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To examine the migration and vocational choices of recent high school graduates from three geographical areas of Minnesota, data were obtained by questionnaires and interviews of 739 male high school graduates from the years 1948-1956. The sample was stratified by agricultural income of the region. Some findings were: (1) Out-migration was greater in the high agricultural income area, (2) Career advancement was highly associated with migration, (3) In the high agricultural income area, out-migration was associated with residence, father's occupation, present occupational aspiration, year of high school graduation, and age at the time of interview, (4) In the low agricultural income area, migration was associated with present occupational aspiration, year of graduation, age at time of interview, and place of early adulthood residence, (5) Graduates who migrated from the low income agricultural area tended to remain within commuting distance of their high school community or leave the state entirely, (6) High agricultura I income area graduates more frequently move beyond the commuting distance of their home high schools but remained within the state, (7) 64 percent of the low agricultural income area and 47 percent of the high agricultural income area graduates who migrated moved to cities of 100,000 or more. (DM)





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# IN SEARCH OF OPPORTUNITY

A Study of Post High School Migration in Minnesota

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UNIVERSITY OF MINNESOTA

AGRICULTURAL EXPERIMENT STATION

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# IN SEARCH OF OPPORTUNITY

# A Study of Post High School Migration in Minnesota

Marvin J. Taves and Richard W. Coller

A mericans frequently move from one job to another and from one residence to another. Such movements set up a chain of reciprocal adjustments by all involved—not only the migrant and his immediate family and friends, but also the community he leaves and the community he enters.

Heaviest migration is by individuals from younger working age groups. This selective migration changes the population composition in the communities involved. It affects the demand for, and the ability to supply, certain facilities and services in these communities. The need for schools, churches, health facilities, and other services increases in areas of inmigration but may diminish in areas of outmigration. The ability to support these facilities also fluctuates but not necessarily at the same rate. Effective planning by local communities requires some concept of the future size and composition of their populations.

Can a purely economic view of migration as a simple response to variations in potential income adequately explain why young men leave the farm and their hometown in some areas but not in others? Where do migrants go? What jobs do they take? Does the economic well-being of an area influence the tendency to leave?

### Purpose of Study

This study sought answers to such questions. It concerned the migration and vocational choices of recent high school graduates from two areas in north-eastern and one in southwestern Minnesota. A theory of mobility was explored and several of its tenets tested.

In this report the incidence and patterns of outmigration also are described. Statistical analyses are presented of possible correlates of migration such as childhood and adolescent residence, parental occupation, occupational aspiration, age and year of high school graduation, military service, reasons for moving, and occupational achievement.

By way of theoretical orientation the authors propose that a socio-economic success theme pervades U.S. society and that rural youths accept this theme into their own values. Consequently, each youth seeks communities during his early adult years which he thinks offer him the

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best opportunity for such success. Some see this opportunity in their hometown; others see brighter opportunities elsewhere.

It is assumed that the processes of vocational and residential choice more often extend through childhood and youth rather than being crystalized during early childhood. Teenage, and even early adulthood, experiences may then influence vocational and residential preferences. Furthermore, it is recognized that society's image of opportunities offered by different regions, communities, and vocations changes with time and circumstance. This was readily apparent during the 1930's when the rural to urban stream of migrants was reversed in many U.S. areas, including the areas studied.

#### Source of Data

Data for this study were obtained during the summer of 1958 by questionnaires and interviews from 739 male high

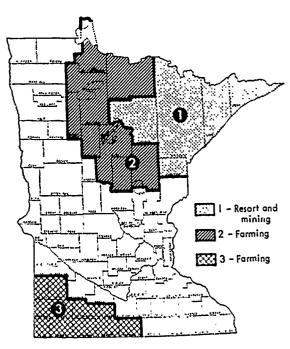


Figure 1. Sample areas.

school graduates in even-numbered years from 1948 to 1956. On the basis of a 1956 survey, four schools were selected to represent the low agricultural income northeastern counties and two to represent the higher agricultural income southwestern counties. Two of the four northeastern schools were in the predominantly mining and resort area (Area 1 on figure 1) and two were in the more predominantly agricultural western part (Area 2). In the text the terms "low agricultural income" (identified as LAI) and "northeastern" area refer to Areas 1 and 2 combined.

The two schools in the southwestern area were in the Minnesota Corn Belt (Area 3 on figure 1). The terms "high agricultural income" (identified as HAI) and "southwestern" area refer to the region identified as Area 3. LAI and HAI refer to farm income in the *area*, not to incomes of individual respondents.

### The Study Area

The LAI northeast counties comprise a spectacular country of forests, lakes, muskeg bogs, and iron ore deposits. The area's stands of virgin timber were harvested at the turn of the century without regard for conservation. The denuded areas soon attracted people with dreams of farming.

The farmers who succeeded the loggers outstayed them, but have not done nearly as well. The land which produced such desirable timber proved poor for farm crops, particularly with the added handicap of a short growing season. The U. S. Department of Agriculture declared this portion of Minnesota a "farm problem area" because of the prevailing low incomes and consequent low level of living. The conclusion was based on 1949 data which showed the area to be "substantially marginal."

<sup>&</sup>lt;sup>1</sup> Criteria of marginality include: (a) incidence of "residual farm income to the operator and his family labor in 1949 of less than \$1,000 . . .; (b) a level of living index in the lowest fifth of the nation . . .; and (c) 'low production' farms comprising 50 percent or more of the commercial farms." An area having any two of these three characteristics is defined as "substantially marginal." USDA, Development of Agriculture's Human Resources, Post Doc. 149, April 1955.

As in most low income rural areas of the United States, geographic mobility to and from this area closely follows the business cycle. During prosperous times its counties have had the highest outmigration rates in the state. During the depression years of the 1930's its population increased more rapidly than other parts of Minnesota. Since this population growth exceeded the rate of natural increase and was concentrated in adult categories, it was clearly due to inmigration.

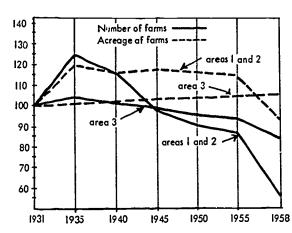


Figure 2. Trends in number and average size of farms in Minnesota, 1931-58 (1930 == 100). Source:

Minnesota State Farm Census.

The generalization that the better educated leave in greater proportion than the less educated applies to Minnesota's northern forested area. The high rate of spatial mobility is matched by some of the highest average figures in the state for formal schooling of high school age youth.

Economically the area differs sharply from other parts of Minnesota. The poor returns from most farms have led farmers to seek supplementary sources of income. Mining and cutting of pulpwood have been the usual standbys. However, in more recent years the development of light manufacturing and tourist industries has benefited many part-time farmers in the region.

