

Psychological Research in the North

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A decade ago Vallee challenged psychologists to go North;¹ most have been content to stay South. However some research has been done in the interval to supplement the meagre work done earlier, and this paper will attempt a selective and topical review of it.

Research with northern native peoples by psychologists, as well as psychiatrists and psychologically sophisticated anthropologists will be surveyed under four headings:² cognitive skills; attitudes; personality; and some psychological effects of culture contact and social change. The first section will include perceptual and intellectual abilities, and potential for western (southern?) education; the second will be concerned with attitudes, values and motives; the third will survey evidence for a "northern" personality; and the fourth will examine changes (adaptations and reactions) in cognitive skills, attitudes and personality during acculturation. A final section will focus on the role and responsibility of the psychologist in northern development, and make suggestions for urgent and essential research.

Perhaps a word need be said at the outset to establish why psychologists are, or should be, interested in the North. Firstly, behavioural variation as a function of ecological and cultural variation may be admirably studied in the North; from our point of view it is a unique human laboratory capable of producing essential knowledge about human behaviour in its widest context. Secondly, there are rapidly growing psychological problems in the North stemming from the search for an exploitation of material resources by other scientists and technicians who typically have minimal regard for the human resources of the North; here we can help, but only if our basic research, conducted for the first reason, has been well-initiated. For both these reasons, I echo Vallee's

challenge into the seventies, and hope that more take up the task than responded in the sixties.

Cognitive Skills

More research has been carried out by psychologists in the North on the kinds of behaviour known as cognitive skills than on any other aspect of human functioning. This research has focused primarily on perceptual and intellectual development, and on educational potential; the impetus for it seems to have stemmed from a concern both with pure research and with applied problems (education, wage employment and health).

Probably the most interesting consistent finding is that Eskimos differ very little from southern norms on tests involving perceptual skills or those abilities tapped by "performance scales" of conventional intelligence tests.³ It is often found, of course, that non-western peoples (e.g. in Africa and among American minority groups) perform significantly lower on these tests, and so this northern result is in many respects a unique finding. Interpretations of this relatively high perceptual development have been offered in terms of a functional adaptation to the demands of the northern environment where perceptual-motor skills are highly useful.⁴

A corollary to these results is the lack of sex-difference in these skills among Eskimos;⁵ the usual finding among other groups is that females perform significantly poorer than males, but this is not so in the North. Interpretations have been offered for this in terms of socialization practices and role requirements in Eskimo life.⁶

Several studies of Indian and Metis peoples have indicated a level of perceptual development almost as high as that found among Eskimos, suggesting the existence of a "northern" cognitive style.⁷ Since this category of cognitive skill (as opposed to "verbal skills") is so important in a technological economy, this general finding for Eskimos, Indians and Metis bodes well for the acceptance of southern technology by northern peoples; however other problems inherent in social and technological change may interfere with this traditional high level of development of these

skills, and render this solid base less useful than it might otherwise be to the individual contemplating change.

Other kinds of tests have been employed from time to time in the North, among them the Piagetian tests for "equivalence."⁸ Although Eskimo and white school children were virtually equal on a conventional test of intellectual development, attainment of superordinate cognitive categorization was not as frequent among the Eskimo children. This finding was considered to be a result of traditional emphasis on "the concrete individuality" of physical objects, obscuring any overriding equivalence among a set of objects. This tendency to deal with discrete units in the environment was also noted by Berry who found that, despite equivalent visual acuity, Eskimos were significantly more aware of slight variations in their visual environment, than were other groups tested;⁹ these observations are reinforced by the finding that Eskimos tend to retain the identity of pictorial material, and reproduce it with fewer distortions than other groups tested.¹⁰ All these results indicate that Eskimos tend to perceive objects in their environment with accuracy, and as discrete individual entities, and suggest a further interpretation in terms of traditional demands on perceptual development made by the qualities of life in the North.

From a specifically educational point of view, MacArthur and Vernon have examined Metis, Indian and Eskimo school children in the Western Arctic, and discovered that on a variety of predictors of educational success, these pupils perform creditably (though slightly lower than whites) on these western derived and western biased tests.¹¹ In practice, then, traditional intellectual development has prepared northern peoples reasonably well for our notions of education.

