depth, and until it receives the attention it seems to merit, it will remain one of the tragedies of unfulfilled potential in the fields of prevention and evaluation.

Before shifting the discussion to issues of measurement, the following caveat must be noted. The order of presentation of methods of evaluation may seem to imply a hierarchy of value from case study methods, to descriptive data to—at the summit—the experimental model. However, this is not the intent. Method must be matched to the question asked. The order of these questions—strategy, implementation or outcome—is unimportant.

MEASURES

For a number of reasons, single measures to evaluate the outcome of preventive programs do not suffice. For one, change in programs over time creates the potential for new and sometimes unanticipated outcomes. Secondly, program effects are invariably complex, usually affecting multiple aspects of intrapersonal and interpersonal behavior. Cowen (1978) advocates the use of multiple criterion measures of outcome: "Doing so not only accurately reflects a program's true complexity, but it also reduces the risk of putting all one's eggs in a single delicate criterion basket" (p. 800).

Prevention can be thought of in two senses: preventing the occurrence of undesirable patterns of health and behavior or promoting healthy ones. Our thinking about what to prevent, drawing on a rich clinical core, has spawned many constructs and measures which can be used in evaluation studies. It has, however, proven remarkably difficult to decide what positive mental health means, let alone to develop measures for this construct.

Heath (1977) has made a significant contribution to this field. He posits that maturing is accompanied by increased capacity for symbolization, by an increasingly allocentric orientation, by a higher degree of autonomy, stability and integration. Using this theoretical framework, Heath has examined cognitive abilities, self concept and values in samples of university men in the United States, Turkey and Italy. By and large, the men who were seen as more mature by peers and professors could be distinguished from the immature by psychometric means: their cognitive abilities, self-concept and values were marked by a higher degree of symbolization, allocentrism, stability, integration and autonomy than were those of the immature men. Despite the rarefied nature of its samples, the study is significant for its attempt to present a unifying conceptual framework for

positive mental health and for the hints it provides that, even in differing cultures, patterns of maturation may be constant.

Heath's concept that maturing brings with it an increasingly higher level of autonomous cognition provides theoretical context for a new ideology in health care. This might be characterized as moving health care professionals away from a preoccupation with what they can do for people to how they can enable people to make decisions in the interest of their own health promotion. Ivan Illich (1975), for example, cautions against the dangers of the "expropriation of health" by modern-day health care professions. This process, by which information and responsibility for health is taken over by the health professions, renders individuals dependent, robbing them of personal autonomy. Ultimately, people are thereby rendered less healthy. Similarly, Erickson² speaks of "centrality" as conducive to mental health. Centrality, for Erikson, means the sense of being central to the events of one's life, rather than a peripheral object of circumstances.

Pierce (1982) calls attention to the personal responsibility to make informed choices regarding health. As Pierce says, "... part of mental health (is) being a more active and better informed participant about your own health." He sees the role of health professionals as helping people to make life choices which promote health and prevent illness. Part of the professional's responsibility is to provide information—for example, to inform people that if they choose to reduce drinking, eliminate smoking, control their weight, sleep seven hours per night, exercise regularly, they will probably live longer (Institute of Medicine, 1979). People must assume personal responsibility in how they choose to use such information.

Presumably, Heath, Illich, Erikson and Pierce would all agree that programs which place more useful information in the hands of the public and which promote individual responsibility for health care are health-promoting programs. They enable people, in Heath's terms, to become more autonomous.

Despite its heuristic value, one could criticize Heath's model of mental health for being too Apollonian. Man's affective life as well as his cognitions and performance should be included in a well-rounded concept of health. Two affective dimensions of positive mental health, which might be termed zest and contentment, have received some research attention.

Although he refers to it as positive affect, Bradburn's (1965, 1969) well-known scale consisting of items such as "During the past few weeks have you felt particularly excited or interested in something?" and "During the past few weeks have you felt on top of the world?" seems to offer an operational measure of the desired feeling state we often call zest.

One reason for calling this dimension something other than positive affect is that it has proven possible to operationalize and measure another positive affect—contentment—and to demonstrate that the two operate as relatively independent aspects of well-being (Beiser et al., 1972, 1974). The two dimensions demonstrate different patterns of association with other variables. For example, the strongest and most consistent correlation for zest, in Bradburn's studies as well as those of others, has proven to be evidence of involvement in social organizations (Bradburn, 1969; Beiser, 1974; Beiser & Leighton, 1976). Contentment, a more perduring feeling state than zest, has as its major correlates, the sense of satisfaction emanating from family and work (Beiser & Leighton, 1976). It has also been demonstrated that each dimension acts as a separate and independent determinant of people's overall feelings of happiness (Beiser, 1974; Beiser & Leighton, 1976).

These findings are consistent with a theory of health as a dynamic process rather than a static end state (Beiser & Leighton, 1976). This theory, which also emphasizes the need for multiple criteria in assessing the mental health outcome of programs, is based in part on survey research findings. In a well-known study of a national U.S. sample of adults, Gurin and associates (Gurin et al., 1960) employed a multiple-criteria approach to the study of well-being; they asked their subjects about feelings of happiness as well as about worries. Eighty-nine percent of the sample said they were "very happy" or "pretty happy", while 25% said they worried a lot, or all the time. In other words, at least 14% of the population were both happy and, at the same time, worried a great deal. In a later study, Bradburn (1965, 1969) and his associates employed a list of questions designed to measure "negative affect" in addition to the "positive affect" items (what I have termed zest) already mentioned. To the surprise of Bradburn and his co-workers, the expected inverse relationship between zest and the negative affect items could not be demonstrated. The two item domains were completely unrelated. Furthermore, just as zest and contentment make a separate contribution to overall happiness, it appears from Bradburn's work that zest and negative affect each operate as separate determinants of well-being. As Bradburn (1969) says:

A person's sense of well-being can be understood best as a function of the relative strengths of the positive and negative feelings he has experiences in the recent past. The data show clearly that these two distinct and independent dimensions are associated with different aspects of a person's life. Forces contributing toward increased negative feelings, and those forces which contribute toward the development of positive feelings, such as social interaction and active participation in the environment, do not in any way lessen negative feelings. Thus, it is possible for a person who has many negative feelings to be happy, if he also has

compensatory positive feelings. Only by knowing the relative balance of feelings can one make prediction about people's happiness (pp. 56-57).

Another study (Beiser, 1974) reveals that depressive affect varies directly, as does psychiatric disorder (Dohrenwend & Dohrenwend, 1969), with material deprivation. In other words, the socioeconomically deprived have the highest rates of depressed affect and psychiatric disorder. However, neither zest nor contentment show any relationship to material prosperity.

The relationship between physical health and psychological well-being has been the topic of studies in Canada (Beiser, 1974; Beiser & Leighton, 1976) and in Puerto Rico (Maitlin, 1966). Results in both places were consistent: the more physical illnesses people have, the more negative feelings they report. However, number of physical illnesses does not relate to positive feelings.

The implications for evaluation of preventive mental health programs are fascinating. It is conceivable that two programs could be found equally effective in reducing the incidence of mental disorder. However, it is also plausible that different program structures or differences in the way in which preventive services are delivered might show a difference in the level of positive feeling states generated. Thus, there is utility in thinking of multiple measures of program outcome. There are also implications for theory-building, by attempting to systematically study hypothesized relationships between preventive activities and positive mental health outcomes.

DISCUSSION

The potential of evaluative studies for contributing to an understanding of human nature and of organizational systems has not yet been realized. Future efforts in evaluation should be shaped by a recognition of the needs of differing constituencies. These include governments and funding bodies, program practitioners, the communities served by the program in question and the scientific community. Serving the needs of these different constituencies calls for flexibility of methods and a constant awareness of multiple types of possibilities of outcome. A sensitive case study approach may be necessary in order to understand the community and the program at the time an evaluation is to begin, to place the proposed study in a historical context and to clarify the nature of the preventive program. Descriptive data will be helpful in establishing whether a program is being implemented as people expect it to be while an experimental or quasi-experimental design will generate needed data about outcome measures. Even if an experimental evaluation has taken place, evaluators may have to return to a careful case study framework in order to make theoretical sense out of what really

happened, which components of a program seem to account for any differences observed and to generate new ideas for research and implementation.

NOTES

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1. Devising a program to promote such growth would be an example of health promotion, rather than illness prevention. Judging from the literature, health promoting programs are highly valued (see for example Lalonde, 1974). However, the products of these programs—health behavior as opposed to illness—are difficult to conceptualize, let alone to measure. This is a topic which I shall address further in the section on measures.
2. Erikson, E. H. Introductory remarks. In M. Beiser and J. H. Shore (Eds.), *Flower of two soils: Native American youth in transition*. Unpublished manuscript.

REFERENCES

- Acosta, F.X., Evans, L.A., Yamamoto, J., & Wilcox, S.A. Helping minority and low-income psychotherapy patients tell it like it is. *Journal of Biocommunication*, 1980, 7, 3, 13–19.
- Attneave, C.L., & Beiser, M. *Service networks and utilization patterns: Mental Health Programs, Indian Health Service*. U.S. Public Health Service, Report No. 110-73-342, 1975.
- Bank Street College of Education. *Young Native Americans and their families: Educational needs assessment and education*. New York: Bank Street College of Education Research Division, 1976.
- Beiser, M., & Attneave, C.L. *Analysis of patient and staff characteristics, presenting problems and attitudes towards mental health: Indian Health Service, Mental Health & Social Services*. U.S. Public Health Service, Indian Health Service, Report No. 240-75-0001, 1977.
- Beiser, M., & Attneave, C.L. Mental health services for American Indians: Neither feast nor famine. In R.H. Dana (Ed.), *Human services for cultural minorities*. Baltimore, M.D.: University Park Press, 1981.
- Beiser, M., & Attneave, C.L. Mental health of Native Indian children: Rates and risk periods for entering treatment. *American Journal of Psychiatry*, in press.

- Beiser, M., & Leighton, A.H. Personality assets and mental health. In B.H. Kaplan, R.N. Wilson, & A.H. Leighton (Eds.), *Further explorations in social psychiatry*. New York: Basic Books, 1976.
- Beiser, M. Components and correlates of mental well being. *Journal of Health and Social Behavior*, 1974, 15, 4, 320—327.
- Beiser, M., Feldman, J.J., & Egelhoff, C.J. Assets and affect: A study of positive mental health. *Archives of General Psychiatry*, 1972, 27, 545—549.
- Beiser, M., & Collomb, H. Mastering change: Epidemiological and case studies in Senegal, West Africa. *American Journal of Psychiatry*, 1981, 138, 4, 455—459.
- Bloom, B.L. Evaluating achievable objectives for primary prevention. In D.C. Klein & S.E. Goldston (Eds.), *Primary prevention: An idea whose time has come*. U.S. Department of Health and Human Services, ADAMHA, NIMH, DHHS Publication No. (ADM) 80—447, 1977.
- Bradburn, N.M., & Caplovitz, D. *Reports on happiness*. Chicago: Aldine, 1965.
- Bradburn, N.M. *The structure of psychological well being*. Chicago: Aldine, 1969.
- Bromley, D.B. *Personality description in ordinary language*. New York: John Wiley & Sons, 1977.
- Cockerham, W.C. Drinking attitudes and practices among Wind River Reservation Indian youth. *Journal of the Study of Alcohol*, 1975, 36, 321—326.
- Cowen, E.L. Some problems in community program evaluation research. *Journal of Consulting and Clinical Psychology*, 1978, 46, 4, 792—805.
- Diesing, P. *Patterns of discovery in the social sciences*. Chicago: Aldine, 1971.
- Dohrenwend, B.P., & Dohrenwend, B.S. *Social status and psychological disorder*. New York: Wiley, 1969.
- Eisenberg, L. A research framework for evaluating the promotion of mental health and prevention of mental illness. *Public Health Reports*, 1981, 96, 1, 3—19.
- Eisenberg, L. The children, the youth: Our first priority. In M. Beiser, Krell, T.Y. Lin, & M. Miller (Eds.), *Today's priorities in mental health: Knowing and doing*. The Proceedings of the 1977 World Congress on Mental Health. Miami: Symposia Specialists, 1978.
- Erikson, E.H. Observations on Sioux education. *Journal of Psychology*, 1939, 7, 101—156.