The northern area's total farm acreage has remained fairly constant since reaching a peak in the early 1940's. But the number of farms has decreased consistently during the same period. This is in contrast to the trend in southwestern Minnesota. From 1951 to 1959 the decline was 31 percent in farms and 27 percent in farm population (table 1). None of Minnesota's other farming areas recently lost so heavily in either number of farms or population. Nevertheless, about 10 percent of Minnesota's farms, as well as farm people, are located in this northern low income farming area.

The HAI southwestern area, in contrast, lies within the Corn Belt. Its longer growing season and heavier soil make for prosperous farming. The higher level of living and the higher investment in land, buildings, stock, and machines are apparent when driving through the countryside. Examination of statistics substantiate the observation.

The southwest is an area of rolling, fertile hills with well kept farms and stable communities. Its citizens reflect a confidence in the future and an appreciation for the status quo. The trained observer

Table 1. Change in farms and farm population for LAI northeastern and HAI southwestern counties, Minnesota, 1951–55, 1951–59, and 1955–59

				Decline 1951-55		Decline	1951-59	Decline 1955-59		
Change in:	Area	1951	1955	1959	Number	Percent	Number	Percent	Number	Percent
Number of farms	LAI	17,216	15,458	11.940	1,758	10.2	5,276	30.6	3,518	22.8
Manual Of Identity	HAI	20,141	20,038	18,421	103	0.5	1,720	8.5	1,617	8.1
Farm population	LAI	63,889	58,351	46,686	5,538	8.7	17,203	26.9	11,665	20.0
Talli population	HAI	83,844	81,549	78,294	2,295	2.7	5,550	6.6	3,255	4.0

Source: State Farm Census.

fails to find such confidence among many residents—farmers and townsmen alike—in the LAI northeastern counties.

The southwest area's average capital investment per farm is over six times that of its northeast counterpart. More southwest farms were classified as "commercial" by the 1959 U. S. Census of Agriculture (94 percent versus 49 percent).<sup>2</sup> Population density is twice that of the LAI northeast counties. And more of the southwest's rural population are

farmworkers (16 percent versus 6 percent).

The counties within this portion of the state have some of the highest levels of living found in Minnesota's rural areas. This affluence is reflected in the wide network of good all-weather roads, well maintained homes, and flourishing retail centers. Such divergence from the traits of northeastern Minnesota makes the Corn Belt useful for a comparative study of migration.



<sup>&</sup>lt;sup>2</sup> Farms were grouped into two major categories, commercial and other, mainly on the basis of total value of products sold. In general, all farms with a value of sales amounting to \$2,500 or more were classified as commercial. Farms with a value of sales of \$50 to \$2,499 were classified as commercial if the farm operator was under 65 years of age and (1) he did not work off the farm 100 or more days during the year and (2) the income received by the operator and members of his family from nonfarm sources was less than the value of all farm products sold.

# The Sample

Data consisted of school records, responses to mail questionnaires, and personal interviews with graduates from six high schools in northeastern LAI and southwestern HAI Minnesota. The selected high schools provided groups of male students representative of the non-metropolitan portions of their areas. Such matters as distribution of students by residential categories, occupational backgrounds, and income levels were considered.

All males who had graduated from the schools during the selected years formed the sample. With the cooperation of school administrators and community leaders, presumed current addresses of 1,104 of the 1,168 high school graduates were obtained (table 2). Fifty graduates were selected for interviewing; the remainder comprised the mailed ques-

tionnaire sample group. Because four of those originally assigned interviews were not located, they were mailed questionnaires. This resulted in a total of 1,058 questionnaires mailed and an interview sample of 46.

All items in the mail questionnaire appeared in the interview schedule. More detailed information was also

Table 2. Sample for study of high school graduates from selected Alinnesota areas, 1948-56

			Year	of gradua	tion	
Sample	Total	1948	1950	1952	1954	1956
Total sample of graduates			9.44	1.49	156	218
LAI area	796	135	144	143	82	82
HAI area	372	56	<u>71</u>	71		
	1,168	201	215	214	238	300
Questionnaires mailed out	720	121	134	138	149	178
HAI area	338	62	65	68	78	65
	1,058	183	199	206	227	243
Mailed questionnaires completed*	456	70	86	91	91	118
LAI area	237	48	42	46	57	4
HAI area						
	693	118	128	137	148	162
Personal interviews completed	46	********	********			4
Grand sample total	739	118	128	137	148	20

<sup>•</sup> The post office returned 72 schedules because of insufficient address. No further effort was made to locate these individuals as it was felt sources of information had been exhausted.

<sup>&</sup>lt;sup>3</sup> Efforts to locate graduates included inquiries of former neighbors, of relatives, and of classmates. In addition, records of utility companies, the post office, and last place of employment were consulted.

sought of the interviewees. In this study the data which were identical in both the schedule and questionnaire were treated as one set of data.

Of the 1,058 questionnaires mailed, 72 were returned by the post office because of insufficient or incorrect address (table 2). Data were obtained from 693 respondents who returned mailed questionnaires and from 46 personal interviews for a total of 739. Some cases re-

quired persistent use of letter and postal card followups. Through additional correspondence and secondary sources, partial information was obtained on 72 of the 239 who did not return the completed questionnaires. So some data were gathered for 811 cases or 79 percent and more complete information was obtained for 739 or 72 percent. The following analysis is based mainly on data obtained from the latter group.



# Statistical Tests

The "goodness of fit" and significance of differences between the migratory patterns found both within and between the two sets of respondents were tested by the chi-square technique. Chi-square was also used in determining homogeneity of responses for both within and between the two groups.4

An actual or theoretical cell frequency of less than five was combined with the frequency of another cell either just above or below its position. Where such combinations seemed theoretically unjustifiable, Yates' Correction for Continuity was utilized.5

For chi-squares significant at the 0.05 level or better, the Means Square Contingency Coefficient (C) was calculated. This formula was used to note the degree and direction of the association.6 Since all data in this study were arranged in contingency tables of a size below 5 x 5, the appropriate correction formula was applied.7

### Representativeness of the Sample

Graduates who scored high on the American Council on Education Psychological Examination (A.C.E.), taken while they were still in high school, were slightly overrepresented. Those scoring low were somewhat underrepresented in the sample. Whereas 32 percent of all the northeast LAI area graduates scored above the 50th percentile (using national norms), 36 percent of the respondents did so. Likewise, only 27 percent of the graduates in the southwest HAI area scored above the 50th percentile, but 30 percent of the respondents did so.8

A slight bias also appeared on father's occupation among the southwest area respondents. Father's occupation at the time the respondent graduated was reported as farming by 42 percent of the sample drawn, but farming was the father's occupation of 45 percent of the respondents at time of graduation. Otherwise the proportions of fathers in occupational groups were representative of the sample.9

### **Present Residence**

In 1958, 44 percent of the LAI northeast area men and 40 percent of the HAI southwest men were still in their high school community (table 3). About 6 of 10 of both groups combined resided outside their high school town.10 About 6 percent resided beyond U. S. boundaries, largely in the armed forces overseas.