Before leaving the educational field, it is perhaps worthwhile to point out that little work has been done in the North on the "culturally deprived" or the "culturally disadvantaged". It is hoped that this situation is due to the recognition by potential researchers that these concepts have no valid place in a society guided by an ideology of cultural pluralism. However it is probable that this lack is a reflection of the general lack of psychological research in the North, and not due to any ideological sophistica-

tion; we may yet read that some enterprising researcher has pronounced our northern peoples to be culturally inadequate!

Attitudes, Values and Motives

Considering the widespread research on intergroup relations in other countries, it is somewhat surprising to discover that so little has been done with native ethnic group relations in Canada. What does the southerner think of the Eskimo? What does the Cree or Slave think of the southerner? We do not know!

Admittedly we have informal evidence bearing on these questions (from speeches, documents, and every-day comments) but there have been, to my knowledge, no published formal studies of these attitudes. One paper has yielded a list of word associations commonly made to the stimulus word "Indian",¹² and another has collected some psychological data on Indian-white relations in Southern Alberta.¹³ An unpublished thesis by Wills has examined Indian attitudes toward the western world.¹⁴ Basically their concerns were for money, which whites seemed to have plenty of, but which Indians could not share; readers familiar with millenarian movements will recognize in this report the basis for a cargo-type movement. Vallee has also written on ethnic relations, but his material from Baker Lake is primarily sociological, and although providing an excellent base for future psychological research, cannot count as an example of a psychological study of northern intergroup attitudes.¹⁵

With respect to values, again little of a formal nature seems to have been done from a psychological point of view. Leitch has examined the respective values of Indians and of the Department of Indian Affairs (concentrating on the former) as they entered into the series of consultations on the proposed Indian policy; from a content analysis of the transcripts, he was able to conclude that the final outcome stemmed predictably from the initial values.¹⁶

Perhaps the best known study of values in the North has been carried out by Lantis, using Nunivak Island Eskimos' mythology as a source.¹⁷ Her characterization of the Eskimos as observant and analytic supports the psychological findings in the

last section, and her description of them as individualistic, self-reliant, and self-confident anticipates a discussion in the following section on personality.

Another study of Eskimo values is a model of well-documented and incisive research in the North.¹⁸ Dr. Briggs has concerned herself with emotions which are central to the value system of Chantrey Inlet Eskimos, and has used linguistic analysis as a major tool. However, she has searched beyond the verbal evidence and worked with behavioural cues and behavioural contexts of the emotions. Her general conclusions point up *nurturance* and *reason* as qualities most valued, both being defined broadly.¹⁹ The first is considered to include warmth, food, safety, service and emotional support, and the second encompasses calmness, equanimity, moderation, voluntary conformance, pragmatism and a high regard for the autonomy of others and oneself.

Motivation, especially "achievement motivation", has received generally wide attention recently in many parts of the world, but not in the North. A single study appears to have been carried out with B.C. Indians (band not specified).²⁰ Predictably, Indian children (along with working-class white children) produced less evidence of achievement motivation during testing than did middle-class white children. However this kind of research has been recently widely charged with an ethnocentric bias for not taking into consideration traditional goals and examining traditional sources of motivation; much more work is obviously required in this area, especially work which is consistent with this latter point of view.

In sum, there has been very little work done in the North on attitudes, values and motives, and the work which has been done has been only marginally psychological. Although work is currently being carried out by Nelson Graburn on Indian-Eskimo stereotypes, and George Parsons is preparing a report on ethnic relations in Inuvik, an area as crucial as this for the comprehension of northern peoples urgently requires more attention.

Personality

Although more work has been done on aspects of Indian and Eskimo personality than on cognitive skills, almost none of it

is the work of psychologists. Psychologically sophisticated anthropologists and a few psychiatrists have examined mental health, psychopathology and basic personality trends in the North; excellent reviews exist for the first two, and hence only brief comment need be made here. Boag has twice surveyed mental health in the Arctic and included extensive commentary on psychopathology, particularly on *pibloktok* and *witiko* psychoses.²¹ Parker and Chance have also reviewed aspects of the area, while Vallee has taken an *emic* approach, attempting to view mental illness from the Eskimo's point of view.²² Readers wishing to gain a more extensive knowledge of northern mental health and psychopathology are referred to these readily-available papers.