- Erikson, E.H. *Childhood and society*. New York: W.W. Norton, 1950.
- Fuchs, E., & Havighurst, R.J. *To live on this Earth: American Indian education*. Garden City, N.Y.: Doubleday, 1972.
- Galloway, C.G., & Mickelson, N.I. Changes in personal-social distance of teachers of Indian children. *American Journal of Orthopsychiatry*, 1970, 40, 681-683.
- Glidewell, J.C., Gildea, M.C., & Kaufman, M.R. The preventive and therapeutic effects of two school mental health programs. *American Journal of Community Psychology*, 1973, 1, 295-329.
- Goldstein, G.S. The model dormitory. *Psychiatric Annals*, 1974, 4, 11, 85-92.
- Gurin, G., Veroff, J., & Feld, S. *Americans view their mental health*. New York: Basic Books, 1960.
- Hammerschlag, C.A., Alderfer, C.P., & Berg, D. Indian education: A human systems analysis. *American Journal of Psychiatry*, 1973, 130, 1098-1102.
- Hammer, R.J., Landsberg, G., & Neigher, W. (Eds.). *Program evaluation in community mental health centers*. New York: D and O Press, 1976.
- Havighurst, R.J. Indian education since 1960. *American Academy Political and Social Science Annals*, 1978, 436, 13-26.
- Heath, D.H. *Maturity and competence. A transcultural view*. New York: Gardner Press Inc., 1977.
- Illich, I. *Medical nemesis. The expropriation of health*. London: Calder and Boyars, 1975.
- Institute of Medicine. *Healthy people: The surgeon general's report on health promotion and disease prevention*. Washington: U.S. Government Printing Office, 1979.
- Jensen, G.F., Straus, J.H., & Harris, V.W. Crime, delinquency and the American Indian. *Human Organization*, 1977, 36, 3, 252-257.
- Kleinfeld, J., & Bloom, J. Boarding schools: Effects on the mental health of Eskimo adolescents. *American Journal of Psychiatry*, 1977, 134, 4.
- Lalonde, M. *A new perspective in the health of Canadians: A working document*, Ottawa: Government of Canada, Cat. No., H31-1374, 1974.
- McFee, M., The 150% man, a product of Blackfoot acculturation. *American Anthropologist*, 1968, 70, 1096-1103.
- Maitlin, N. *The demography of happiness*. Puerto Rico Master Sample Survey of Health and Welfare. Sec. 2, No. 3. Rio Pedras: U. of Puerto Rico School of Medicine, 1966.

- Ogden, M., Spector, M.H., & Hill, C.A. Suicides and homicides among Indians. *Public Health Reports*, 1970, 35, 1, 75-80.
- Orne, M., & Wender, P. Anticipatory socialization for psychotherapy: Method and rationale. *American Journal of Psychiatry*, 1968, 124, 88-98.
- Pierce, C.M. Mental health and social development. In R. Nann, S.D. Butt, & L.L. Ignacio (Eds.), *Mental health, cultural values and social development: A look into the 80's*. Amsterdam: D. Reidl & Co., 1982.
- Polgar, S. Biculturation of Mesquakine teenage boys. *American Anthropologist*, 1960, 62, 217-235.
- Rhoades, E.R., Marshall, M., Attneave, C.L., Echohawk, M., Bjork, J., & Beiser, M. Impact of mental disorders upon elderly American Indians as reflected in visits to ambulatory care facilities. *Journal of the American Geriatric Society*, 1980, 28, 1, 33-39.
- Roy, C., Chaudhuri, A., & Irvine, D. The prevalence of mental disorders among Saskatchewan Indians. *Journal of Cross-Cultural Psychology*, 1970, 1, 4, 383-392.
- Rutter, M. Prospective studies to investigate behavioral change. In J.S. Strauss, H.M. Babigian, & M. Roff (Eds.), *The origins and course of psychopathology*. New York: Plenum Press, 1977.
- Rutter, M. *Fifteen thousand hours*. Cambridge: Harvard University Press, 1979.
- Saslow, H.L., & Harrover, M.J. Research on psychosocial adjustment of Indian youth. *American Journal of Psychiatry*, 1968, 125, 224-231.
- Scriven, M. The methodology of evaluation. In R.W. Tyler, R.M. Gagne, & M. Scriven (Eds.), *The methodology of evaluation*. AERA Monograph Series on Curriculum Evaluation, No. 1., Chicago: Rand McNally & Co., 1967.
- Shore, J.H., & Nicholls, W.W. Indian children and tribal group homes: New interpretations of the Whipper Man. In S. Unger (Ed.), *The destruction of American Indian families*. New York: Association on American Indian Affairs, 1977.
- Suchman, E.A. *Evaluative research: Principles and practice in public service and social action program*. New York: Russell Sage Foundation, 1967.
- Weiss, C.H. *Evaluation research methods of assessing program effectiveness*. Englewood Cliffs, New Jersey: Prentice-Hall Inc., 1972.

Zimiles, H. A radical and regressive solution to the problem of evaluation. In L.G. Katz (Ed.), *Current topics in early childhood education*. Vol. 1, Norwood N.J.: Ablex Pub. Corp., 1977.

DISCUSSION

Joe Trimble: As Morley Beiser points out, early evaluation research was guided heavily, if not exclusively by the hypothetical deductive research strategy in which you compartmentalize, you operationalize, you nest conditions, you control, you use very well-defined measures, always standardized, if possible. . . We're in an era now where people are questioning very seriously this perspective and orientation on many grounds.

What's happened, I think, is that "evaluators" have been asked to fix programs, have been asked to tell program directors what's wrong with programs, have been asked by agency heads to provide them with needed data so that they can continue to substantiate the continued funding of certain programs. . . This country has bought into the role of evaluation, in many cases almost blindly. A lot of programs, particularly those funded by National Institute of Alcoholism and Alcohol Abuse, required their training efforts to build-in an evaluation component. In fact, I once read that 10% of the budget should be used for some sort of process evaluation in every training effort. I recall sitting on a training review committee looking specifically for evaluation designs. But that's changing now. . .

The other thing that bothers me about evaluating prevention efforts, and you have alluded to it, is that we never really know when a person achieves wellness. We don't know what the criteria are; we don't know what constitutes competence. . . Nonetheless, I, like you, feel that we need to begin to develop schemes that will enable us to in fact describe what something does. I think we can describe how a program works. As Malcom Parlett suggests in his illuminative perspective: one illuminates through interviews, through observations, through the use of hard data such as records . . . You examine its structure **and** function.

George Keepers: The Warm Springs program has gone through a period of time in which it has been evaluated by several outside agencies, primarily because it receives funds from several outside agencies all of which have specific built-in reporting and evaluation requirements as you've mentioned. They have become largely disenchanted with that. The Warm Springs program staff found that the information that it gives them is not worth the effort they have to put in to fill out the forms and to deal with the treatment strategies that the forms imply, which may not be appropriate for their particular setting. They now are looking at building an evaluation

strategy into the program itself so that, as part of the program's continuing evaluation, internal evaluation occurs. I suspect that this approach will work much better.

Joe Trimble: A lot of agencies have problems with that. They say you're biasing your data, as if you have been objective by building checks into the program before it is implemented. I find that to be absolute nonsense. I defy someone to challenge my objectivity if I'm evaluating a program. I may have a great deal of time and effort invested in something, but that doesn't necessarily mean that I can't be objective about how I collect information, how I assess the impact that something is having, and about employing an outside evaluator to corroborate my findings, to show me as a third party that I'm doing the right thing.

Norm Dinges: I'm amazed to hear you say that considering the massive literature on experimenter effects. The impact in this kind of political context is even much more likely. There is a definite politics of evaluation in any kind of program; I think objectivity is severely threatened. . . I just have to disagree very strongly that there's not a politics of evaluation, I think it depends very much on the evaluation model and the extent to which you operationalize. The only problem with operationalizing is that you really don't know in advance what the best indicators are. You have to make your predictions long before the events occur.

With respect to the question of values in evaluation, Morley, you didn't say too much in your paper about needs assessment: how one defines the needs, who defines the needs and who operationalizes the needs. This has to emanate from the community, particularly in cross-cultural settings. We certainly tried to do that in our program beginning with having the community define mental health needs as they perceived them. Community review is another issue that has to be mentioned because you may work hard to gather data—hard or soft, but in the final analysis it depends on how the community perceives the effects that's critical.

Bernard Bloom: My impression in talking with people in other fields besides mental health is that they are astonished in how **little** money we put into evaluating our work, not how **much** money.

The more I work in this field the more alarmed I get at people who become discouraged by our hard approach to evaluation and then want to back off and get more soft evaluation. The objectives of our programs are important and it's important to know whether we achieve them or not. We all tend to be very selective about our attention to evaluation results, tending to remember the results that conform to our belief system.

If you want to do something about reducing suicide rates among the Indian population, that's a wonderful objective. It seems to me that there's absolutely nothing wrong with calculating a suicide rate

before your program started and after your program has been under way for awhile and look to see if you reduced the suicide rate. If you want to reduce the occurrence of otitis media, if you want to increase the hearing of young people. . . it requires you to be very specific in your own mind as to what it is you're trying to accomplish in your program and to ask yourself the next question which is, "How would I ever know this?" That doesn't mean that you are restricted in your evaluation studies to log or multiple regression analysis. There's nothing wrong with using a case history approach so long as you ask yourself, "What am I trying to accomplish by this program and what evidence do I have that I accomplished it?" If you don't ask these questions, you're in a pack of trouble. If you don't know where you're going, you'll never know if you get there. So I'm always worried by people who want to back off from doing hard nosed evaluation. Otherwise, you run the risk that your program will end up existing on the flimsiest kind of foundation and therefore become very vulnerable to changes in politics and changes in the economy of our country. People knock off programs left and right and they do that when you don't have any evidence that is persuasive that the program is worth keeping.

Now one other point. There are some propositions each of us holds that are non-refutable. There's no evidence in the world you can give me that will make me change my mind about certain things. For example, I think patients in mental hospitals should be reasonably well clothed and well fed. I don't care if you show me data otherwise. I don't care that if you feed them less, they get out of the hospital faster. I believe that psychiatric patients ought to be reasonably well clothed and well fed. There isn't any evidence that you can provide me that will make me change my mind. Don't go to the trouble of finding the evidence. One of the things we have to ask ourselves is "Do we have any refutable propositions around?"

Another issue about evaluation is not, "Should we have the program or not?"; it is, "Which program should we use?" Should we try method A for reducing suicide rate or method B or method C? If you have a variety of strategies for reducing suicide rates, it seems to me to be critically important that you be reasonably hardnosed about looking to see which of the programs seems to have the best results.

John Red Horse: Returning to Norm's remark about community review. An interesting suggestion came out of the National Indian Council on Aging meeting last Fall which passed the general assembly. The elders wanted to know who evaluation is for: the evaluator and the government, or is it for community building? They suggested that when we do evaluations that we write two reports. Write one report that is rigorous, that we can give to the government and write another report that's in the language that elders can understand saying what have we done, how we did it, what have we accomplished.

EXAMPLES OF EVALUATION RESEARCH IN DELIVERING PREVENTIVE MENTAL HEALTH SERVICES TO INDIAN YOUTH

James H. Shore

and

George Keepers

As mental health programs for American Indian youth have grown, it has become increasingly important to develop strategies of evaluation and research to demonstrate the effectiveness of various interventions. The goal of this paper is to review the theoretical issues that should be considered when proposing research to evaluate Indian youth programs that are designed to prevent behavioral adjustment problems. We discuss examples of program evaluation of Indian youth services that demonstrate various types of inquiry which, in turn, lead us to propose a process for conducting research of this nature. The paper closes by describing a pilot evaluation of a tribal adolescent group home as an applied example of the proposed prevention research process.

THEORETICAL ISSUES

Writing about child psychiatric epidemiology with special reference to American Indian and Alaskan Native children, Green, Sack and Pambrun (1981) raised a number of questions that present a challenge for future studies in prevention research:

Do adolescents who return to Indian life after foster care by Whites really show an exaggerated identity crisis? Can this be documented epidemiologically to support what experienced workers intuitively sense? What can we learn both for the American Indian and for the U.S. population as a whole about the effects of cultural disorganization and culture transition on children's upbringing and problems? What about the hypothesis that American Indian early development is superior, or at least not impaired, and that a definitive 'cross-over' point exists? Can this be better documented or more firmly negated? Can we formulate categories of childhood disturbance that will be useful in epidemiological research on American Indian children and yet make sense in Indian terms? Then, too, can we learn from the Indian children and adolescents who do relatively well or stay in rather than drop out? What protective fac-

tors exist to confer relative invulnerability to the cultural stresses described? (p. 34)

This series of questions poses fundamental issues of cultural sensitivity, potential prevention of behavioral maladjustment among Indian youth, and the evaluation of subsequent prevention efforts.

In a recent discussion of the major issues in conducting research among American Indian children, Beiser (1981) emphasized several factors which should be considered in an evaluation design. These factors include comprehensiveness of psychological test items, the inclusion of positive mental health constructs, the employment of multiple perspectives, the striving for age appropriateness, and cultural sensitivity. Such considerations should guide future methodological developments in the field of child psychiatric research. While comprehensive lists of items or rating scales for studies of the majority population provide a convenient starting point, their adaptation for use among American Indian children will require caution. Categorizing items of behavior should be based on the principle of allowing the data to speak for itself. The development of psychological measures from multiple perspectives expands the data base in a search for more valid measures. Multiple perspectives can prevent uncritical labeling and include consideration of cultural factors and attributes of positive mental health. These various perspectives should include the child's psychological inner state, teachers' classroom observations, parents' home observations, the Indian community's definition of the observed behavior, and an evaluation by a mental health professional. In addition, Indian communities are presently in rapid transition, often with multiple changes in human service programs occurring simultaneously. Evaluation efforts must consider the potential effects of all relevant influences on the adjustment of Indian youth, even though this broader perspective of social structure and interpersonal dynamics complicates evaluation.