These differences between respondents and the total sample group are not statistically significant. Between respondents and nonrespondents, however, differences on average score on A.C.E. were significant at the 1-percent level.

Throughout this report, unless otherwise stated, differences statistically significant at the 5-percent level indicate real differences in the populations sampled. Chance error in sampling can be expected to account for the observed difference in not more than 1 in 20 such generalizations.

10 The graduates for whom no addresses were obtained probably had migrated out of the community. Therefore, their absence from the sample may have resulted in an underestimation of migration.

<sup>&</sup>lt;sup>4</sup> Margaret J. Hagood and Daniel O. Price, Statistics for Sociologists, Rev. Ed., New York, Henry Holt and Co., 1952, pp. 365-66.

<sup>5</sup> P. Yates, "Contingency Tables Involving Small Numbers and X<sup>2</sup> Tests," Journal of Royal Statistical Society, 1934, 1:217-35.

<sup>&</sup>lt;sup>6</sup> Hagood and Price, op. cit., p. 370. <sup>7</sup>Thomas Carson McCormick, Elementary Social Statistics, New York, McGraw-Hill Book Co., 1941, pp. 206-08. Also Charles C. Peters and Walter R. Van Voorhis, Statistical Procedures and Their Mathematical Bases, First Ed., New York, McGraw-Hill Book Co., 1940, pp. 391-99.

Table 3. Residence of respondents in 1958 by income area

		Number		Percentage of distribution of respondents				
Residence in 1958	LAI		HAI		LAI		HAI	
Within income area	116	214 40 27 3 52	64	101 8 8 12 52	12	44 8 6	46 25 25	40 3 3 5 20
Within the west North-Central Region  Elsewhere in the United States		21 95	11 	47	6	20	100	18

<sup>•</sup> The 72 respondents for whom only partial information was available are not included in this table.

The only significant difference in pattern between the two areas was that a higher proportion of the HAI southwest graduates had moved beyond the counties contiguous to their county of residence at the time of high school graduation but remained within the state; 20 percent versus 11 percent; P < 0.01. Slightly higher proportions, although not significantly so, of the LAI graduates were in the armed forces or had mi-

Table 4. Residence of respondents in 1958 by number of years since graduation from high school

_	Years since graduation					
Residence in 1958	8-10	2-4				
		percent				
Within state Still in high school town	34	51				
Within commuting distance of high school town Elsewhere within state	15 18	11 10				
Outside state Within the west North- Central Region	7	3				
Elsewhere outside state	26	25				
Total	100	100				

grated, but only within the confines of their county or income area.

According to the percentage distribution shown in table 3, the LAI men tended somewhat more than the others to migrate short distances, tended less to migrate the median distances involved in intrastate movement, and tended about the same to migrate the longer distances to another state.

Migration appears to be a function of age. More of those who had graduated 2 to 4 years ago than those graduating 8 to 10 years ago were still in their hometown (table 4). While about the same proportions of the two groups were moving out of the region, fewer of the more recent than earlier graduates had made the shorter moves (24 versus 40 percent).

### College Aptitude

Both northeast LAI and southwest HAI respondents scored considerably below the national average on the A.C.E. taken while they were still in high school. Thirty-six percent of the northeast and only 30 percent of the southwest respondents scored above the 50th percentile (table 5). Even more significant were the relatively large proportions, 42

Table 5. Distribution of respondents by percentile ranks on A.C.E.

	Distribution of respondents								
	Number		Percent		Cumulative percen				
A.C.E. percentile	LAI	HAI	LAI	HAI	LAI	HAI			
100-76 75-51 50-26 25-1	102 72 95 203	48 30 45 123	22 15 20 43	17 11 17 47	22 37 57 100	17 28 45 100			
Total of 718	472 11	246 10	100 2	100 4					
Total of 739	483	256							

and 48 percent respectively, who scored in the 25th percentile or lower on national norms.

Considering the distributions cumulatively from highest to lowest, the northeast group consistently scored higher. Further research is needed to determine the source of this difference. Among possible explanations are, that compared with the northeast LAI, those in the HAI southwest area: (1) ranked lower in i nate intelligence, (2) were less often mc tivated toward educational achievement, and (3) experienced a selective dropout pattern which lowered the A.C.E. ranking of the group continuing in school.

# Father's Occupation

The father's occupation most often reported by graduates, 45 percent of the southwest HAI and 23 percent of the northeast LAI respondents (P < 0.01), was farming (table 6). A higher proportion of the northeast (18 percent) than of the southwest respondents (4 percent) reported the father in a skilled occupation (P < 0.01).

Only small differences existed in proportions of respondents from the two areas who reported their fathers' occupations in the (1) professional, (2) proprietorial and clerical, (3) skilled and semiskilled, (4) farm laborers, and (5) relief and unclassified categories, respec-

tively. So occupational background more often involved the skilled occupations for fathers of northeast LAI boys and farming for fathers of the southwest HAI boys.

Table 6. Distribution of respondents by father's occupation at time respondent graduated

	Nun	nber	Per	ent
Father's occupation	LAI	HAI	LAI	HAI
Professional	31	16	6	6
Farming	112	116	23	45
Proprietorial or clerical	90	45	19	18
Skilled work	86	11	18	4
Semiskilled work	54	20	11	8
Farm laborer	•••••	1	*****	•
Laborers other than farm	49	9	10	4
On relief, uncla ified, and no response	61	38	13	15
Total	. 483	256	100	100

# Toward a Theory of Migration

Migration has interested thinking men throughout recorded history. Among the most widely known accounts of population movements are the Old Testament records of the wanderings of Abraham, Isaac, Jacob, and their descendants, the Israelites. These and other earlier accounts mainly preserve knowledge concerning geographic changes in residence of families, tribes, and societies.

Following the "Age of Exploration and Commercial Growth" and the so-called industrial revolution, emphasis was largely on ascertaining the directions of migration, its sources and destinations, and the numbers and characteristics of individuals involved.

With the development of the social sciences, particularly sociology, efforts focused on discovering specific factors and traits associated with migration. The questions were: who migrates, from where, to where, and how do migrants differ from nonmigrants? The end product has been largely a catalog of traits differentiating migrants and nonmigrants, and conditions associated with in- and outmigration. This approach characterizes most contemporary studies.

Admittedly, the primary interest in much cataloging was to understand not only the fact but also the process. While the incidence and selectivity of migration are readily observable, the process whereby certain individuals move while others remain is less easily understood. Social scientists have already initiated the development of tools for gathering and analyzing data necessary to a scientific exploration of the process of human migration.

The various social sciences present various explanations rather than an integrated one; this is evidence of the lack of knowledge of migration. With time the economic, psychological, sociological, political, and other largely unidimensional explanations probably will be merged in a broader and more complete understanding of human migration. The study here reported cannot claim such a broad approach. But in exploring a social explanation, the authors have attempted to recognize both its contributions and limitations to a more holistic explanation.

