

# Eskimos' Apparent Perceptual Gifts Can Lead to Technical, Science Fields

COLLEGE — Eskimos have been referred to in highly laudatory terms by explorers and present day observers for their map-making ability and mechanical talents.

Dr. Judith Kleinfeld, an assistant professor of educational psychology at the University of Alaska, suggests that these aptitudes may reflect "unusually high intellectual abilities" in such areas as perceptual analysis and image memory.

In a paper just published she says that the performance of Eskimos on measures of their learning abilities "approximates

and in some instances exceeds national norms".

"In an exploratory study reported in this paper," Dr. Kleinfeld writes, "village Eskimo students surpassed urban Caucasian students in their ability to recall complexly structured images. Since the cultural biases of conventional psychological tests may result in a test score that is lower than the person's level of ability, it is not unreasonable to suggest that Eskimos' actual abilities in these areas may be even higher than such studies indicate."

Professor Kleinfeld interprets

her suggestion to mean that not every Eskimo possesses the talents to which she refers but that "in a group of Eskimos selected at random, more individuals who have high ability in this area will probably be found than in some other randomly selected group".

The academic progress of Eskimos, she says, may be substantially increased by educational methods that build on Eskimo students' learning strengths.

Her paper, entitled "Cognitive Strengths of Eskimos and

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# Perceptual Qualities...

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Implication of Education", was published in the "occasional papers" series of the University's Institute of Social, Economic and Government Research, which has copies available at \$1 each.

Exploring the literature on the subject Dr. Kleinfeld notes that stories of Eskimos' mechanical talents "have become part of Alaskan folklore".

She cites instances where Eskimos repaired complicated pieces of machinery that white mechanics summoned for the task were unable to fix. And she states that oil companies recently have made comments like this on Eskimos' mechanical skills:

"We have found that the Eskimo has more innate ability to work around equipment than anyone else around the world."

Dr. Kleinfeld calls on other sources for these further observations:

"While Eskimos' mechanical aptitude may result in part from their higher level of manual dexterity, two additional skills are likely to be involved—ability in analyzing spatial relationships and ingenuity in using unconventional materials as substitutes for missing parts.

"Interestingly, among Caucasians as well, ability in perceptual analysis appears to go together with an ability to solve problems that require insight into unconventional methods."

Dr. Kleinfeld urges that research be done to "define precisely the nature of Eskimos' perceptual abilities and their relationship to aptitude for different types of occupations."

So far, she writes, Eskimos' perceptual skills have been evidenced in such pursuits as map-making, mechanics and drawing. But she suggests that these talents may lead to unusually high performance in other areas, especially technical and scientific fields.

"Child-rearing practices gen-

erally function to increase children's competence in the skills they will need as adults," Dr. Kleinfeld continues. "Adapted to the demands of hunting in the Arctic, Eskimo child-rearing methods seem likely to increase the ability to observe and recall experience accurately.

"Traditionally, Eskimo children learned primarily through watching adults rather than through verbal explanation. As a Savoonga villager points out in recommending that the schools use more appropriate teaching methods for Eskimo children:

"For instance, if a child is given (written) instructions of how to put the tape on the tape recorder here, the child would bog down trying to read the instructions. If a child is shown by the teacher doing the work, the child could do it right after the teacher removes his hands from the machine. That's the way all the Eskimos on St. Lawrence Island learn."

Dr. Kleinfeld suggests further that since hunting was essential to survival "natural selection may have led to a higher incidence of individuals with high levels of perceptual skills among Eskimos".

"Able hunters," she writes, "may have been more likely to possess highly developed perceptual skills. They may also have been more likely to survive and to produce many offspring who inherited similar abilities."

Dr. Kleinfeld reports that of 102 village teachers responding to an inquiry 69 per cent believed that their pupils demonstrated an unusual ability to recall visual detail. One teacher replied:

"They will remember minute details from a movie or their readers, which I never even noticed. They remember movies from two or three years ago and can mimic the action or draw it."