An understanding of evaluation research in mental health prevention programs for American Indian youth must begin with a discussion of the definition of prevention. Caplan (1964) provides a traditional public health definition of prevention at primary, secondary, and tertiary levels. (See Manson, Tatum and Dinges in this volume for a more detailed discussion.) Primary prevention reduces the incidence of a mental disorder in a community. Secondary prevention reduces the duration of a mental disorder. Tertiary prevention reduces the resultant impairment, but does not alter the appearance or length of an illness or serious behavior problem.

In a recent book on primary prevention, Klein and Goldston (1977) argue that there is resistance to the development of a precise definition of prevention because popularity and vagueness of the term permits use of "prevention" in a wide variety of activities. They propose that the use of the word be limited to primary pre-

vention. We disagree. In community mental health field research, including prevention research with American Indian youth, it is important to systematically work from a classification of symptoms in a patient or student group towards an earlier stage of case identification. This method provides a conceptual approach to prevention that is applicable to all community health services. It allows integration of prevention efforts at any level in a service delivery model and avoids a polarization between "prevention" and "other" approaches. Thus, one reaches primary prevention systematically through observations at the tertiary and secondary prevention levels. Several program examples illustrate this progression.

PROGRAM EXAMPLES

The program examples in question are drawn from two areas of concern in regard to the emotional development of American Indian children: 1) boarding school adjustment and 2) the relationship among adoption, childhood identity, and adolescent adjustment.

Concern for the adjustment of Indian and Native children who attend boarding school focuses attention on areas of adolescent behavior and educational achievement. Writing about the hazards to mental health which are posed by boarding schools, Beiser (1974) stated that the central problem is that children living without parents are not provided with sufficient opportunity to form meaningful relationships with other adults. Since the staff of many boarding schools are inadequate in size and experience to deal with youngsters at special risk, they cannot be expected to provide for the emotional needs of the children. Other factors also contribute to mental health hazards in Indian boarding schools. These include the referral of high-risk students to boarding schools, a pattern of academic underachievement unrelated to intelligence, and the phenomena of increasing drop-out in high school years (see Kleinfeld in this volume for a more detailed discussion).

Shore (1975) previously reviewed several examples of preventive mental health programs for American Indian youth in boarding schools. He presented their systematic evaluation and the application of the research findings for program development. We will elaborate on two school programs, summarizing the nature of the problems confronted, interventions performed, and resulting impacts.

Boarding School Dropout Prevention

During the late 1960's the dropout rate in an Indian boarding school rose from 3% to 26% of the student body.¹ A psychiatric consultant (JS), in collaboration with staff from the health program and boarding school, designed a research project to evaluate the rel-

ative adjustment of dropout and non-dropout students. These student groups were compared in terms of demographic factors and tribal identity, previous school records, and history of delinquency and guardianship status, in addition to boarding school academic performance, behavior, and health history. The health history included information about potential drug abuse and suicidal behaviors.

The study demonstrated that three items in the students' backgrounds were significantly related to subsequent dropout from the boarding school: 1) a history of institutional or foster home care prior to school referral; 2) a history of legal guardianship different than one's parents and 3) poor achievement test scores prior to boarding school admission. These data were used in the subsequent school year to identify high-risk students for special services. The special services consisted of out-reach counseling coordinated by mental health, academic and dormitory staffs with a group training program for dormitory aides. In the year of intervention the dropout rate decreased from 26% to 19% of the student body. Yet, this initial success was only temporary. The prevention program was not continued, largely because of complicated political and administrative program changes; the dropout rate increased once again.

The implications for prevention are dramatic. If school dropout of Indians and Natives can be prevented, then the student will benefit significantly from a more stable educational experience. Although not documented by systematic research, the association of high school dropout by Indian adolescents and an increase in adjustment problems has been confirmed repeatedly by clinical observation (Bergman, 1969; Kleinfeld & Bloom, 1977; Krush et al., 1969). This example demonstrates a prevention effort that proceeded through systematic identification of symptoms and characteristics of high-risk students. Primary prevention of school dropout was directed to the "newly discovered" high-risk group. However, the research began at the tertiary level with the clinical evaluation of symptomatic students. The initial intervention represented an attempt to reduce the impairment of their symptoms of behavioral maladjustment. This contact, combined with the comprehensive collection of relevant data, made prospective identification of high-risk students possible, and led to the program for secondary and primary prevention. The effect of preventing school dropout has elements of both secondary and primary prevention. Secondary prevention reduces the duration of psychiatric illness that would be prolonged as a result of dropout. Primary prevention reduces the occurrence of psychiatric illness that may be caused by the dropout experience.

Model Dormitory Project

Goldstein (1974) reported on the development of a model dormitory project at a Navajo boarding school in the southwestern United States. In 1969, as a strategy for promoting change, one school dormitory which housed 200 children from 5 to 11 years of age was singled out for a dramatic increase in the number of dorm staff. The ratio of children to house parents was decreased to 12 students to 1 staff person, a marked change from the usual ratio of 80 students to 1 staff person, a ratio which has been as high as 200 to 1 in other boarding school dormitories. House parents — who were Indian and who spoke their native languages — were given intensive, in-service training in child care. The model dormitory and a matched control dormitory from another school were evaluated throughout the first three years of operation. Results documented the effectiveness of this primary prevention, demonstrating that on measures of intelligence and of emotional and physical development, children of the model dormitory were significantly superior to those of the control dormitory. However, in the fall of 1973, this program was also closed for lack of funds.

The above examples indicate that there have been successful preventive mental health programs for Indian youth. The examples demonstrate the complex relationship between the use of research to document successful intervention and the difficulty in utilizing these findings to insure the continued evolution of successful programs. This difficulty emphasizes the importance of considering social structural change (political and programmatic) as well as individual student adjustment in the successful application of prevention techniques.

A STAGED PROCESS FOR EVALUATION RESEARCH

In our experience, while the majority of Indian youth program directors use concepts of disease prevention in the provision of services, they do not incorporate these same concepts into the design of subsequent evaluations. We propose a staged process of program evaluation that corresponds to the three levels of prevention. It offers a systematic approach to prevention research that encourages working from case data towards a multi-dimensional perspective of program effectiveness in a cross-cultural setting. This process links evaluation of symptoms, their duration, and frequency of occurrence to tertiary, secondary, and primary prevention, respectively.

A program aimed at tertiary prevention treats the symptoms of a particular behavior or illness but would not seek to prevent a recurrence of the illness. With respect to Indian youth, a third stage study would involve behavioral or symptomatic screening to identify

student adjustment problems and to evaluate the effectiveness of a given intervention. The boarding school dropout study summarized above began at this level.

Secondary prevention decreases the number of disruptive episodes or the duration of a particular illness. A second-stage study would attempt to ascertain if an intervention resulted in a shorter duration or fewer episodes of a specific illness or adjustment problem. Second-stage studies can, in turn, direct program development towards primary intervention.

Primary prevention, if successful, stops the occurrence of the illness or problem in question. A first-stage study would seek to determine if an illness has been prevented. Both boarding school studies demonstrate elements of primary prevention. The first prevented school dropout, and presumably associated morbidity. The second prevented the morbidity which appears to be associated with retarded emotional and intellectual development. These studies demonstrate the multivariant nature of etiology and the many associated factors that contribute to mental health adjustment. Unlike the classical infectious disease model, no single cause is responsible for psychiatric illness or destructive behavior. For example, prevention of school dropout (not an illness) may prevent other behaviors such as suicide attempt (a symptomatic behavior) and/or depression (a psychiatric illness). We recognize that many programs' prevention efforts are directed at these multiple levels and that a rigid staging of research design can at times seem artificial.

PRELIMINARY EVALUATION: A PREVENTION STUDY

There is widespread consensus among Indian communities that Indian child welfare is a national Indian priority for political action and program development. This consensus led to special legislation, the Indian Child Welfare Act, Public Law 95-608, which was passed by the U.S. Congress in 1978. The pattern of off-reservation adoption of Indian children by non-Indian families had created a vicious cycle of child placement and parental destabilization, which Shore (1978) and others have discussed. Many tribal programs were developed to reverse this trend. Yet, there has been little systematic research to evaluate the effectiveness of these efforts despite clear implications for mental illness prevention.

The Community

In 1973 one of the plateau reservations of the Pacific Northwest opened a tribally-sponsored residential group home for adolescents and an emergency shelter for younger children (Shore and Nicholls,

1975). Tribal policy was changed to require placement of children in this home or in on-reservation foster homes rather than off-reservation as had previously been the case. As a result a unique opportunity arose to study the preventive implications of these changes and to determine the results of the different placement and treatment strategies in the affected cohorts of children. In order to determine the feasibility of such a comprehensive study, a preliminary investigation was undertaken.

The population of this reservation is composed of over 2000 members of three tribes of the Great Basin and Plateau Indian culture areas. They were relocated on a single reservation located east of the Cascade Mountains. The largest of the three tribes speaks Sahaptin, a language similar to other major plateau tribes of this region.

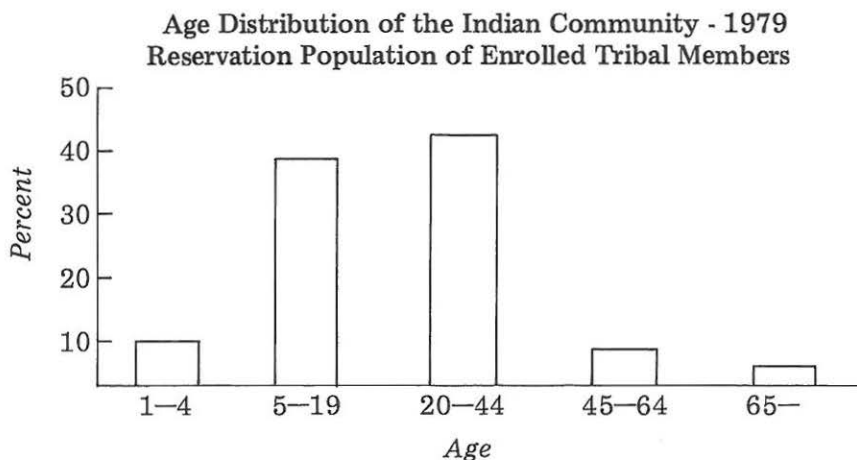
The reservation is self-governing; hence, the laws of the surrounding state are not valid within the reservation's boundaries. The people have established their own governmental and social service agencies. As a result of their independence from state agencies, interface with these agencies is problematic and obtaining state services is often difficult. The Indian Health Service of the U.S. Public Health Service provides medical care for the reservation but has been unable to meet the extensive mental health and social service needs. The tribes have established their own mental health and social service agencies supported by tribal resources and federal grants.

Tribal health and social programs are sponsored by a consolidated tribal government which includes a legislative body, the tribal council, composed of traditional chiefs and elected representatives. Tribal government includes an executive branch (a tribal corporation), a judicial system (a tribal court and police), and physical resource agencies. The social service agencies interact with other tribal agencies and serve as a resource, especially to the tribal court. During the development of the mental health and social service agencies, other tribal programs have brought about significant changes in the standard of living, income, housing, and educational experience of the reservation population.

The tribal mental health programs include the tribal group home previously mentioned, an emergency shelter program for younger children, a foster care program, a residential alcohol treatment center, crisis services, outpatient alcohol counseling, and psychotherapy services. Social services include financial aid, health care outreach, and services for the elderly. Due to the preponderance of Indian youth on the reservation and difficulties with alcohol related accidents, child neglect and child abuse, much effort has been focused on providing appropriate facilities for their care. Figure 1 indicates that approximately 50% of the reservation population is under 20

years of age. It was common to place children in non-Indian, off-reservation foster homes for care and treatment. In 1971, before the

Figure 1



tribal group home opened, there were over 200 Indian children in off-reservation placements. This number represented approximately 20% of the total population of children and youths. At the time that this report was written there were only seven children representing far less than 1% of the youth population. This change came about as a result of a tribal policy which required placement on the reservation whenever possible.

Children were placed in these facilities by the tribal court either because of their own or their parents' behavior. Typically, children were placed for having run away, because of delinquency, their own or parent's misuse of alcohol and drugs, parental neglect, or parental abuse. Many children were placed in the residential home. Children were also sent to off-reservation facilities for psychiatric treatment. Some were placed in foster homes both on- and off-reservation, or were returned to parents or relatives.

Method

The feasibility study was undertaken in three steps. First, a survey of sources of information which could be used to help determine outcome for cohorts of children was undertaken by one of us (GK) who works on the reservation with the tribal mental health program. Information sources and availability were determined through conversations with members of the various tribal organizations and direct examination of the various record systems. Secondly, overall statistics from the operation of the tribal group home were examined.