In any case, current research can profitably be guided by a theoretical frame of reference with growing empirical foundations. The frame of reference chosen for the current study revolves around the "success theme."

### "The Success Theme"

There is a generalized emphasis in the United States upon "making good," becoming a "success," or "getting ahead." This is reflected in such expressions as "the American dream" and "the American success ideology;" it is generally accepted as part of the "American character" or the "American credo." Whatever the term used, the contemporary American ethic incorporates a "success complex."

Margaret Mead delineated the basic ingredients of this complex:

To get ahead, to make good—these are the goals impressed on American children—to go some place else, get on with it, count your success by the number of less handicapped you have passed on the road . . . What he is—as a person—is irrelevant, for to be a success is to have done something, rather than to have been a kind of person. Pride at being at the top is soured if it is based on someone else's climbing, and so the sons of rich men are driven back into harness, back to the office to show what they have in them.<sup>11</sup>

Merton carried the point even further. He suggested that it becomes a moral duty to strive for success:

This cultural theme . . . holds that . . . success is possible for all, irrespective of station, and that striving for success is incumbent on all . . .

This leads naturally to the subsidiary theme that success or failure are results wholly of personal qualities; that he who fails has only himself to blame, for the corollary to the concept of the self-made man is the self-unmade man. To the extent that this cultural definition is assimilated by those who have not made their mark, fail-

<sup>11</sup> Margaret Mead, And Keep Your Powder Dry, New York, William Morrow and Co., 1943, p. 68.

ure represents a double defeat: the manifest defeat of remaining far behind in the race for success and the implicit defeat of not having the capacities and moral stamina needed for success.<sup>12</sup>

In exploring the criteria of this success Cuber and Harper concluded that:

the intense rivalry characteristic of America has been expressed in the main in pecuniary terms... To be sure, there is some attention given to nonpecuniary statuses... but the impression is widespread that the things which really count are the economic symbols which reveal conclusively that one has outstripped many of his fellows in the competitive struggle.<sup>13</sup>

Wyllie reached a similar conclusion after reviewing studies in history and historical sociology: "no other definition 'enjoys such universal favor in America as that which equates success with making money'..."<sup>14</sup>

Margaret Mead forcefully depicted the pervasiveness of the success theme. She observed that children, all except those who have already achieved the highest statuses, are almost universally expected to find employment and economic return above the level of their parents. In turn, parents are expected to see that their children rise to a higher status. This contrasts to the earlier "old country tradition" in which the son was expected to follow his father's occupational footsteps.

From this perspective, migration stems mainly from the individual's attempt to fulfill the social expectations of the success theme. It is almost inconceivable that an American adolescent today could escape making this theme part of his own value system. In the home, in school, and

in his other associations, he is constantly bombarded with beliefs and attitudes generated by this success emphasis. In the home he is encouraged to excel his siblings; on the playing field he is spurred on to excel his opponent; in school he is prodded to do better than his fellow students.

A significant corollary of this theme is that young adults should achieve economic and social independence of parental support. Furthermore, the emphasis on success and personal independence has developed a growing expectation among American parents that their children leave them physically: that they travel with "a different crowd." Margaret Mead observed that even where a family has remained at the top for several generations, "there are, for all but the very few, still larger cities or foreign courts to be stormed." 16

Apparently, an affinity exists between striving for success and migration. Success may not depend upon seeking one's fortune elsewhere. But in the American experience fortunes have so often been made after leaving the parental environment, that chances are often assumed to increase with migration. Today this conviction appears reflected frequently in the belief that there is a direct association between opportunity and the size of a population center.

As the success theme stresses personal achievement, migration also involves largely the individual rather than formally organized groups.

Furthermore, the American ideology attributes to youth the energy and capacity to succeed in greater proportion than other age categories. So to the extent that the success theme generates a tendency for migration, it should be most evident and exert its greatest force when

13

<sup>12</sup> Robert K. Merton, Social Theory and Social Structure, Rev. Ed., Glencoe, Ill., Free Press, 1957,

New York, Henry Holt and Co., 1951, p. 463.

13 John F. Cuber and Robert A. Harper, Problems of American Society: Values in Conflict, Rev. Ed., New York, Henry Holt and Co., 1951, p. 463.

14 Irvin G. Wyllie, The Self-Made Man in America, New Brunswick, Rutgers Univ. Press, 1954,

<sup>18</sup> Mead, op. cit., p. 197.

<sup>16</sup> Ibid., p. 39.

the individual is outgrowing dependence upon the parental family. For the majority of American youths this is about the time of high school graduation.

To the extent that the success theme assumptions are valid, they should apply with particular utility to the male high school graduates in this study. As a segment of the American society they are particularly subject to success theme pressures. They have at least completed what contemporary American culture regards as a minimum prerequisite for high achievement. Consequently, it seems reasonable that the community should expect more of them in the success struggle. And, as they internalize this expectation, the graduates set higher goals for themselves.

Yet, concurrently, these graduates are still tied to the positions of their respective families in the local social structure. Their attendance at high school probably gave the graduates a feeling of lagging behind their peers who dropped out of school to work and who could display their newly found income and "independence" via the prevalent status symbols (a car, the latest in clothes, and ready cash). Therefore, the "success theme" should press upon the newly graduated high school student with a special intensity.

Migration provides one socially accepted solution for those who finish high school without visible success opportunity. It is a law abiding type of adaptation. It is not only approved by the culture but in most cases also expected as a natural turn of events. Spatial mobility likewise provides opportunity to seek success in a more diversified social structure, if not one of an entirely different kind.

These expectations regarding success and independence tend to give recent high school graduates a relatively detached attitude toward their immediate social structure of family and hometown. In terminology of contemporary youth these familiar groups are often defined as "square." This would seem to make

recent high school graduates into prime candidates for migration.

The application of this frame of reference to this study elicits certain fundamental perspectives. An initial derivation is that experience (either direct or indirect) with various positions in differing social structures should affect migration patterns. Varied experience of this type should make the individual evince a higher degree of geographic mobility.

Secondly, father's occupation (as an index of initial social position) should be fairly closely linked with subsequent migratory behavior. And last, occupational aspiration and career "progress" as indices of success orientation and actual steps taken toward the success goal, respectively, should similarly aid in explaining residential shifts.

Viewing data within this frame of reference requires certain assumptions and generates certain expectations. Among the assumptions are that, with reference to male high school graduates in Minnesota:

- 1. The success theme attributed to American culture is well diffused.
- 2. Internalization of the success theme has generated a desire to achieve.
- 3. One consequence is a search for opportunity (particularly for economic opportunity) initiated and sustained largely as a consequence of the individual's acceptance of the success theme.
- 4. This search involves adaptation to some social structure.