While not wishing to perpetuate the myth of "basic" or "modal" personality in this review, it is a worthwhile endeavour to search for consistencies and regular patterns of observations made by various researchers in the field; insofar as an individual personality is shaped both by genetic and cultural factors, and insofar as both the gene pool and aspects of culture (especially socialization practices) tend to be functionally adapted to the group's ecology, one might reasonably expect a homogeneity of personality traits across the northern regions. To this end, four studies of Eskimos by Ferguson, the Honigmanns, Lubart, and Berry may be examined.

The Ferguson report is based on nine Rorschach protocols from Great Whale River.²³ While generalization is inappropriate from such a small sample, the author did speculate that the evidence of a repressed, unimaginative and emotionally constricted person contained in the protocols is a dynamically possible substrate lying "beneath the Eskimos' smiling exterior." In fact, such a pattern of traits, she concluded, may be functionally adaptive in the northern physical and socio-cultural environment.

In the study in Frobisher Bay, the Honigmanns included a chapter on "the Eskimo as a Person." The flavour of their description can be communicated by listing the kinds of adjectives they applied: optimistic, venturesome, individualistic, not reared for routine or repetition, a people with weak and informal leadership, and a reluctance to press too closely on one another in expecting conformity.²⁴ This description is consistent with pre-

vicious observation, and along with their description of Eskimo emotional withdrawal, fits well with the Ferguson report.

The paper by Lubart is highly descriptive, is sometimes inconsistent, and avoids reference to earlier work on the topic.²⁵ It is thus difficult to assess the objectivity and, hence, the validity of the description offered of the Caribou Eskimo personality. One point of inconsistency relates to the degree of independence *vs* conformity in the Eskimo personality: on one hand he opines that "the Eskimo is, in general a marked conformist..."²⁶, while later he considers him to be "very much an individualist".²⁷ A comparative study carried out in Pond Inlet and Frobisher Bay concluded that these Eskimos tended to be strongly individualistic (independent and self-reliant), a conclusion based on an experimental task involving judgements in the face of an incorrect suggested group norm.²⁸ This description is consistent with earlier reports of Lantis and Chance from the Western Arctic,²⁹ and with the Honigmanns' reports.

The early work on northern Indian personality is so well-known that it need not be detailed here; the series of papers by Hallowell and, further south, by Spindler and others, have set the stage for recent work with northern peoples.³⁰ Note again, however, that none of the work has been carried out by psychologists, and that the number of studies is small.

As a qualification of the "modal personality" approach, Helm *et al* have explored personality *variations* within a Slave family group using Rorschach's TAT's.³¹ In spite of their interest in diversity, they are able to comment on modal tendencies which they saw as a constrained emotional life including a repression of hostile impulses, a high "valuation on personal autonomy", and a "reliance on techniques of avoidance, withdrawal and flight from sources of anxiety".³² The similarities between this description and the generalized description emerging from the review of Eskimo studies, suggest a "northern", pan-ethnic, adaptation of personality characteristics to traditional conditions of life in the North.

The existence of self-sufficiency (corresponding to the above discussion of independence and personal autonomy), has been

explored by Cohen and Van Stone using a content analysis of Chipewyan stories.³³ They found about equal presence of self-sufficiency and its opposite, dependency, in these traditional stories which were collected in the early part of this century, and a relatively stronger decline in self-sufficiency in recently collected Chipewyan children's stories (at Snowdrift, 1961). The presence of dependency (equal to self-sufficiency) in the traditional stories does not fit too well with the more general picture already painted, but the relative increase in dependency during acculturation fits well with observation in Africa.³⁴

Psychological Effects of Acculturation

Essentially in this section an attempt will be made to survey the psychological effects of culture contact and social change in the North. A convenient organization is to follow the order of the previous sections, and attempt to trace changes in cognitive skills, attitudes and personalities during acculturation.

There is a good deal of evidence that during westernization, cognitive skills generally of non-western peoples become more like those of the West; as familiarity with our ways increases, school performance, perceptual characteristics and IQ's gradually come closer to our norms. Since education is itself an *agent* of acculturation, there are interaction effects, so that clear-cut research is impossible; but it may be taken as a truism that, at least until personality problems arise, usually during adolescence, school performance improves with increased use of English or French and increased familiarity with the instructional situation.