Number of residents, average age, male/female ratio, and average length of stay were determined for 1974 and for 1979. These were the first and last years for which complete statistics are available. Finally, 10 individual patient charts from 1974 and ten from 1979 were randomly selected for careful review. The charts were examined to determine sex, age, family composition, reasons for placement, length of stay, and disposition of each patient. The data were compared for the 1974 and 1979 cohorts.

Results

Table 1 presents information from our examination of the overall statistics for the group home. The number of children served by the group home declined from 105 in 1974 to 49 in 1979. Between 1974 and 1979 the average age increased from 10.3 to 14.3 years and the average length of stay of group home residents increased from 31.1 to 36.8 days. This increased length in residence is largely attributable to the female residents whose stays increased from an average of 25.8 to 36.8 days.

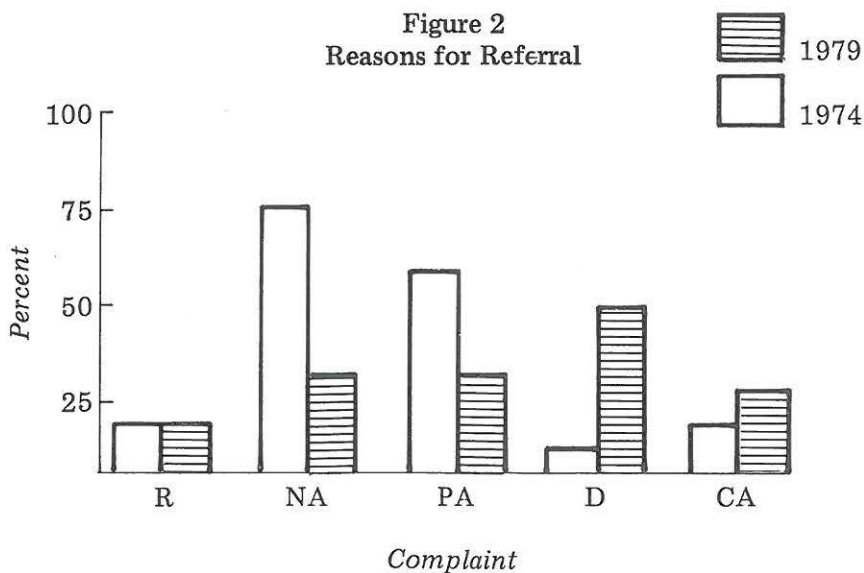
An examination of the charts revealed wide variation in completeness and quality. Some records contained a full psychiatric evaluation; others only a few demographic items. There was an identifiable shift in the complaints that led to group home placement during the period studied (see Figure 2). In 1974 the predominant reasons for placement of a child involved parental behavior. By 1979 the behavior of the child figured most importantly in reasons for placement. Figure 3 depicts the disposition of group home residents in 1974 and 1979. A change in the placement of children from the group home was found. In 1974 there was a greater use of foster home placement; whereas five years later the use of treatment facilities had increased.

Table 1

Group Home Census by Sex, Age, and Length of Stay in Days

	Total	Average		Males	Average		Females	Average	
		Age	length of stay		Age	length of stay		Age	length of stay
1974	105	10.3	31.1	55	10.5	36.0	50	10.0	25.8
1979	49	14.3	36.8	21	13.6	36.8	28	14.8	36.8

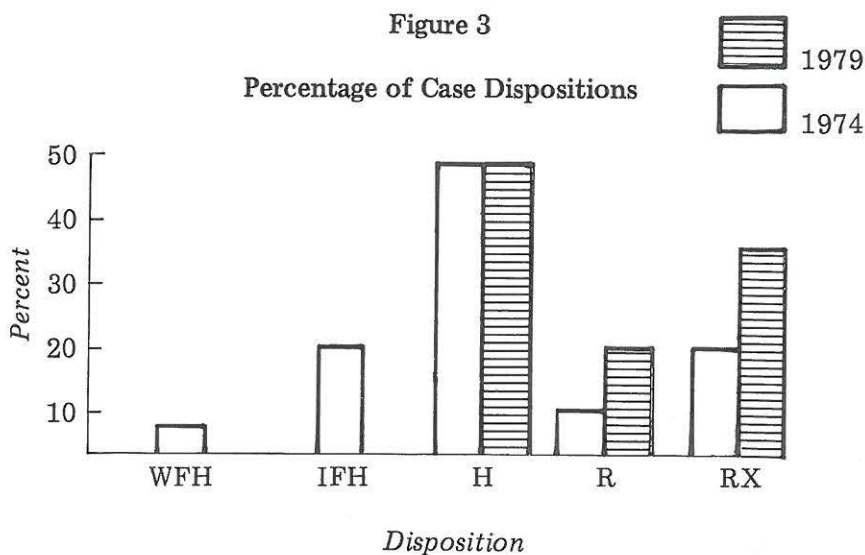
Figure 2
Reasons for Referral



R — runaway
NA — parental neglect
and/or abuse

D — delinquency
CA — child alcohol or drug abuse
PA — parent alcohol or drug abuse

Figure 3
Percentage of Case Dispositions



WFH — White foster home
IFH — Indian foster home
H — sent home

R — sent to relatives
RX — sent to treatment facility

This preliminary evaluation demonstrates that a comparison of cohorts is possible and that the findings suggest the feasibility of and directions for an outcome study. It appears that the initial goal of the tribal program, to control off-reservation, non-Indian foster home and adoption placements, was accomplished during the early years of program services. The initial referrals were of younger children, referred for parental behavior, who were placed in foster homes. By 1979 it is possible that the majority of the children needing this intervention had been served. In 1979 the typical child was older. They were more likely to be placed in the group home for delinquent behavior, and a larger number were subsequently referred to a treatment facility.

These findings raise a number of questions: Did adolescent adjustment problems become more prevalent on the reservation between 1974 and 1979? Did reservation foster home placement contribute to an increase in the number of adolescents with adjustment problems living in the community? Did the program first serve one group of children in 1974 and a second cohort by 1979 or were they the same cohort five years later? For example, it is possible that the "success" of the tribal program in "preventing" off-reservation placements kept all the high-risk youth on reservation. This would have contributed to the evolving pattern of group home services and possibly to the observation of a higher delinquency rate in the community. Thus the program's successful placement policy might necessitate additional interventions in the community for high-risk adolescents five to ten years later.

During the period in which the tribal group home has been operating, additional mental health and social services were established. There have been several policy changes by the tribal council and court which affect children; moreover, the tribe's economic wealth has increased dramatically. These factors undoubtedly have influenced the development and course of psychiatric problems among the tribal youth. Prevention studies must be designed with an awareness that multiple factors may affect the outcomes of a treatment program quite apart from the nature of the intervention. A social systems view should be included in the design of evaluation methods to account for such extra-programmatic impacts.

Nonetheless, in this program example, the preliminary evaluation yielded a data base that can address various hypotheses concerning the frequency and length of disruptive behavioral adjustments and the effectiveness of specific services in preventing relapses and chronicity. The preliminary evaluation also identified inconsistent data in the chart review that will affect the reliability of subsequent

research. Future evaluation should consider the fact that data on these cohorts of children is available from multiple sources. The tribal mental health records contain information which may be relevant to the effectiveness of the program. Tribal police and court records are an additional source of data. A tribal computersystem which tracks each tribal member could be of potential use in tracing individuals for follow-up interviews. The role and function of such data depend upon the kinds of questions asked and the sanction of the tribal council.

This study provides an opportunity to identify significant variables that may contribute to prevention and demonstrates how one can establish a point of departure for other, successive stages of prevention evaluation research. Ultimately, the research should address whether the goal of on-reservation placement was accompanied by the desired changes towards greater psychological stability of the Indian children, a true test of primary prevention.

SUMMARY

We have presented examples of program evaluation of Indian youth preventive services that illustrate different stages of inquiry. These examples include evaluations of a boarding school dropout prevention project, of a model dormitory project, and of a tribal group home. We emphasize that in prevention research with American Indian youth it is important to systematically work from a classification of symptoms in a patient or student group towards an earlier stage of case identification. This allows integration of prevention efforts at any level in a service delivery model and avoids a polarization between "prevention" and "other" approaches. We propose that one can reach primary prevention systematically through observations at the tertiary and secondary levels of prevention and that this approach should guide future evaluation research.

NOTES

1. Programs and communities are not identified by name to avoid stigmatizing a school or tribe with a particular type of problem.

REFERENCES

- Beiser, M. Mental health of American Indian and Alaska Native children: Some epidemiological perspectives. *White Cloud Journal*, 1981, 2 (2), 37-47.
- Beiser, M. A hazard to mental health: Indian boarding schools. *American Journal of Psychiatry*, 1974, 131 (3), 305-306.
- Bergman, R. Boarding schools and psychological problems of Indian children. *Hearings before the special subcommittee on Indian education*, Ninetieth Congress, Vol. 3. Washington, D.C.: U.S. Government Printing Office, 1969, 1121-1127.
- Caplan, G. *Principles of preventive psychiatry*. New York: Basic Books, 1964.
- Green, B.E., Sack, W.H., & Pambrun, A. A review of child psychiatric epidemiology with special reference to American Indian and Alaska Native children. *White Cloud Journal*, 1981, 2 (2), 22-36.
- Goldstein, G.S. The model dormitory. *Psychiatric Annals*, 1974, 4 (9), 85-92.
- Klein, D.C., & Goldston, S.E. *Primary prevention: An idea whose time has come*. Washington, D.C.: U.S. Government Printing Office, 1977, v-viii.
- Kleinfeld, J., & Bloom, J. Boarding schools: Effects on the mental health of Eskimo adolescents. *American Journal of Psychiatry*, 1977, 134 (4), 411-417.
- Krush, T., Bjork, J., & Sindell, P. Some thoughts on the formation of personality disorder: Study of an Indian boarding school population. *Hearings before the special subcommittee on Indian Education*, Ninetieth Congress, Vol. 5. Washington, D.C.: U.S. Government Printing Office, 1969, 2218-2241.
- Shore, J.H. Destruction of Indian families—Beyond the best interests of Indian children. *White Cloud Journal*, 1978, 1 (2), 13-16.
- Shore, J.H. Preventive mental health programs for American Indian youth - Success and failure. In D.V. Siva Sankar (Ed.), *Mental health in children*. New York: PJD Publications, 1975, 61-71.
- Shore, J.H., & Nicholls, W.M. Indian children and tribal group homes: New interpretations of the Whipper Man. *American Journal of Psychiatry*, 1975, 132 (4), 454-456.

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DISCUSSION

Harriet Lefley: One of the things that struck me in the early part of the paper, talking about theoretical issues once again, is how much we need measures to validate the existing measures for adjustment. I think we have the beginning technology to develop such measures. Today, it is better to begin with cultural definitions of social behavior; I have tried to describe some of this methodology in my paper, but we have a long way to go.

Coming to the evaluation model itself, the preliminary research demonstrated that three items of the students' backgrounds were significantly related to subsequent boarding school dropout. All three variables were antecedent and apparently predictive, although one (grade-point average prior to admission) might have been a consequence of the other two. This was a good example of heuristic or what Beiser might call "theory-building evaluation," which I think is a critical function of evaluation. These data show us that a secondary or tertiary prevention effort can work, but the predictors also tell us something about what to do in regard to primary prevention, i.e., the antecedent events to prevent. The sequential evaluation, the stage-studies approach, is a good idea, a good example of deriving primary hypotheses from evaluations of interventions at the second stage and from the establishment of the data base. The data base sheds light on both retrospective and prospective questions in the example given.

Now, coming to the discussion of the preliminary evaluation and your progression. The second stage study, when you ask why did the program first serve one group in 1974 and a second cohort by 1979 and you ask about community variables, is very critical. How might this be related to culture change, which we always think of as toxic but in this case may have positive effects? Apparently primary prevention has already occurred if this is the case. It seems to have occurred naturally, as part of the organic development of the community, because the younger children without demonstrated disruptive behavior are no longer referred. The only referrals are at the secondary prevention level. These factors clearly have some effect, as Judith has mentioned, and can give us some clues about the things that are occurring naturally. The method provides a basis for identifying the positive elements in the community—possible adaptive strengths that might be related to organic primary prevention in the community itself.

In conclusion, I want to say that the customary uses of evaluation—for accountability and programmatic improvement, or what Beiser has called summative and formative evaluation—are not enough. Evaluation can be a powerful research tool, because it is a perfect source for generating hypotheses—the kind John Berry calls retroductive. Ideally, every evaluation of a prevention program should provide a data base either for (a) exploring or discarding hypotheses about antecedent events, or (b) for determining correlates of successful interventions, or best of all (c) as baseline data for prospective studies. Norm Dinges' work is a classic example of what could be done with (c). It's only the latter that will really allow us to make definitive statements about prevention of psychopathology.