Whether success is sought in the hometown or elsewhere depends on the individual's perception of the geographic distribution of opportunities and the costs of commanding them. So some choose to adapt to the social structure of their immediate environment while others seek their "success" elsewhere. Among the latter, migratory patterns may be related to differences in how the individual views—and changes his views of—the potentials offered by selected areas for his gaining the desired "success."

These "views" involve perceptions of both (1) the level of costs in personal exertion, financial resources, etc., and (2) the desirability of the anticipated level of "success" as measured in economic, social, and psychological rewards.

It is proposed that perception is an interpretation of reality filtered through a person's accumulation of experience and innate predispositions. As the accumulation of experience appears the most amenable to manipulation, attention is focused on it. The social influences in a person's experiences which might affect his perception of opportunity for success include: (1) occupational aspiration, (2) residence during formative years, and (3) father's occupation.

However, effects of any or all of these influences can be altered by such an experience as military service with its greater variety of contacts and happenings. These include: (1) possibility of residence in a place other than the hometown, (2) contact with the occupational aspirations of people other than relatives, friends, and neighbors, and (3) new knowledge of opportunities and methods available to attain higher aspirations.

### Hypotheses

This study concerning the process of migration was guided by a desire to explain distance, direction, frequency, destination, and pattern of migration. The theoretical argument just developed served as a source of testable hypotheses. It was hypothesized that each of the above dimensions of migration is associated with each of the following variables:

- Childhood residence—the individual's initial, most influential orientation to a social structure which he later wishes to maintain, recreate, or improve.
- Father's occupation during most of high school years—provides an orientation to adult roles within a social structure and point of departure for success seeking.

- Adolescent residence—the influential milieu at the time that an individual decides upon his route to success. His rejection or acceptance of it as a future residence depends upon the route chosen.
- Present stated occupational aspiration—an index of the respondent's estimation of what is a desirable socio-economic position for himself in society. This involves a decision as to where he may best obtain this status.
- Year graduated from high school
   an indication of the time elapsed between graduation and residence in 1958.
- Age—to yield further detail on how long the individual has pursued an occupational goal and perhaps also give some indication of the frequency and distance he is apt to migrate.
- Military service—to represent participation in a drastically different societal structure; also, to represent an experience which augments the respondent's knowledge of other socially defined "opportunities" more readily accessible in areas foreign to his former life. This experience might awaken the idea of greater success away from the home community.
- Reasons for moving—a verbal expression of the degree to which the cultural success theme defines certain circumstances as socially approved "reasons" for spatial mobility.
- How far individual has "advanced" in his chosen career or occupation—an indication of the extent of commitment to the success goal, and how much vertical social mobility has been demonstrated.
- Residence during young adult years—an intervening variable which links observed mobility patterns to specific locations at a given time period. This variable adds the dimension of duration to account for migration patterns.

The two socio-economic areas of Minnesota sampled were assumed to constitute distinct entities. So it was hypothesized that they would show significant differences between them regarding association of migration with the variables.

# The Findings

The findings of this study concern four aspects of geographic mobility:17

Incidence, or the ratio of migrants and of nonmigrants to total population.

Frequency, or the number of moves made by the various categories of migrants.

Range, or the distances covered by different sorts of migrants.

Destination, or the types of communities to which these various migrants went.

Since all four aspects were analyzed with reference to the same set of explanatory variables, a seeming repetition may be noted. However, these analyses have been kept parallel but completely discrete so that the final comparisons may be more productive.

### **Incidence of Migration**

The higher propensity towards migration of HAI area students, compared with those from the LAI area, has already been noted (60 percent versus 56 percent). The association between migration and area of residence was only moderate ( $\overline{C}=0.22$ , P>0.001). These findings differ from those of Anderson who noted that youth from low income rural areas migrated more than those from relatively prosperous parts of the state. However, his sample included all ages and all educational levels. 18

These results also differ from those of Ramsey, Orman, and Nelson. They found that migration correlated significantly

and positively with low levels of living and low population density. <sup>19</sup> Both these attributes were found in northeastern Minnesota. An explanation for this discrepancy lies in the differences in samples. Ramsey, Orman, and Nelson used U.S. Census data on total gain or loss of population from Minnesota counties; Anderson's sample also included all ages and occupational levels.

However, this study was limited to male high school graduates who were mostly between 20 and 30 years of age in 1958. These findings parallel Duncan's conclusion that the "Dust Bowl" exodus from Oklahoma was comprised of more families from relatively prosperous sections of the state.<sup>20</sup>

Perhaps the concept of "relative deprivation" is the most appropriate explanation.<sup>21</sup> The more prosperous farmers in Duncan's study felt they had higher expectations and more to lose than did others. Therefore, they responded with greater alacrity to the first pinch of pri-

n Merton, op. cit., pp. 234-35.

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<sup>&</sup>lt;sup>17</sup> Data on which these findings are based are found in greater detail in Richard W. Coller, Geographic Mobility of Selected Rural Minnesota Male High School Graduates, unpub. Ph.D. thesis, Univ. of Minn., 1959, tables 4-156.

<sup>18</sup> W. A. Anderson, Rural Youth in Low Income Agricultural Areas, Cornell Univ. Agr. Exp. Sta. Bull. 809, March 1944, p. 14.

19 Charles E. Ramsey, Allan D. Orman, and Lowry Nelson, Migration in Minnesota, 1940-1950, Agr. Exp. Sta. Bull. 422, Univ. of Minn., January 1954, pp. 15-16.

Agr. Exp. Sta. Bull. 422, Univ. of Minn., January 1954, pp. 15-16.

O. D. Duncan, The Theory and Consequences of Mobility of Farm Population, Exp. Sta. Circ. 88, Okla. A. and M. Coll., Stillwater, May 1940, p. 18.

vation. Something similar may be occurring in Minnesota as the southwestern youth begin to experience the full effects of largescale mechanized agriculture. The northeast and southwest areas of Minnesota do show distinctness, but their differences were not what were anticipated in the light of most previous research.

### **Factors Influencing Migration**

In an attempt to better understand influences which cause migration, the association between migration and nine other variables was computed for the LAI and HAI respondents (table 7). The nine variables were: (1) residence between ages 5 through 11, (2) father's occupation, (3) residence from age 12 to 17, (4) present occupational aspiration, (5) year of high school graduation, (6) age at time of interview, (7) military experience, (8) career advancement,<sup>22</sup> and (9) residence from age 18 to 22.

All these variables except military experience were statistically significantly

associated with migration among the southwestern or HAI sample. Among those from the LAI area, significant associations were found only for present occupational aspiration, year of graduation, age at interview, career advancement, and residence during early adulthood. The variable most highly associated with migration for both groups was career advancement (LAI:  $\overline{C} = 0.45$ ,  $\cdot P > 0.001$ ; HAI:  $\overline{C} = 0.57$ , P > 0.001).