Not so obvious, however, is the finding that the already high level of spatial perceptual skills in the North tends to increase with acculturation, reflecting the combined effects of traditional and modern educational influences on these skills.³⁵ Moreover habits of perceptual inference alter with acculturation, as evidenced by a changing pattern or response to visual illusions, so that Eskimo susceptibility to certain illusions approaches that of western perceivers.³⁶

For other cognitive skills and intelligence test results, changes also occur with increased contact. Vernon found differences in performance on a variety of cognitive tests between town and

bush Eskimos and Indians,³⁷ and similar results are reported in a variety of unpublished reports and informal observations by teachers and administrators in the North.

With respect to attitudes changing during acculturation, only two studies have come to hand, those of Yatsushiro and Holden.³⁸ The first has explored Frobisher Bay Eskimo attitudes toward wage employment, which of course requires greatly different attitudes from those inherent in their traditional livelihood. Briefly, he found that despite the predicament the town Eskimo finds himself in (the desire to maintain traditional attitudes and sources of food *vs* the desire to have money for western goods) he has made a reasonable attitudinal adjustment. A majority were satisfied with their jobs and their earnings, but their predicament was articulated by their concern about having enough time off to hunt. However, overall, a large majority agreed that the Eskimos in Frobisher Bay were leading a better life than they were twenty years earlier.

The second attitude study, with Cree in Northern Quebec, was made by Holden as part of the McGill Cree Project. An eight item modernization scale was developed which was able to discriminate between town and bush dwellers, and included items concerned with attitudes toward wage employment, education, and who should be "listened to", old people (Indians) or whites. In addition to differences being found between town and bush dwellers, significant relationships were detected with age and education. Such a scale might conceivably be expanded and generalized to make it applicable in many areas of the North.

By far the largest body of literature on psychological aspects of acculturation in the North is in the area of personality change. Once again, however, most has been done by anthropologists (with a few psychiatrists), pointing up the lack of work by psychologists. To review all the work in detail would take more space than is available; hence a mention of key works only will be made, without reference to specific content, and a broad overview will be given without always acknowledging the numerous specific sources.

First, two large interdisciplinary projects should be mentioned: the McGill Cree Project, directed by Norman Chance,³⁹

and the Identity and Modernity in the East Arctic project directed by Robert Paine at Memorial.⁴⁰ Although neither has an overall psychological orientation, each has some aspects devoted to psychological effects of acculturation. In the McGill project, the psychological concern is shared by Wintrob and Sindell in their report on education and identity conflict among the Mistassini and surrounding Cree⁴¹. They have focused on the effects on adolescent personality of being educated away from their own people; major findings include the statement that almost half of those given the Adolescent Adjustment Interview (developed for the purpose) suffer a high degree of identity conflict, and that this conflict is being resolved differentially (toward a "white" model, toward a "traditional" model or towards synthesis of the two) depending upon the student's degree of emotional commitment to western education. The Memorial project is still going on, but a preliminary unpublished report on the psychological portion is available; although mainly descriptive, it provides a useful baseline for the study of the effects of change.⁴²

The study by the Honigmans mentioned previously was also concerned with personality change, as the Baffin Eskimo moved into Frobisher Bay.⁴³ In their judgement, the Eskimos personality is compatible with "The town's incessant, built-in change", and readily accepts the white man's notion of "progress".

A number of studies, in addition to those already mentioned, have been concerned with the stressful and more negative aspects of acculturation; their concerns have been with alienation, emotional disturbance and patterns of psychopathology.⁴⁴ Since much of this work has been well-summarized by Vallee little need be said here. In his paper, Vallee has made a useful distinction for future researchers on these problems: that between crises which are primarily *communal* and those which are primarily *personal*. He makes a case for keeping separate those aspects of acculturation which place stress directly on the individual and those which stress the group, and through that, affect the individual.⁴⁵

Two reports by Lubart which have been published since Vallee's review require some comment. His 1969 study is largely a re-statement of his views of Eskimo basic personality and devotes only the last few pages to problem of adaptation, where

alcohol use and prostitution are discussed as indices of social breakdown.⁴⁶ His 1970 report for Northern Science Research Group is a considerable improvement, including as it does clinical data and case reports on a wider range of problems of adaptation. However, a tendency to very broad generalization and a persistent use of psychoanalytic jargon limit the appeal of the report.⁴⁷

Finally, mention may be made of current work known to the reviewer. Ann McElroy (University of North Carolina) is working on Eskimo psychological adaptation to Arctic urbanization in Frobisher Bay and Pangnirtung, and the present reviewer is examining the pattern of psychological response to acculturation (including marginality, alienation, psychosomatic stress, deviance, attitudes toward modes of relating to the dominant white society and ethnic identity) among James Bay Cree.