Morton Beiser: I want to come back to the question of evaluation. It seems to me that we've gotten trapped into a dichotomy when we talk about hard vs. soft and strong vs. weak approaches. The point I was attempting to make was not a question of rejecting one approach to evaluation in favor of another one, but rather a plea for more flexibility in evaluation. It's not that any one method is strong or weak. It's that certain methods meet certain needs better. I think, for example, if one is concerned about a question like, "What are the unanticipated consequences of an evaluation?" you have to look at a case method approach in addition to whatever other approach you're thinking about. Harriet makes a very important point that any evaluation must contribute to theory building. That's a significant point. We all have various approaches that we have been talking about which contribute to theory building. The case method approach, just as an experimental approach, contributes to theory building, so it's a question of marrying the design or the approach, the method to the need rather than advocating one approach over another.

Bernard Bloom: I want to just check out my reading of the distinction you make between formative and summative statements. I think what you call formative statements is what I call the evaluation of effort; what you call summative statements, I call the evaluation of effect. I wrote down assessment of need where you talked about implementation. A statement of need, an assessment of need. Now, if that's a reasonable translation, then your notion about use of the method that is the most appropriate for the situation at hand, reduces itself to the following kind of assertions. If you have a strategy that you'd like to put into effect to prevent some particular mental disorder and you don't know if that strategy is effective or not, then you've got to conduct studies that evaluate the effectiveness of that strategy and that's what you call summative statements. This gets back to something Joe mentioned earlier and would require that you have an experimental group and a control group to really do find out whether your procedure has any kind of effect or not. If,

on the other hand, you have a procedure you'd like to invoke, the effectiveness of which has already been established, as, for example, the use of seat belts or fluorides to reduce dental care, then you're really interested in the evaluation of effort. The issue is not do seat belts work, but do people use seat belts, because you've already established that belts work. Or, how successful the community has been in getting fluoride into the water if their water supply was deficient. These are evaluations of effort. I hope you see a parallel between that and what you call formative statements.

GETTING IT TOGETHER AT ADOLESCENCE: CASE STUDIES OF POSITIVE SOCIALIZING ENVIRONMENTS FOR ESKIMO YOUTH

Judith Kleinfeld

In developing preventive approaches to mental health problems, much can be learned from the study of natural social settings which appear to be having positive effects on high risk population groups. These settings may suggest new approaches to designing mental health programs. They also may suggest ways in which preventive mental health efforts can be embedded in existing institutions, such as schools, camps, churches, and recreation programs. Locating preventive mental health programs in such natural settings can cut the high costs of typical intervention efforts while greatly increasing the number of people served.

This paper examines two very different settings in Alaska, a religious boarding school and an indigenously developed youth organization. Both appear to be having positive developmental effects on village Eskimo youth, an age group at high risk for suicide, alcoholism, and other serious mental health problems.

The effects of such natural social settings, however, are difficult to evaluate. The conventional approach is to examine the incidence of "problems" such as alcoholism, suicide, and arrests, in the natural setting and in a comparison setting. Yet, this approach is often misleading and uninformative. First, these natural settings are designed to produce other types of outcomes. While they may prevent socio-emotional problems, the causal linkages are not usually direct and readily measurable. For example, the religious boarding school described in this paper appeared to strengthen Eskimo adolescents' self-esteem and help them develop clear value orientations. I suspect that the strong positive identity encouraged by the school made these Eskimo adolescents less vulnerable to suicide, but suicide prevention was not its direct objective. Second, selection effects occur very frequently in natural social settings, which makes it difficult to locate good "comparison" groups. The type of youth who enrolls, for example, in a particular youth organization or boarding school usually differs from his or her age-mates. Thus, examining the incidence of problems in the natural setting and a comparison setting is likely to be inappropriate.

Yet, primary prevention, as Beiser (see this volume) pointed out, means "not only the prevention of illness but also the promotion of health". This conceptualization suggests a different approach to evaluating the outcomes of these natural social settings. Rather than focusing on the incidence of mental health problems, it may be more fruitful to analyze the competencies and adaptational skills that the setting develops (see Manson, Tatum, & Dinges in this volume). Instead of attempting to apply conventional "experimental group/comparison group" evaluation methods, it may be more productive to focus in detail on the characteristics of the experiences provided in natural settings. We need to develop concepts which enable us to describe clearly the content of different types of experiences: for example, what kinds of roles the setting provides, what skills it teaches, and what specific values it transmits. We can then evaluate the extent to which the setting develops particular attitudes and competencies in the youth who participate in it. The following case studies attempt to use this "positive mental health" framework in examining situations which appear to be strengthening the skills and coping strategies of Eskimo adolescents.

THE MENTAL HEALTH OF ALASKA NATIVE YOUTH

Adolescents growing up in contemporary Indian and Eskimo villages in Alaska face unusually difficult problems in developing some satisfying, unified personal identity. Traditionally, social roles and norms were clearly defined in Alaska Indian and Eskimo groups and linked to economic survival in a harsh arctic environment. The successful and generous hunter was the central character ideal for men, and the hardworking wife and mother was the admired role for women.

During the 1960's, social and economic changes in Alaska swept away the economic foundation of village life and increased the incidence of alcoholism, violence, and other serious problems (Kraus & Boffler, 1979). These changes included the erosion of the family unit and disruption of the established system of values and adult roles which youth absorbed from their elders by precept and example. The fish and wildlife populations, while remaining important sources of food, are no longer sufficient to support the growing populations of many villages. Village families need cash for food, gasoline, heating oil, television sets, and other items. Yet, in most villages, few jobs exist to satisfy needs for cash. Adults support themselves by a combination of hunting and fishing, welfare and other transfer programs, and occasional jobs in government programs, firefighting, and construction projects.

Many young people, particularly young men, want to remain in the villages as adults within a satisfying, familiar social milieu. Yet,

few productive adult roles are open to them. Others think about leaving the village but face the problems of limited job and academic skills and the anxieties of coping with a dominantly White environment.

Added to these difficulties is the new pressure on Native youth arising from the passage of the Alaska Native Claims Settlement Act in 1971. Under this act, Native regional and village corporations were organized to receive and invest \$962.5 million and 40 million acres of land. In addition, Native non-profit corporations have been established in 12 regions of Alaska to administer social programs formerly under the control of the Bureau of Indian Affairs and other federal and state agencies. These developing organizations need skilled Natives to direct and staff their operations, however, as yet, few Natives have the educational background and work experience required for these positions. The result has been that non-Natives do much of the technical work and still, in effect, manage Native affairs. Both Native leaders and village teachers exhort young people to prepare for corporate positions and take part in Native self-determination. Yet young people do not have clear ideas of how to meet these demands. Many feel pressured, yet unable to satisfy vague, conflicting expectations of western society, Native leaders, and their families and village communities.

The lack of clear, attainable adult roles combined with the loss of traditional roles and patterns of life has led to a malaise among many Native youth. The most prevalent problem is boredom. According to village adolescents, there is "nothing to do" except walk around, watch TV, and hang out with friends. Alcohol and drug abuse, increasingly severe problems in rural Alaska, are in part a way to find some excitement, some relief from the routine confines of an isolated village of a few hundred people.

The most serious indication of the difficulties youth are experiencing is the steadily increasing suicide rate of Natives entering adulthood. Suicide among young Alaska Natives is a contemporary, not a traditional, phenomenon (Kraus & Buffler, 1979), which accelerated primarily after 1965 (see Figure 1). The suicide rate peaks among Alaska Natives in the 20-24 year age group, the cohort entering adulthood, and remains extremely high through the early adult years. From 1970-74, the most recent period for which age specific data are available, the suicide rate for Natives between 25 and 34 years of age exceeded 75 per 100,000 (Blackwood, 1978). For the total U.S. population in this age group, the suicide rate was under 20 per 100,000.

The vulnerability of Native youth to severe mental health problems is an issue of great concern. Very little is known, however, about what types of naturally occurring environments or special program interventions promote psychological health.

Figure 1
Alaska Native Suicide Rate by Age Group



Source: Kraus & Buffler, 1979.

BOARDING SCHOOLS AND EMOTIONAL DISTURBANCES

Boarding schools have typically been viewed as a source of serious emotional disturbances and long-term adjustment difficulties among Indian and Eskimo children. The fundamental problem, at least with adolescents, is not leaving home for the school year to attend boarding school (Leon, 1969). Rather, the problem is the type of socialization that often occurs at federal and state boarding schools.

My own research on public boarding schools in Alaska has illustrated several serious defects which are often found in these schools (Kleinfeld & Bloom, 1973). The key problem is not the formal education that occurs in the classroom but rather the informal education system, the type of society that evolves in these settings.

First, these boarding school societies offer no unified value system, no realistic models for growing up well. The school stresses the individualistic, achievement oriented value system of mainstream U.S. society with little awareness of the village values of kinship and group assistance. Krush, Bjork, and Sindell (1969) have drawn attention to the value conflicts that Indian children experience in this setting. They suggest that youth adapt not by developing a unified value system but rather by adopting a chameleon-like response where they take on the values of whatever cultural situation they find themselves in.

In the boarding schools I have studied, the problem was not so much clear-cut value conflict as value confusion. Different teachers, dormitory counselors, and administrators subscribed to highly disparate sets of beliefs about what type of lifestyle was desirable or possible for Native adolescents. Some urged students to leave home and "get ahead". They communicated the view that the villages were little more than a refuge for people who could do no better for themselves. Others advocated subsistence living and village life-styles, but then saw little legitimate role for themselves and the western subjects they were teaching. Most commonly, teachers themselves were confused and uncertain and reluctant to do anything beyond teaching English, math, or world history. The result was that Native youth received no clear messages about what type of behavior and roles earned respect from the village and western cultures in which they were coming to adulthood. Their cognitive maps had no clear roads or destinations.

A second problem in these boarding school societies was the lack of personal contact between youth and adults who could guide young people and present models of how to grow up well. The result was that socialization was accomplished almost entirely by peers who

created a youth society organized around the companionship of small friendship groups, excitement, and in some cases, deviance and mischief. The lack of relationship between youth and adults other than parents and classroom teachers has become a central theme in the literature on contemporary adolescence (Coleman et al., 1974). Formation of isolated peer societies is by no means limited to Native youth. However, the boarding school environment strengthens these trends. It removes youth from the influence of parents and relatives and, in the public boarding schools I observed, offers no adult substitutes. Relationships between youth and classroom teachers are typically brief and impersonal. In the dormitories, an overworked staff faced with several hundred students tries vainly to provide recreation, maintain the building, deal with discipline problems, and carry out administrative functions.

A third problem with public boarding school socialization is the dependency it creates in young people. Adolescents receive little experience in fulfilling responsible roles, in carrying out activities that are in reality important to the society they live in. Even recreation is provided for them: movies, craft programs, dances, and sports. Cleaning up in the dormitory is the student's major contribution to boarding school life, and it is not clear that this work is more than an imposition by a "rich" government agency. In short, the boarding school situation reinforces passive, dependent behavior. It provides little opportunity for youth to plan and organize or to shape the society they live in.

ST. MARY'S: A CATHOLIC BOARDING SCHOOL FOR ESKIMO ADOLESCENTS

In view of the research and testimonials that boarding schools are sources of psychological problems for Indian and Eskimo youth, I was surprised to find a boarding school situation that appeared to be having positive effects on mental health. This school was St. Mary's, a remote Catholic boarding high school located along the Andreafsky River, a tributary of the Yukon River, in Southwest Alaska.¹ Eskimo adolescents attending this school did experience initial homesickness and adjustment difficulties during their first year away from home.² However, upperclassmen at St. Mary's and the school's graduates appeared to have an unusually high degree of psychological health.

Indeed, I became interested in this school primarily because of the graduates I met at the University of Alaska. Unlike many other Native village students, particularly those entering college in the early 1970's, the St. Mary's students tended to be confident, organized, communicative, and to have a secure sense of who they were and where they were going. "They're well put together," was the ex-

pression different dormitory advisors and other university staff often used to describe the St. Mary's group.

In his film study of Eskimo education in many different schools, Collier (1973) similarly emphasized the "psychic well-being" of the St. Mary's students:

Included in our sample is just one example of a coordinated, sustained effort to strengthen student's psychic well-being. This was the example of the students from the bicultural program of the St. Mary's Catholic High School. Those visiting students appeared to have durable personalities that had definitely been strengthened within education (p. 123).

An excerpt from an interview with one of the St. Mary's graduates at the University of Alaska gives a sense of the kind of person who frequently emerged from this school. This interview was done by a research associate in the context of a general study of Native college success at the university.

When I called to set up an appointment for the interview Ellen was the first student I'd called who required a thorough explanation of what we wanted to talk to her for. It wasn't hostile, but rather a matter of her being sure of what she was getting into before she got into it. Generally, students I have talked to find some time to be interviewed, no questions asked. Or they "forget" the interview time. Ellen wanted to know what the study was about, where we got our list of names, how she got picked. Convinced, apparently, that we were OK, she set up an appointment and said she'd try her best to answer our questions and that she'd try her best to remember her appointment.