The association between migration and each independent variable was considered. Whether residence during child-hood was mainly in the open country or in a town was significantly associated with migration only for the HAI area group ( $\overline{C}=0.38$ ). Among these, a far higher proportion of those who spent their childhood in a town had migrated (70 percent versus 45 percent).

Although the difference for the LAI northeast group was not statistically significant, it was opposite from that of the HAI southwest group. More from the open country (47 percent) than from town (39 percent) migrated. Perhaps

Table 7. Association between the occurrence of migration and other variables for all respondents

	No	rtheast L	Ai migran	its	Sou	thwest HA	i migrant	s
Variable	Degrees of freedom	Chi-	Р		Degrees of freedom	Chi- square	P	c
	<u> </u>	1.858	0.20	N.S.*	1	15.378	0.001	0.38
Childhood residence	_	4.107	0.20	N.S.	2	20.101	0.001	0.42
Father's occupation	2			N.S.	1	19.273	0.001	0.42
Adolescent residence	1	0.060	0.90	М.Э.	•	17.270	0.000	
Present occupational	2	9.536	0.01	0.28	2	16.222	0.001	0.44
aspiration	–	11.675	0.02	0.26	2	8.655	0.02	0.26
Year of graduation	-		0.001	0.32	2	12.116	0.01	0.30
Present age	2	15.681		N.S.	- ;	2.007	0.20	N.S.
Military experience	1	0.986	0.50		Ċ		0.001	0.57
Career advancement	2	29.520	0.001	0.45	2	33.882		
Young adult residence	2	27.494	0.001	0.41	2	28.528	0.001	0.47

<sup>•</sup> N.S. = not significant at the 0.05 probability level of confidence.

<sup>&</sup>lt;sup>22</sup> Career advancement was intended to serve as an estimate of an individual's current position in the occupational structure. It was based upon a respondent's formal schooling, job history, and acquired skills since high school.

small town youths who live in an area of more highly mechanized, prosperous farming do not have the same entree to the dominant agricultural system and, therefore, more often migrate to find "success" elsewhere. The association between migration and childhood residence was characteristic only in the HAI area.

A significant association was found between migration and father's occupation for the HAI but not the LAI sample (table 8). In the HAI area only 45 percent of the sons of farmers but 63 percent of the sons of blue collar workers and 80 percent of the sons of white collar workers migrated. In the LAI group, half of the sons of farmers and white collar workers but only 39 percent of the sons of blue collar workers migrated. More sons of farmers but fewer sons of white collar and blue collar workers migrated in the LAI than HAI income area.

In the more prosperous southwest, children of parents not in agriculture apparently perceived the situation to provide fewer "opportunities for success" in local nonagricultural pursuits which were consonant with their level of expectations. This may have been due as much to a relatively higher level of expectations as to lack of employment opportunities. It may be that it is less frustrating to be poor where all are poor than in a more heterogeneous situation.

The association between residence during adolescence and migration was also not statistically significant for the northeast group but highly significant for the HAI group. Also, far more town than open country dwellers left the community in which they attended high school (73 percent versus 45 percent). The explanation cited for the impact of earlier residence apparently applies here as well.

The hypothesis that migration is positively associated with occupational aspiration was supported by data from both areas. This association reflected largely the greater tendency for those aspiring to professional than blue collar vocations to migrate. In both samples the aspirants to nonprofessional white collar positions fell midway between the professional and blue collar groups on incidence of outmigration.

Data for both areas show that time since graduation (as indicated by year of graduation) was positively associated with migration (for both,  $\overline{C}=0.26$ , P>0.02). Moreover, those who migrated tended to do so within about 5 years of graduation. For both groups the increase in the proportion who migrated was most marked between those graduating within the last 4 years and those graduating either in 1952 or during 1948-50. While 38 and 49 percent of the most recent graduates had migrated, 56

Table 8. Association between occurrence of migration and father's occupation

	Farmer		Wi		- co		
Respondents	Number	Percent	Number	Percent	Number	Percent	Total
LAI respondents*							
Nonmigrants	. 55	<b>5</b> 0	34	47	63	61	152
Migrants	. <b>55</b>	<b>5</b> 0	38	53	40	39	133
Totals	. 110	100	72	100	103	100	285
HAI respondents†							
Nonmigrants	. 64	55	12	20	15	37	91
Migrants	52	45	47	80	26	63	125
Totals	. 116	100	59	100	41	100	216

<sup>•</sup> Chi-square: 4.107 d.f.: 2 P > 0.20  $\vec{C} = N.S.$ 

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<sup>†</sup> Chi-square: 20.101 d.f.: 2 P > 0.001  $\overline{C} = 0.42$ 

to 67 percent of those graduated prior to 1953 had done so. So migration occurs soon after graduation or else the bent to do so tends to dissipate. This conclusion is consistent with findings in other studies.

Contrary to expectations, there was no statistically significant association between the proportion of graduates who returned to their home communities after active military duty and migration. The tendency towards such association that was observed indicated greater frequency of migration among those who had never been on active duty. This was true for both samples. However, those graduates with migration tendencies perhaps did not return at all to their home community.

The policy of deferring military duty for college attendance may partly account for the lower rate of migration among those who served in the armed forces. This idea rests upon the observations that: (1) many who migrated sought a college education, and (2) those who stayed at home and sought jobs nearby were more liable to be taken for military service and more likely to later return to their already established jobs.

The finding that migration and career advancement were consistently positively associated agrees with other investigations. This association often represents a reciprocal relationship between career advancement and migration. So migration may enhance opportunities for career advancement and career advancement, in turn, may increase potentials for migration.

As for the relationship between migration and residence during childhood, adolescence, or young adulthood, the association held only among the HAI group. Furthermore, in the HAI area more of those residing in towns than in the open country had migrated; in the LAI area the greater proportion of migrants were from the open country.

## Frequency of Moves Made by All Migrants

Geographic mobility is here regarded as closely associated with a striving for success. So the actual number of residenial shifts constitutes another item of migratory behavior to be explained. A comparison of the frequency of moves made by the LAI and HAI migrants

Table 9. Association between frequency of moves and childhood residence

	Open	country	Tov	vn	
Number of moves	Number	Percent	Number	Percent	Total
LAI migrants*	<b>57</b>	70	30	63 37	87 42
Three or more		30	18 	100	129
Total	81	100	40	100	,_,
HAI migrants†	43	70	68	80	111
One to two	10	30	17	20	35
Total	61	100	85	100	146

<sup>•</sup> Chi-square: 0.8488 d.f.: 1 P> 0.50  $\overline{C} = N.S.$ † Chi-square: 1.759 d.f.: 1 P> 0.20  $\overline{C} = N.S.$ 

<sup>\*\*</sup>Albert J. Reiss, Jr. and Evelyn M. Kitagawa, "Demographic Characteristics and Job Mobility of Migrants in Six Cities," Social Forces 32:1, October 1253, pp. 72-73.

showed that three-fourths of all migrants moved less than three times. This is not particularly surprising because a considerable portion of the sample included relatively recent graduates. No statistically significant difference appeared between the two areas in regard to number of moves.