Responsibility of the Psychologist: Research for Development

As a final note let me comment on the responsibility and potential role of the psychologist in the North, and on the kinds of research he must urgently do.

For a psychologist, the term "development" implies a "progressive change ... continuously directed toward a certain end condition."⁴⁸ That is, a person who is in state A now develops toward state B: for us to have "development" then (and not just exploitation) we need to know and describe quite precisely what state A is; we need to be able to specify our goal, state B; and we need to know how to get from state A to state B, coping with problems along the way.

From an examination of the psychological research accomplished to date, no one could argue that we know even very much about state A; what, psychologically, are the people of the North, what are their particular strengths, their problems?

What is contained in state B, the goal? Who specifies it, those in the North or those in the South? If it is to be those in the North, how do we encourage an expression of their goals, and how do we monitor it? We must not assume merely that state B is best left unspecified, to appear as an epiphenomenon of technological change in the North.

Finally we know only a little about the path and the problems to be encountered between state A and state B. We do know that transition is psychologically difficult in many circumstances; we also know that it is not inevitably so. We must devote considerable research effort to these problems, to help ease the transition where necessary.

For centuries, we were the "learners" in the North; we need to return to this stance if we are to come to understand its people and the problems generated by our presence.

What, then, are some concrete research topics, those which are urgent and essential for the psychologist wishing to work in northern *development*. To continue the A-B model, we need to work intensively on the following:

- A basic cognitive and personality characteristics of northern Indians and Eskimos; the fundamental perceptual and intellectual abilities, and emotional tendencies fostered in traditional life.
- B goals and aspirations of the people, and motives that can be marshalled in pursuit of these goals.
- C psychological problems of transition during acculturation; psychological substrate of ethnic relations, including the selection of southerners for northern work (in terms of ethnocentrism, authoritarianism, and potential adaptation to northern living); implications of cultural pluralism as an ideology for a Indian/Eskimo educational system.

If we do not take up our responsibility and concern ourselves with the human resources of the North, then we cannot blame the physical scientists and other agents of technological change for *their* lack of concern when they scramble for the material resources of the North.