Ellen arrived on time for the interview, dressed in slacks and a sweater, and a jacket that she took off shortly after the interview began. This was interesting because many of the village students leave their jackets on, even if you invite them to take it off. But Ellen rather distinguished herself by making herself comfortable. She is short, wears her hair piled on top of her head, and has a sincere, very pleasant face with slight acne. I was not aware at first that she was a St. Mary's graduate. However, she announced it very early. This girl is very well put together, socially and emotionally, really impressive, and clearly in the St. Mary's mold.

I first asked her if she found the university a friendly place. She said that she knew a lot of students and that the university in general is friendly. But she qualified this judgment by analyzing the difference between the students at the university and the students at St. Mary's. St. Mary's, she pointed out, is friendly, with the students smiling. If you look down, someone will ask you if you are down. At the university, people are not that way. She said that she didn't understand what the problem was at first, but she talked to older students who went to St. Mary's and they told you that it is different and knew what it is you are missing. Her implication is that college is friendly, once you know enough to lower your expectations. She made

the same comment about her teachers, that they are not as easy to get to know. This is interesting because so many students we have interviewed think the teachers here at the university are superfriendly, compared to high school.

Her friends are mostly other girls from St. Mary's and her roommate is from St. Mary's. But they don't seem to stick together the way so many village girls do. She says that she goes her own way and does a lot on her own to meet other people. If you leave the door open to your room, people will stop in and visit you.

She said she liked to go and try new things. For example, she and her friends had never hitchhiked before and had heard about it. So she asked advice about hitchhiking and was told to look over the car and the driver, see if it was a man or woman, and ask questions before getting in.

She has gotten involved in a lot of activities like communications workshops on campus, sponsored by United Campus Ministry, and she volunteered for Crisis Line downtown and she learned to ice skate. According to her advisor, "she was into all kinds of things—anything the university would do. Conferences, just anything that was happening. She'd read about it on bulletin boards, and go ahead and attend and find out what it was like."

Then we got into her classes. She likes her English class and said it was really helpful, a good class on research papers. The other class she talked a great deal about was skin sewing. She said it gives you a good feeling to know you can make boots and parkas.

When we got into the goals section of the interview, it was evident that she had a fairly well-developed general goal orientation. She wants to help people, although she isn't certain in what way, maybe teaching.

She seemed to have a strong feeling that having a specific goal would be appropriate, but I think this was partly generated by the interview. She used the interview as a learning experience, which no other student has overtly done so far. She ended up feeling perhaps she should go talk to someone in the career placement office about a major and a career goal.

As she left, she said that the interview had been valuable for her because she could discuss things and think about things she hadn't thought about before. Having succumbed at last to the irresistible St. Mary's ethic, I wished her a good day as she left.

Another indication of St. Mary's students' psychological health was their ability to function well in both a western university and a Native village environment. From 1968 to 1974, 55% of St. Mary's graduates succeeded³ in college during their first enrollment, compared to 16% of village students from public boarding schools. During the late 1970's, the success of village students from St. Mary's at the University of Alaska was not significantly different from the suc-

cess of non-Native freshmen. Importantly, the high college success rates of St. Mary's graduates were not the result of higher academic abilities. The scores of St. Mary's freshmen on the American College Test (ACT) given to entering students were no higher than the scores of other Native freshmen. The high college success rates were due to something other than academic competence. This "something else," we suspected from our interviews with Native college students, involved the ability to organize and direct one's energies, an ability that arises from an integrated identity.

When students from boarding schools return to their home villages, parents sometimes report adjustment problems, such as refusing to help with chores, putting on airs and acting like a *Kass'ag* (White person), looking down on the village, drinking, and doing little that is productive. To explore whether St. Mary's was acculturating students in such ways, we sent an Eskimo fieldworker to the two most traditional villages that sent students to school. For each of the 21 St. Mary's students at home during the summer and for each of the 11 graduates who lived in the villages, the fieldworker observed behavior and informally solicited opinions from the student, his or her peers, and his or her parents. The St. Mary's students' behavior during the summer elicited no particular critical comments. The only evidence of the school possibly causing adaptation problems occurred with one young woman who was angry because she could not find a job in the village and her traditional parents would not allow her to go elsewhere to work.

In addition, St. Mary's graduates had a reputation in the villages for quiet leadership. While they rarely held prominent political positions, they were often leaders of community affairs: the members of the local school board, the village council, and the health board, the people who organized the teen club and put together a village celebration on the Fourth of July. Among the 1963-70 St. Mary's graduates, 61% participated in at least some unpaid civic activities, and 25% participated in three or more activities. While our ability to make comparisons in rates of civic activities between St. Mary's graduates and those from public boarding schools was quite limited, what information we had did suggest higher rates of participation by the St. Mary's graduates.

Even if St. Mary's students did show unusually high levels of psychological health, it was entirely possible that the school itself had little or nothing to do with creating these characteristics. Perhaps self-selection was the explanation for the psychological health of the graduates. St. Mary's students did not differ from students who entered public boarding schools in standardized test scores or family socioeconomic status. Yet, they were an unusual group. From interviews with village priests, we knew that St. Mary's students came from more stable, religious, and traditional village families. The

school was working with a group of Eskimo students who already had a strong primary identity framework.

Two considerations, however, suggested that selection effects were not the entire explanation for the success of the graduates. First, the graduates themselves were convinced that their high school experience had profoundly affected their development. In a follow-up survey of St. Mary's graduates and graduates from two public boarding programs, we asked a general question, "Looking back, what do you think of the high school you graduated from?" The public school students rarely stressed positive themes, and the positive feelings that they had related to the learning of academic subject matter (see Table 1). For example, a public school graduate wrote:

I learned some but not that much. Our teachers didn't teach much, but I did pretty good making the honor roll four times last year. But there was too much drinking. Had carpentry work for four years. You could learn lots if you put your mind to it.

About a third of the St. Mary's graduates, in contrast, emphasized that the school helped them develop as people. One graduate wrote eloquently:

I strongly feel now that it is a great school with very interested teachers who really aim to teach. These teachers were voluntary teachers who taught for almost nothing financially. Thinking back I can now say that that's where I learned to see people as people, like close friends, who never will end their friendship. St. Mary's helped me to look at life more like a challenge and a healthy adventure, and it not only taught me chemistry and math, it helped me as a person, and I am very happy I went there.

In addition, as I studied the school from 1971 to 1974 through observation, filming, structured interviews with teachers and students, and psychological tests, I became aware that student selection was not an "alternative explanation" for the success of the school. Rather, selecting students initially oriented toward the values and ideals that the school stood for was part of the process through which the school influenced its students. Through such selection, the school was able to foster a peer culture that supported the school's ideology. St. Mary's thus added the powerful pressure of peers to the influence of the staff and the formal curriculum. In short, the school did not cause any massive personality change. It strengthened students' primary identity framework and showed how the traditional values learned in an Eskimo childhood could be applied in the contemporary adult world.

In sum, several different types of data suggested that St. Mary's was a successful socializing environment for Eskimo adolescents. First, independent observers with no particular ties to the school or interest in it observed that St. Mary's graduates seemed unusually well "put-together," secure in a fundamentally village Native identity.

Table 1

**Major Themes in the High School Evaluations of St. Mary's
Graduates and Graduates from Two Public Boarding Programs**

Question: Looking back, what do you think of the high school you graduated from?

	St. Mary's 1970-72 (N = 44)		Two Public Boarding Pro- grams, 1970-72 (N=45)	
	Number	Percent	Number	Percent
Pride in attending school	19	43	4	9
Concern of staff for students	17	39	1	2
Growth in learning	16	36	8	18
Personal development (self- confidence, sense of re- sponsibility, positive attitudes)	15	34	1	2
Inadequacy of curriculum and facilities	3	7	9	20

Note: Proportions are based on the number who spontaneously mentioned each theme; $\chi^2 = 24.40$; $df = 4$; $p < 0.01$.

Source: Follow-up survey of 1970-72 graduates from St. Mary's high school and two public boarding programs. J.S. Kleinfeld. *Eskimo School on the Andreafsky: A Study of Effective Bicultural Education*. New York: Praeger, 1979.

Second, St. Mary's graduates were more successful in college than graduates from any public boarding program, even though their standardized academic test scores were no higher. Third, St. Mary's graduates appeared to experience no severe adaptation problems when they returned to traditional villages and were notable for their high rate of participation in civic affairs. Fourth, St. Mary's graduates themselves held favorable views of their high school experience, and credited the school with helping them to develop as people, not only teaching them academics.

Yet, St. Mary's seemed an unlikely school to have such positive effects on Eskimo adolescents caught in a maelstrom of cultural change. A run-down boarding school in an isolated village, it enrolled only about 200 students. About 60 were day students from the adjacent village of St. Mary's. The rest were boarders who, at the time, left home for high school because there were no secondary schools in their home villages.⁴ At the time of the study, St. Mary's lacked school equipment considered essential in rural schools—current textbooks, controlled readers, modern typewriters. Nor did it have the special programs, such as bilingual classes, English as a second language classes, or vocational classes, all widely regarded as necessary to effective cross-cultural education. The majority of the classroom teachers at St. Mary's had no specialized cross-cultural training. Indeed, most classroom teaching was done by volunteers, young college graduates without a professional background in education or any teaching experience.

Yet, intensive study of the school suggested that it was a powerful socializing environment. Indeed, the school exemplified the paradigm type of educational institution theorized to have strong effects on students—a communal setting with prominent ideological, rather than technical, goals (Bidwell & Vreeland, 1963; Vreeland & Bidwell, 1966). In this paper, I cannot describe this environment in detail. Rather, I will draw attention to three of its characteristics which, I suggest, are critical to the effective socialization of adolescents, particularly adolescents experiencing rapid cultural change.

Mentor Relationships

One of the unusual features of St. Mary's, compared to public boarding schools, was the close relationships that students established with their teachers. The school staff was composed of three groups. The first was a small number of Jesuit priests and brothers who held such roles as school superintendent, maintenance man, dormitory supervisor, and school baker. The second was the Ursuline Sisters, most of whom had worked at the school for many years. The Jesuits and Ursulines brought tradition and stability to the school and personal knowledge of the students and of village life critical to interpreting student behavior and guiding the new

volunteers.

The group of teachers who had the most contact with the students, however, were the volunteers. The volunteers were an unusual group, primarily young college graduates willing to work for a year or more without pay as an expression of their commitment to Christian service values. The volunteers not only taught classes, but they also spent virtually all their free time talking with students in the dormitory, organizing special school events, helping students with homework, and doing chores with them around the school.

Through these informal contacts, much education and counseling took place. "School," as one volunteer put it, "is always in session." On an evening in the girl's dormitory, the following scene was commonplace:

A teacher lounged on a staircase in the girls' dormitory. Three senior high girls walked over and settled themselves on the stairs beside him. A few junior high girls, too hesitant to approach, eyed the exchange from the safety of the opposite staircase that led to the junior high rooms.

"What are you here for?" a senior student asked.

"I came to see you." With mock gallantry, he drew himself halfway up with a cavalier bow.

The girls swelled with appreciative laughter. "What we do tomorrow in class?" inquired a chunky junior.

"I dunno," he joked, imitating the student's intonation.

"We've got to plan an activity," the girl insisted, referring to the sophomore class' responsibility to organize a Friday night recreation for the school.

"Do you have any ideas?" he replied lazily.

"No, do you?" she responded.

"Well, you better put your thinking cap on!"

"I left it in the classroom." She dissolved into waves of giggles.

"Hey, is this a strike?" he asked her.

"What you mean strike?" she retorted. The teacher began to explain strikes and labor unions. The conversation ambled on with the teacher daydreaming about the joys of going to Rome for the school's annual retreat. The talk circled back to a discussion of the animals the students could place around a village model being built in his class.

"Any wolf around her?" the teacher asked.

"How come you say 'woof'?"

"It's my New York accent."

The group went on to talk about language differences in different regions of the United States and differences in dialect between Eskimo villages. The girls began to argue about which was the "pure Eskimo" way to pronounce "ulu" (an Eskimo women's knife) and started teaching the teacher to pronounce Eskimo words, giggling with superiority at the feebleness of his efforts.

Through these close relationships with teachers, students also learned how to deal with Whites. Frequently, situations occurred

where teachers were open with students about their own problems, fears, and motivations. As a dormitory prefect described a meeting where the students talked to him about his previous behavior:

The guys started out the meeting. "We are here to talk about our problems with Mr. L." I was open with them, told them what I had hoped to do, how I had fallen down on my responsibility. I explained what I was feeling. The kids said they were mad because of something I said about breaking a guy's guitar. I said, "Well, look guys, if that guy is here, he should say something. I don't like an accusation." The kids replied that last Friday I told them to go down to the warehouse and get the food. I said, "We need you now." John was playing the guitar and I said, "Get down to the warehouse or I'll break your guitar."