No significant association was found between frequency of moves and child-hood residence for either group of migrants (table 9). This suggests that the striving for success, as denoted by number of moves, is not influenced by early experience in a particular residence category.

A significant association was found between frequency of migration and father's occupation for the northeast migrants but not for those from the southwest. So data for only one group of respondents supported the hypothesis. The significant difference among the LAI migrants stemmed particularly from the greater migratory tendency of sons of white collar workers. Sons of the blue collar workers moved less than those of farmers. This difference held for migrants from both areas.

Neither frequency of moves (one or two versus three or more) nor occupational aspiration was associated with residence during adolescence for either

on the other hand, the older groups of graduates had consistently moved more often than the younger. Because of the high correlation between year of graduation and age at being interviewed, the same associations held for age. The mere fact of having more time to migrate seemed to account for this. Other studies indicated that these associations should reverse in direction some time after age 30.24

Although military experience did not seem to influence the tendency to leave the high school community in either area after return from such service, this service was positively associated with number of moves made by migrants from the HAI area. A frequency of three or more moves was far more often reported by those who had migrated before going on active duty than those whose history of migration began after active duty. This observation suggests that active duty nurtures more than iritiates the tendency to migrate. In fact, those with premilitary migration exhibited a higher frequency of moves than did either those never on active duty or those without a premilitary migration history.

Frequency of reasons for moving (which included moving with parents or to be near relatives, attending school, because of a job, climate, or financial reasons) was associated with frequency of moves at a statistically significant level only among the HAI migrants. Among the others a similar but less pronounced tendency was noted. Taken singly, "better income or job" was the only reason significantly associated with the tendency to migrate.

Migrants who cited family or educational reasons for moving showed the lowest frequency for number of moves. This is not surprising as young men starting employment immediately after high school are more apt to change jobs than are those entering higher education to change schools within the next 4 years.

Although other studies reported significant association between frequency of moves and career advancement, 25 these data did not reflect this. The relative youthfulness of the populations here studied may account for the low level of this association.

<sup>&</sup>lt;sup>24</sup> Robert T. McMillan, Migration and Status of Open-Country Families in Oklahoma, Tech. Bull. T-19, Agr. Exp. Sta. Okla. A. and M. Coll., Stillwater. September 1943, p. 16, table 8; and p. 62, table 57.

Also, Rudolf Heberle in appendix B of Dorothy Swaine Thomas, Research Memorandum on Migration Differentials, Bull. 43 Soc. Sci. Res. Council, New York, 1933, pp. 274-75; and Percy Davidson and Dewey Anderson, Occupational Mobility in an American Community, Stanford Univ. Press, Palo Alto, Calif., 1937, p. 114.

Whether the migrant spent his young adult years (age 18 to 22) in the open country, in a small town, or in the city seemed to have little, if any, influence on the frequency of his moves.

In summary, frequency of moves was found to be consistently associated with

age and with years since high school graduation. Father's occupation, military experience, and "reasons for moving" were each significantly associated with frequency of moves for migrants from only one income area—either the HAI or the LAI area.

# Range of Migration

R ange of migration, as measured by distance between the individual's 1958 mailing address and his high school community, varied for graduates from the two areas. Although a somewhat lower proportion from the LAI northeast area migrated, those who did more often either remained within commuting distance of their high school community or left the state entirely. The HAI southwest graduates more frequently moved beyond commuting distance but remained within the state. Of all migrants, one-third left Minnesota.

These data support Lively's "Law of Limited Circulation of Population."26 The tendency for migratory streams to dwindle with increasing distance from their source has been noted in most similar studies. The only study whose results differed markedly was done on the territorial mobility of youth in the state of Washington.27 The present finding of a 2:1 ratio for instate versus out-of-state migrants, respectively, parallels the findings of Hoag, Byrn, Bogue and Thompson, Carter and Fenix, and Anderson.28 The findings also support Anderson's conclusions from his investigation into the migration of youth in New York from low and high income areas of the state.

The greater tendency of the LAI area graduates to remain within, or at least within commuting distance of, the town in which they graduated from high school, may have reflected the greater proportion among them who lacked the means and information to migrate far. But those among them who could com-

mand the means and had the information appeared to go greater distances than did those from the HAI area. This fact probably also reflected the greater abundance of employment opportunity in the HAI area.

If this study's theoretical foundations as presented earlier are valid, economic factors provide only a partial explanation. Another portion of the explanation should be found in the social environment. The validity of this proposition can be partly tested by noting the association of distance of migration with each independent variable considered (table 10).

Occupational aspiration, year of high school graduation, and military experience consistently were statistically significantly associated with range of migration. In addition, career advancement showed such association for the HAI group and age showed a relatively strong association among LAI migrants. In no case was range of migration significantly associated with residence during child-

<sup>26</sup> C. E. Lively, "Spatial Mobility of the Rural Population with Respect to Local Areas," Amer. Jour. of Sociol. XLIII 1, July 1937, pp. 101-02.

27 Paul H. Landis, The Territorial and Occupational Mobility of Washington Youth, Agr. Exp. Sta. Bull. 449, Wash. State Univ., 1944, table 6, p. 17.

Emily F. Hoag, The National Influence of a Single arm Community, A Story of the Flow into National Life of Migration from the Farms, Washington, L.C.: USDA, Office of Farm Management and Farm Economics, Bull. 984, 1921, p. 19.

Darcie Byrn, Education as a Selective Factor in the Minnesota Rural-Urban Migration Pattern, 1935-1940, unpub. M. A. thesis, Univ. of Minn., 1951, p. 33, Chapter X. Donald J. Bogue and Warren St. Thompson, "Migration and Distance," Amer. Sociological Rev. 14, April 1949, p. 240.

R. M. Carter and R. E. Fenix, Vermont's Agricultural College Graduates, Agr. Exp. Sta. Bull. 541, Univ. of Vt., 1948, p. 4.

W. A. Anderson, Mobility of Rural Families, II, Cornell Univ. Agr. Exp. Sta. Bull. 623, March 1935, pp. 34-36. -, Rural Youth in a Low Income Agricultural Area, p. 40.