Notes

1. F.C. Vallee, "Suggestions for Psychological Research Among the Eskimo," *O.P.A. Quarterly* 14:39-45 (1961).

2. Although it would be useful to have a review of studies of whites living in the North, this paper has been arbitrarily limited to a survey of research with native peoples. As studies dealing with white adaptation to northern living increase in number over the next few years, it would seem appropriate to make them the subject of a second survey.
3. Caroline Preston, "Psychological Testing With Northwest Coast Alaskan Eskimos," *Genetic Psychology Monographs* 69:323-419 (1964); J.W. Berry, "Temne and Eskimo Perceptual Skills," *International Journal of Psychology* 1:207-229 (1966); P.E. Vernon, "Educational and Intellectual Development Among Canadian Indians and Eskimos," *Educational Review* 18: 79-91, 186-195 (1966); R.S. MacArthur, "Some Cognitive Abilities of Eskimo, White and Indian-Metis Pupils Aged 9-12 Years," *Canadian Journal of Behavioural Science* 1: 50-59 (1969).
4. e.g. Berry, "Perceptual Skills."
5. *Ibid.*; Preston, "Psychological Testing"; R.S. MacArthur, "Sex Differences in Field Dependence for the Eskimo: Replication of Berry's Findings," *International Journal of Psychology* 2:139-140 (1967).
6. Berry, "Perceptual Skills"; MacArthur, "Sex Differences".
7. G.H. Turner and D.J. Penfold, "Scholastic Aptitude of Indian Children of the Caradoc Reserve," *Canadian Journal of Psychology* 6:31-44 (1952); R.S. MacArthur, *Assessing the Intellectual Ability of Indian and Metis Pupils at Fort Simpson, N.W.T.* (Dept. of Northern Affairs and National Resources, Education Division, Ottawa, 1962); Vernon, "Educational and Intellectual Development"; W.H. Gaddes, A. McKenzie and R. Barnsley, "Psychometric Intelligence and Spatial Imagery in Two Northwest Indian and Two White Groups of Children," *Journal of Social Psychology* 75:35-42 (1968); E. Wiltshire and J.E. Gray, "Draw-a Man and Raven's Progressive Matrices (1938) Intelligence Test Performance of Reserve Indian Children," *Canadian Journal of Behavioural Science* 1: 119-122 (1969).
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9. Berry, "Perceptual Skills".
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11. MacArthur, *Intellectual Abilities*; P.E. Vernon, *Intelligence and the Cultural Environment* (London: Methuen, 1969); *idem*, "Educational and Intellectual Development".
12. R.C. Gardner and D.M. Taylor, "Ethnic Stereotypes: Meaningfulness in Ethnic-Group Labels," *Canadian Journal of Behavioural Science* 1:182-192 (1969).
13. H. Zentner, "Cultural Assimilation Between Indians and Non-Indians in Southern Alberta," *Alberta Journal of Educational Research* 9(2).
14. R.H. Wills, "Perceptions and Attitudes of the Montagnais-Naskapi of Great Whale River" (M.A. thesis, University of North Carolina, 1965).
15. F.G. Vallee, *Kabloon and Eskimo in the Central Keewatin* (Ottawa: Canadian Research Centre for Anthropology, 1967).
16. G. Leitch, "Value Orientations and Political Negotiations: the Indians of Canada and the Government" (Honours thesis, Queen's University, 1970).
17. M. Lantis, "Alaskan Eskimo Cultural Values," *Polar Notes* 1:35-48 (1959).
18. Jean Briggs, "Utkuhikhalingmiut Eskimo Emotional Expression," Northern Science Research Group Report (Dept. of Indian Affairs and Northern Development, Ottawa, 1968); *idem*, *Never in Anger* (Cambridge: Harvard University Press, 1970).

19. Briggs, "Utkuhikhalingmiut," p. 49.
20. A. Cameron and T. Storm, "Achievement Motivation in Canadian Indian, Middle- and Working-Class Children," *Psychological Reports* 16:459-463 (1965).
21. T.J. Boag, "Mental Health in the Arctic," *Excerpta Medica International Congress Series* no. 150 (Proceedings of the IV World Congress of Psychiatry, Madrid, 1966); *idem*, "Mental Health of Natives Peoples of the Arctic," *Canadian Psychiatric Association Journal* 15:115-120 (1970).
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25. I.M. Lubart, "A Study of Basic Personality Traits of the Caribou Eskimos: A Preliminary Report," in *Developments in Psychoanalysis at Columbia U.*, eds. G.S. Goldman and D. Shapiro (New York: Hafner, 1966).
26. *Ibid.*, p. 305.
27. *Ibid.*, p. 316.
28. J.W. Berry, "Independence and Conformity in Subsistence-Level Societies," *Journal of Personality and Social Psychology* 59:205-210 (1967).
29. Lantis, "Alaskan Eskimo Cultural Values"; N.A. Chance, "Culture Change and Integration: An Eskimo Example," *American Anthropologist* 62: 1028-1044 (1960).
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33. J. Cohen and J. VanStone, "Dependency and Self-sufficiency in Chipe-wayan Stories," in *Contributions to Anthropology*, pt. 2, National Museum of Canada Bulletin no. 194 (Ottawa, 1961-62).
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35. Berry, "Perceptual Skills."
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41. R.M. Wintrob and P.S. Sindell, "Education and Identity Conflict Among Cree Youth," Preliminary Report. Cree Developmental Change Project, A.R.D.A. Project no. 34002 (Ottawa, 1968).
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43. *Eskimo Townsmen*.
44. G.D. Berreman, "Aleut Reference Group Alienation, Mobility and Acculturation," *American Anthropologist* 66:231-250 (1964); N.A. Chance, "Acculturation, Self Identification and Personality Adjustment," *American Anthropologist* 67:372-393 (1965); N.A. Chance and D.A. Foster, "Symptom Formation and Patterns of Psychopathology in a Rapidly Changing Alaskan Eskimo Society," *Anthropological Papers of the University of Alaska* 11:32-42 (1962).
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