I said to him, "I'll apologize if the comment was offensive. But maybe you have to understand the position that I'm in. Sometimes you guys have to be pushed. You've got to realize that sometimes a comment will come out like that. You've got to understand me and my personality."

Through these types of relationships, Eskimo adolescents acquired some understanding not only of the formal roles of White people but also of their feelings and motivations. The close contact between teachers and students revealed a humanness usually not a part of professional teacher-student relationships.

Volunteers also spent a great deal of time just talking with students and trying to help them think through what they were going to do as adults. Most of the volunteers were in their early 20's and were themselves making decisions about what work they should pursue, what life-styles they should follow, where they should live, and who they should marry. They continually brought up such issues with students, pressing them to think the matter through, not to drift. "I'm philosophically minded," said one, "and talk philosophy sometimes which the students don't always understand—about the philosophy of their life and where they're headed. I try to get them to think where they are headed." The teachers differed from the students in bringing to these discussions a clearer value framework, some useful analytic tools, and a cultural tradition of making choices in a social context that offered a welter of confusing possibilities. But the teachers as well as the students were coming to grips with common problems of coming of age.

In explaining the unusual roles the volunteer teachers assumed at St. Mary's as compared to teachers at public boarding schools, it is important to keep in mind the volunteers' unusual freedom from other responsibilities. Most were young and unmarried and boarded at the school. They had no babies to tend, houses to maintain, meals to prepare, or spouses to take up their time. They were free to devote all their energy to the school. Most burned out. "It's so intense," one said. "You can't do it for the rest of your life."

St. Mary's graduates stressed the teachers' concern for the students and particularly their willingness to teach without pay (Table 1). Students contrasted the St. Mary's staff with other village teachers, who, they felt, taught for the money and made little attempt to get to know them and the community.

Culturally Appropriate Character Ideals

The notion that education is more than instruction, that the obligation of teachers is to exemplify not just a style of life but a standard for living, has vanished from public schooling. In cross-cultural situations, the principle that education should impart ideals and values is not merely missing but actually rejected. According to the prevalent view, teaching western values to Eskimo children is a grave error in both a pedagogical and in an ethical sense. Yet, adolescents experiencing the disintegration of established cultural patterns must find satisfying replacements. St. Mary's presented a system of principles for organizing one's life despite the disorganizing pressures of culture change. What was important, however, was that the values celebrated by the school were not culturally inappropriate western values. Rather the school created "cultural fusion," combining traditional Eskimo with religious and western ideal. The system of values stressed at St. Mary's centered on a person's obligation to be useful in the world, to be of help to the community. "Do your own thing," proclaimed a poster at the school, "Just make sure it's worth doing." At a nearby public school, the poster on the principal's office door flippantly read, "If it feels good, do it."

The value consensus at St. Mary's pervaded every setting in the school. The staff emphasized these values by their own example in volunteering to teach at the school, in their conversations with students in the dormitory, in the column of the school newspaper giving advice to the lovelorn, and in how they presented issues in the classroom. As one teacher pointed out:

I am very concerned with other people—open-mindedness, consideration for others, and empathy. Other people are just that—people. And things go wrong in the world because people forget that. Sensitivity to others. Have your ear cocked to someone else's need. That is the Christian way—then God is with me. That's the way I naturally want to be. When I find myself selfish, I find myself in an unhappy state. Examples I would choose (in class) naturally come across from this belief.

The St. Mary's teachers felt secure in presenting their values to Eskimo students because they did not see these values as rooted in any particular cultural system. The teachers saw them as common human values, rooted in a religious tradition that they and their students shared. The volunteers were aware that their Eskimo students came from a different cultural background and held certain

values different from their own. In discussing sexual matters with students, for example, a cultural relativist point of view held sway. But the St. Mary's teachers, unlike the public school teachers, had a firm belief that a bedrock of universal values lay beyond the culturally specific ones:

I make sure it's not just a value of Chicago, Illinois, before I say it. But you teach values that have to do with a general morality of people—Christian values. Why should I care about you and why should you care about the rest of the world?

While the educational emphases at St. Mary's were rooted in a Catholic religious culture far removed from aboriginal Eskimo traditions, some harmony existed between these two value systems. The Eskimo member of our research team pointed out that the value system in Eskimo villages similarly emphasized helpfulness and generosity:

What is important (in gaining respect) is being helpful, generous, friendly, not ignoring people, chopping wood for old people and helping them, bringing food, sharing, respecting old people, and not talking back. This applies to everyone, no age difference, no sex difference. Good hunters who do not share are not respected.

St. Mary's staff was conscious of this value continuity. "They have a spirit of living and working together communally," a Jesuit pointed out, "not getting out and getting ahead of the other. This is a very fine virtue and I've learned a lot from them." Teachers were saddened by the changes they saw in village life, such as the need to pay people to work on community projects.

St. Mary's also stressed achievement, but the emphasis was very different from the public schools. The ethic was not individual success, "making it." Rather the staff stressed that achievement was important because it was the way to become competent enough to do something useful in the world.

The achievement ethic at St. Mary's was also moderated by a religious concept absent from public education. It was the notion that all people are children of God, that people have different talents, that these talents are all gifts of God, and that in the end it does not matter so much exactly what you do. The school's philosophy reflected the Aristotelian and Thomist principle that that there is a natural place in the world for people with different personalities and abilities. Going to college is a good thing and becoming a teacher or a nurse is a good thing, but getting married and raising children are also good things. No one is ultimately "higher" than another.

As a boy at the school described this ethic, absorbed from his guidance course:

In your senior year you're sort of left to decide for yourself. You look at yourself, what you are, and later on you go to the subject of vocation. You know what you as an individual want to become, or will be happy in. Like some are made to be married. They'll be happy there. Some are made to be single. Some are made to have a type of job in which they will be fully associating with people, and some, well, there are jobs where they don't have to do this.

What was scorned at the school was the student who went home to the village and did nothing. This was the negative character ideal held forth to students. A St. Mary's college student described this juxtaposition of positive and negative ideals at the school:

When you are a senior, they talk a lot about decisions and what you are going to do. They tell you to try to take life seriously, and you are going to be thrust into a world where you will be on your own. You should be an adult.

There's a lot of encouragement in going to college and lots of information. If you want to go back to the village, they say, "What will you do if you go back there, sit around and do nothing?" You are a high school graduate. You will be looked up to, and get a position of power. Be active and and not passive.

Acting Out Character Ideals

The values St. Mary's celebrated were not taught simply by precept and example. Rather students acted out these ideals in their own activities at the school. The essence of the educational method at St. Mary's was to create a school society ordered by the ethic of responsibility toward other people. The school communicated this ethic not only through the teachers it selected and the examples they set but also through the network of mutual obligations the school community created among its members. The stuff of education was not the special federal program but rather the details of life.

An example of this method was the way the school approached the problem of providing recreation. Weekend activities were viewed as more than ways to have a good time, their social meaning at public boarding schools. These events were explicitly presented to St. Mary's students first as a way of helping the school. The school did not have money for a recreation director or for expensive games and decorations. Teachers and students were counted on to organize activities and to improvise equipment.

In addition, these events were explicitly presented to St. Mary's students as a means of learning how to plan things by yourself in preparation for organizing activities later on in the village. A Jesuit who formerly headed St. Mary's explained why he initiated this program:

It is not the responsibility of the school to be constantly organizing recreation. Because they would be returning to the village and would need to know how to organize. Friday night activities were class responsibilities. Previously, the only activity was to have a dance. I knew my methods were rather forceful, but sometimes kids need to be forced out of ruts. They organized a talent show, games, so it would not be a dance every Friday night. One dance a month and the rest of the time they did other things. There was grumbling, but you would see them next morning and they would say, "My gosh, I never had such a good time."

Several graduates remarked that their experience in planning school activities was indeed why, when they went home, they tried out organizing different activities for their villages. One St. Mary's student put it simply, "We do at home like we learn at school."

In planning activities, there was a standard routine that each class learned as a school tradition. The class president stood at the front and asked for suggestions from the group. The class called out alternatives, and each was written on the board. The class then discussed the feasibility of each alternative, developed a consensus, divided the project into subtasks, and assigned these tasks to individuals or small groups. It was a basic planning routine, learned and relearned in each school planning context: Friday and Saturday night activities, class Masses, student council meetings, and special events. In addition to presenting the ideal of leadership and community responsibility, the school pragmatically taught students how to carry out these tasks, just as it taught typing and English usage.

Summary

In emphasizing the positive features of this school, I do not want to give the impression that it was an ideal environment. The classroom teaching, for example, was uneven and often of poor quality. The serious moral tone of the school was one of the reasons some students felt they were not "up to it" and dropped out. Yet, St. Mary's has a number of unusual characteristics which, I suggest, help Native adolescents growing up in a changing cultural setting to form strong, unified identities and develop the social and task competencies important to effective adult adaptation. The school created mentor relationships between Native youth and teachers only slightly older than themselves. The teachers helped students think about finding a productive adult role, educated them informally, and helped them to understand how White people related to the world. The school presented a clear value consensus which fused traditional Eskimo, religious, and western values. Unlike other Alaska Native or American Indian adolescents, St. Mary's students did not come of age in a situation where they were internalizing western achievement values that they could not integrate with tra-

ditional values and that they lacked the skills to carry out. The school taught this unified value system not only by discussion and example, but also by the students' active participation in roles which exemplified this character ideal and taught them the skills to fulfill it.

To what extent can such socializing environments be created in less unusual situations? St. Mary's is, after all, a very special case. In Alaska, it is one of the last parochial boarding schools, and whether it will stay open in the 1980's is unclear. The school is becoming more and more expensive for the diocese to operate. With the creation of high schools in Alaska villages, fewer young people are interested in leaving home to go to school.

Another social institution which potentially shares some of the same characteristics as this boarding school is the youth organization. Political youth groups, religious youth groups, and "character building" youth groups such as Scouting or 4-H to some extent create personal relationships within a network of youth and adults who share a particular value orientation. Youth organization activities, in addition to providing recreation, can also provide role training in organizing events and participating in community affairs.

THE CHEVAK VILLAGE YOUTH ASSOCIATION

To explore whether youth organizations in rural Alaska have the potential to help young people develop adaptive values and skills, we first examined current youth group activity in the villages.⁵ According to a number of anecdotal reports, religious youth groups have had, in some instances, initially dramatic effects on young people. In several Alaska villages, these religious groups were reported to have reduced drinking, increased rapport between youth and their parents, and involved youth in community service activities. In our first year's fieldwork, we indeed observed in an Eskimo village such a situation of apparently dramatic change in youth behavior due to the religious leadership of an older village youth who had previously been a supplier of drugs to young people in the community. However, in this situation, as in the others we had been informed about, the change in youth behavior was ephemeral. The initial "high" among the young people wore off, and no lasting change in youth behavior or youth organization emerged.

We also examined the activities of major national youth organizations in rural Alaska, such as Boy Scouts, Girl Scouts, and 4-H groups. Despite the efforts of these organizations to establish village youth groups, few had developed in Native communities.⁶ Moreover, those few examples of national youth groups we found in the villages tended to be poorly institutionalized. Most were non-indigenous institutions which disintegrated when the outside White teacher, minister, or VISTA worker who started it moved away.

We found, however, one important exception to this general pattern, an indigenously developed youth organization in the western Alaska village of Chevak. The Chevak Village Youth Association, Inc. (CVYA) has been in existence since 1976 and is regarded in the community as an established village institution. In order to determine what functions it might be serving in the community and in socializing youth, a research associate, Bill McDiarmid, spent ten months in Chevak, as a Title I teacher.⁷ He observed youth organization activities, interviewed community members, and participated as a member of CVYA's Board of Directors.

Chevak is a Catholic community with a population of about 520. It is a comparatively traditional village. For example, Cupik (a dialect of Yupik) is the primary language of the young as well as the older generation. Village residents support themselves through a limited number of wage jobs, subsistence activities, and public assistance programs. Annual per capita income for Chevak residents, while difficult to determine accurately, is about \$2,000 to \$3,000.

Despite the poverty of the village, the youth and young adults of Chevak have created a youth organization which supports itself with virtually no dependence on outside agencies. While CVYA receives a small grant (\$2,500 in 1980) from the city of Chevak, most of its \$40,000 operating budget is generated through its own organizational activities. CVYA is a source of community pride, an example of the community's competence in developing an organizational structure which serves two critical functions. One is providing recreation for the whole village, and the other is socializing youth in the directions desired by the community.

CVYA was started by local young people who wanted to establish their own recreational activities. During the 1960's, village youth made several attempts to organize a youth club. In the early 1960's, two village students tried to set up a "coffee house" in the generator room of the BIA school. During the late 1960's a group of St. Mary's students started a Young People's Club during the summer which put on skits, talent shows, and dances. The club also did community service work, such as doing chores for older people in the village. In 1974, Chevak youth formed an "Action Group" which again sponsored community recreation and service activities.

While the community of Chevak was initially skeptical about these youth-initiated activities, in 1976 a village councilman (who was himself a founder of the early "coffee house") decided to work with the young people to establish a lasting organization. CVYA was incorporated as a non-profit organization in 1976. As it established its role as an organization serving the entire com-

munity and being of service to the community, it gained legitimacy. In 1979, the City Council turned over responsibility for the city's Parks and Recreation Program to CVYA.

Organizationally, CVYA consists of a seven member Board of Directors, which is composed primarily of young adults from the community. The Board sets policy and plans activities which board members carry out with the assistance of CVYA staff and village young people. A locally hired Executive Director takes care of organizational finances and other matters. In addition, CVYA employs an Assistant Director and coordinators who supervise dances and help in putting on activities, such as an annual summer festival, the Tundrafest. The organization has no formal membership list. The village views all young people as members.

The major goal of CVYA is to organize recreation for the village. In the village view, recreation is a way to prevent alcohol abuse by providing something interesting for the young people to do. CVYA also attempts, however, to serve educational functions: to teach young people how to organize activities, to teach traditional skills, and to provide information about drugs and alcohol abuse.

As a past Executive Director explained the goals:

It's to try to keep them out of trouble, keep them active. It's also teaching skills—like the village history project. The kids do interviews with the elders. In 1978, we sponsored a sixteen-week cultural project and hired older folks to teach young people to sew mukluks, to do ivory carving, wood carving, and sled making. One other purpose of CVYA is for the youth to plan for themselves, to sponsor their own activities. They work with local government to show them that the young people can manage their own affairs (McDiarmid, Note 7, p. 22).

Observation of CVYA activities during 1981 indicated that the organization served multiple social, educational, economic, and community service functions. The primary function of most events was recreation. CVYA sponsored city league basketball for men and women, Eskimo and western dances, and special celebrations at holidays like Halloween and Thanksgiving. Two annual festivals—Winterfest in March and Tundrafest in August—have become village traditions. In addition, CVYA raised its own operating funds through Bingo games, the operation of a snack bar, and the sale of village crafts on which it earned a small commission. Almost a third of the activities also provided a community service, such as assisting older people.

While most CVYA events involved different age groups in the community, some were explicitly educational and directed toward youth. For example, CVYA holds an annual Youth Conference where outside speakers are invited to talk to youth about current

issues and where youth from other villages hear about the organization. The experience of working on projects along with Board members and CVYA staff teaches young people how to initiate and manage community events. These competencies are obviously important in adulthood.

The organizational structure of CVYA is adapted to its cultural milieu. It differs in important respects from majority culture youth groups, such as Boy Scouts and 4-H. Unlike these national organizations, the youth themselves were not placed in formal leadership roles where they "bossed" other people. Reflecting village preferences, adult and youth roles were cooperative and informal. Board members or the Executive Director actually organized the events with youth observing, helping out, or taking on specific tasks. Joining the organization was also an informal process with no youth singled out as "members" or "non-members". Nor was there a system of rank advancement or rewards for individual achievement. Rather the group itself received recognition as having performed useful services for the community.

In sum, CVYA exemplifies an environment which, I suggest, has a positive developmental influence on Native adolescents. It creates close working relationships between a network of youth and young adults. These adults, generally in their early 20's, have organized personalities themselves and can serve as role models. The CVYA board members were viewed in the village as responsible and reliable people who got things done. CVYA also presents to youth character ideals: serving the village, being self-reliant, and taking responsibility for community affairs. CVYA also provides the opportunity for youth to perform roles where they act out these values and learn organizational skills.

We have not yet attempted to measure the long term effects of this experience on village youth. It is apparent that this community is not having the high levels of alcohol problems, violence, or suicide found in many comparable villages in the region. However, in considering the impact of CVYA, it is also important to keep in mind that CVYA is not an isolated program with isolated effects. Rather it is one of many organizational initiatives in an exceptionally competent community. The village of Chevak, for example, also decided in 1980-81 to contract with the Bureau of Indian Affairs to take control of the local school and carried out these responsibilities without serious difficulty. Youth growing up in Chevak experience many different situations in which they observe village adults managing community affairs. What CVYA provides is an arena for youth to observe and experience such roles. Youth develop competencies in initiating community activities, getting people together for cooperative action and planning and organizing an event.

While several communities in the region have expressed interest in CVYA, none have yet put a similar program in operation. The University of Alaska's Center for Cross-Cultural Studies, under a grant from the Bernard Van Leer Foundation in the Hague, Netherlands, is currently attempting to help communities organize activities for youth. Villagers interested in working with youth enroll in a field-based baccalaureate program in Human Resource Development. Courses are taught primarily in the villages with students coming together during the year for intensive workshops. The program includes a practicum where students organize youth activities in ways compatible with the traditions and social milieu of different villages.

CONCLUSION

This paper has described two natural social settings, a parochial boarding school and a community youth organization, that appear to be increasing psychological health in Eskimo adolescents. These situations are very different. One is an example of an outside western institution—a Catholic school which boards Eskimo youth away from their homes for almost three-quarters of a year. The other is an example of an indigenous Eskimo institution—a village youth organization which is funded and directed by the community. Yet both settings appear to be developing attitudes and competencies important to successful adult adaptation. These include an integrated value framework, clear character ideals, and the skills required to plan and organize community projects.

NOTES

1. The description of this school is summarized from Judith Smilg Kleinfeld, *Eskimo School on the Andreafsky*. New York: Praeger, 1979.
2. In a comparative study of four boarding school environments, we found that 28% of the new freshmen at St. Mary's experiences mild school related socio-emotional problems and another 17% experienced serious school related problems (Kleinfeld & Bloom, 1977). The incidence of school related socio-emotional problems among freshmen at St. Mary's was not significantly different from the incidence at other schools. However, the types of problems were different. Psychological difficulties in this disciplined environment generally took the form of depression and psychosomatic complaints, not the violent drinking and acting out that was common in other schools.
3. Our definition of "success" was attaining a 2.00 grade point average or greater while completing 7.5 or more credits per semester, half the number needed to advance in class standing.
4. The state of Alaska has since built local high schools in most

villages in the region. Students no longer routinely enroll in high schools away from home.

5. This research was supported by a National Institute of Education project, *Youth Organizations as a Third Educational Environment Particularly for Minority Group Youth*. Principal researchers were Judith Kleinfeld, Ann Shinkwin, and Bill McDiarmid.
6. A study of youth services in 166 Alaskan communities (83% of total Alaskan communities with a population of 75 or more) found that 63% of White majority communities had "character building" youth organizations compared to 11% of Native majority communities. *Interim Report*, Alaska House Committee on Health, Education and Social Services, 1980.
7. This discussion of CVYA is a summary of a monograph prepared by Bill McDiarmid, *Getting it together in Chevak: A case study of a youth organization in a rural Alaskan village*, Fairbanks: University of Alaska, Institute of Social and Economic Research, 1981. (Draft Report).

REFERENCES

- Bidwell, C.E., & Vreeland, R.S. College education and moral orientations: An organizational approach. *Administrative Science Quarterly*, 1973, 8, 166-191.
- Blackwood, L. *Health problems of the Alaska Natives: Suicide mortality and morbidity*. Alaska Area Native Health Service Program Formulation Branch, Systems Development Section, 1978.
- Coleman, J.S., et al. *Youth: Transition to adulthood*. Report of the Panel on Youth of the President's Science Advisory Committee. Chicago: The University of Chicago Press, 1974.
- Collier, J. *Alaskan Eskimo education: A film analysis of cultural confrontation in the schools*. New York: Holt, Rinehart, & Winston, 1973.
- Kleinfeld, J., & Bloom, J. Boarding school effects on the mental health of Eskimo adolescents. *American Journal of Psychiatry*, 1977, 134(4), 411-417.
- Kleinfeld, J.S. *Eskimo school on the Andreafsky: A study of effective bicultural education*. New York: Praeger, 1979.
- Kraus, R., & Buffler, P. Sociocultural stress and the American Native in Alaska: An analysis of changing patterns of psychiatric illness and alcohol abuse among Alaskan Natives. *Culture, Medicine and Psychiatry*, 1979, 3, 111-151.

Krush, T., Bjork, J., Sindell, P., et al. Some thoughts on the formation of personality disorder. Study of an Indian boarding school population. In *Indian Education*. Hearings before the Special Subcommittee on Indian Education, Ninetieth Congress, Vol. 4. Washington, D.C.: U.S. Government Printing Office, 1969, 1121-1127.

Leon, N. Mental health considerations in the Indian boarding school program. In *Indian Education*. Hearings before the Special Subcommittee on Indian Education, Ninetieth Congress, Vol. 5. Washington, D.C.: U.S. Government Printing Office, 1969, 2203-2208.

Freeland, R.S., & Bidwell, C.E. Classifying university departments: An approach to the analysis of their effects upon undergraduates' values and attitudes. *Sociology of Education*, 1966, 39, 237-254.

DISCUSSION

Yvonne Red Horse: In terms of looking at adolescents, case studies and interviewing are good ways to measure program success. A couple things struck me in the paper. It appeared that the students who are most successful came from traditional families and the values that they were taught at home in terms of being "well-rounded children" contributed to their success in the school. The other thing that is very critical, and which needs to be brought out in the paper, is the role of the volunteer. It appeared that the students' senses of self-identity and feelings about themselves were enhanced not only through the teaching, but intense counseling and socialization within the school, a large part of which can be attributed to the volunteers. . . In this regard three areas seemed to have impact upon student success: the family, the volunteer, and the school socialization system.

Damian McShane: Judith, in terms of the significance that you place on the relationships between students and young teachers, how would you characterize these relationships with regard to intensity and possible effects? Did you also take a look at any similar sorts of relationships?

Judith Kleinfeld: At Saint Mary's there already was a formal counselor, but she was almost never used. The idea was, as long as every kid found someone there at the school he could talk to, that was fine. The problem you get in boarding schools, at least in the ones I've looked at, is that the kids become separated into these small

tight cliques usually based on village and region. Especially when there are hostilities between these groups, it sabotages the efforts of the staff to create a program. What the school did was to put a very strong emphasis on the idea of breaking down these cliques, developing unity, working out problems and broadening the scope of relationships with strong principles. The staff worked with the details of life, instead of grand abstractions. The school had no money nor programs, so everything was done at the level of the students. If there was a spat between roommates, in public school they would have switched roommates. At St. Mary's the teachers sat down with the two pupils and talked to them about the importance of getting along with other people later in life and what it means when you can't get along with people. It became a test of this ability for the kids to work things out.

Jim Shore: There is a great deal of similarity in the philosophy of intervention in this boarding school and in the model dorm project, even with kids of a much earlier age. It is essential to go back and look at the adjustment of those kids who had the enriched boarding school experience in very crucial years and how that has affected their subsequent development.

Norm Dinges: I'd like to note another similarity. Your case of Ellen strikes me as a remarkable example of a model of psychological health and this speaks to Morley Beiser's comment about the problem with the measurement of such phenomena. I don't think we've got as much a problem as it would appear. I think that psychological health, positive mental health theory and measurement have moved quite a ways from some of the literature that is available. If you read Heath's model and compare that to the description of Ellen, it's a beautiful case example. Almost everything she did you can put into the model and measure it.

I'd like to make another point about evaluation. I think that when we start to prematurely reject stronger designs and go to case studies that we may be sacrificing design strengths for weaknesses in measurement. We're getting a few things confused. We shouldn't prematurely reject a strong design, but rather improve our measures and there are good measures available. They have just not been used and need a much broader application.

Damian McShane: To me, one of the difficulties with evaluation is that we haven't been including significant complexes of transactions called politics, whether tribal or not, and the inter-group friction among adolescents which is typical in these settings. These complex transactions are usually not central to, not even indirectly included in our evaluation designs. I think we may be able to identify other transaction complexes that need to be taken more centrally into consideration as we evaluate and produce different methodologies.

Bernard Bloom: I wanted to ask Judith about her suspicions or her speculations that the young students who elected to go to the boarding school may have been different to begin with than the others who elected not to. What have you thought about how to test it out?

Judith Kleinfeld: I used the conventional measures—socioeconomic status, academic achievement rates, etc. There were no differences on any of these sorts of cognitive and background measures. But I knew there was a difference in these kids, so I ended up interviewing the Jesuit priests who served in the villages and just talked to them about the kinds of families that kids came from. What seemed to be occurring, although I can't prove it elegantly, is that the kids came from, one, more traditional families, and, two, more religious families, but not from families noted for leadership. There was less family history of traumatic situations such as alcohol abuse. There was no question in my mind that we were dealing with a select group of kids. They were building upon a group of kids with a very strong primary identity framework. I'll point that out more clearly in my paper. But what I hope this doesn't do is to negate the experience that was occurring at the school. I did not see the school bringing about any sort of basic personality change in these kids. Rather it reinforced their primary identity framework and showed kids how to combine their traditional orientations with productive patterns in contemporary village and urban life.