Table 10. Association between range of current mailing address and other variables for migrants from both areas

	No	rtheast LA	l migran	its	Sou	thwest HA	1 migrani	\$
Variable	Degrees of freedom	Chi-	Р	<del>-</del>	Degrees of freedom	Chi- square	P	c
	3	0.319	0.95	N.S.*	3	2.032	0.70	N.S.
Childhood residence	•	4.826	0.70	N.S.	8	10.176	0.30	N.S.
Father's occupation		2.347	0.70	N.S.	3	4.519	0.30	N.S.
Adolescent residence		13.851	0.05	0.37	9	27.203†	0.01	0.49
Occupational aspiration		23.212	0.001	0.46	6	14.213†	0.05	0.37
Year graduated		27.178	0.001	0.50	6	9.771†	0.20	N.S.
Present age		15.448	0.02	0.38	6	12.692†	0.05	0.35
Military experience		2.565	0.90	N.S.	6	8.793	0.20	N.S.
Reasons for moving		9.855	0.20	N.S.	8	19.236†	0.02	0.43
Career advancementYoung adult residence		9.440†	0.20	N.S.	6	8.339	0.30	N.S.

<sup>•</sup> N.S. = not significant at the 0.05 probability level of confidence.

† Using Yates' correction.

hood, adolescence, or young adulthood; with father's occupation; and with reasons for moving.

Further examination of data relative to the statistically significant associations helped crystallize the explanation of range of migration. The association between range and occupational aspiration was strongest for the HAI group ( $\overline{C} = 0.49$  versus  $\overline{C} = 0.37$ ).

As an overall generalization the farm and professional groups tended most to stay within the state, whereas the blue collar group was most inclined to move outside Minnesota. The managerial and clerical category fell between the other two. This finding is consistent with the contention that professionals tend to stay within the state because the entrance requirements of special state regulatory organizations and qualifying examinations are ordinarily easiest to satisfy by training and locating within the same state.

The blue collar group looked for occupations that are often more numerous in the more industrialized eastern states. Of course, youth who wish to travel far may deliberately aspire toward such jobs.

As expected, the distance of migration was significantly associated with years since graduation for each migrant group.

The earlier graduates had covered more territory. Over 60 percent of the 1954-56 LAI migrants still gave a mailing address within the same area, whereas only 26 percent of the migrants who graduated in 1952 and in 1948-50 did so.

On the other hand, about half of the 1948-50 migrants resided outside Minnesota. This figure dropped to 39 and 21 percent for migrants in the classes of 1952 and 1954-56, respectively. A similar, but not quite as symmetrical, pattern prevailed for the southwestern HAI migrants (table 11).

Data on age in 1958 and distance migrated showed significant associations in both areas but somewhat different patterns within the two groups. Northeastern LAI migrants unmistakably tended towards leaving the state in a steady progression. Those only 18-21 years old had mostly stayed within the area (70 percent). But only 37 percent of the 22-25 age group and 20 percent of the 26-29 age category had done so. The out-of-state migrants increased almost proportionately as the "within commuting area" migrants decreased.

However, in the southwest HAI area, within-state migration had become important soon after high school graduation.

Table 11. Association between range of current mailing address and year of graduation for northeast LAI and southwest HAI migrants

	Graduate	_	Graduated		Graduated 1954-56	Percent	Totals
Zone of present address	1948-50 	Percent	1952 	Percent		rercent	
LAI migrants*			_		00	35.5	35
Same as high school town	7	12.1	6	19.3	22		
Within area	^	13.8	2	6.5	17	27.4	27
Within state	16	25.9	11	35.5	10	16.1	36
Out of state		48.2	12	38.7	13	21.0	53
Totals	58	100.0	31	100.0	62	100.0	151
HAI migrants†			,	13.4	19	33.9	29
Same as high school town		9.8	4		3	5.4	11
Within area	7	11.5	1	3.3	•	•••	* *
Within state	26	42.6	12	40.0	25	44.6	63
Out of state		36.1	13	43.3	9	16.1	44
Totals	61	100.0	30	100.0	56	100.0	147

• Chi-square: 23.212 d.f.: 6 P > 0.001  $\overline{C} = 0.46$ 

† Chi-square: 14.213 (using Yates' correction) d.f.: 6 P > 0.05  $\overline{C} = 0.37$ 

Almost 57 percent of the 18- to 21-yearold group had moved, but only within the state. Likewise, only about 40 percent of the southwest migrants and 53 percent of the northeast migrants, aged 26 to 29, had moved out of state (table 12). The hypothesis in question, that of significant association between age and migration, was therefore supported. Because of little comparable material from previous studies, the wider significance of these particular data cannot be estimated.

Table 12. Association between range of current mailing address and present age for northeast LAI and southwest HAI migrants

Zone of present address	Age 18-21	Percent	Age 22-25	Percent	Age 26-29	Percent	Totals
LAI migrants*				04.6	2	4.4	34
Same as high school town	16	40.0	16	24.6	_		27
Within area	. 12	30.0	8	12.3	7	15.6	
Within state	. 6	15.0	18	27.7	12	26.7	36
Out of state	_	15.0	23	35.4	24	53.3	53
Totals	. 40	100.0	65	100.0	45	100.0	150
HAI migrants†	_			26.2	3	7.0	29
Same as high school town	. 9	22.0	17		•		10
Within area	. 2	4.8	3	4.6	5	11.6	
Within state	23	56.1	24	36.9	18	41.9	65
Out of state	7	17.1	21	32.3	17	39.5	45
Totals	41	100.0	65	100.0	43	100.0	149

• Chi-square: 27.178 d.f.: 6 P > 0.001  $\overline{C} = 0.50$ 

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There was also a significant association between previous military experience and distance of location from the hometown. In each area, those with active military service presented an unusually strong tendency towards out-of-state mobility.

These findings fully support the hypothesis that participation in such a different social structure as the military service is significantly associated with range of migration (table 13). Again, comparable data from other studies are apparently nonexistent. Further study on how military experience affects the decision involving migration should be implemented.

Only among the HAI migrants was the association between range of migration and career advancement significant throughout the different occupational combinations. When the respondents engaged in agriculture were omitted, the association still persisted. It also persisted when the results were combined

into white collar versus blue collar. The chief basis for this lay in the degree to which the blue collar group departed from the local area and divided almost equally between instate and out-of-state locations.

The majority of those who were already in the white collar group, or who were preparing to enter it, more often gave mailing addresses in the high school hometown or within the state. Since college students were included in this career classification, this distribution of addresses partly reflected the apportionment between local or nearby colleges and the more distant metropolitan institutions within Minnesota.

Other studies, considering strictly occupational data in connection with range of migration, obtained somewhat varying results. Benewitz found that among migrants to a metropolitan center, white collar workers came from long distances. However, blue collar workers who were

Table 13. Association between range of current mailing address and military experience for northeast LAI and southwest HAI migrants

Zone of present address	Never on active duty	Percent	Active duty first, then migration	Percent	Migration, then active duty	Percent	Totals
LAI migrants*							
Same as high school town	25	31.6	6	15.0	4	14.3	35
Within area	18	22.8	8	20.0	1	3.6	27
Within state	18	22.8	9	22.5	9	32.1	36
Out of state	18	22.8	17	42.5	14	50.0	49
Totals	79	100.0	40	100.0	28	100.0	147
HAI migrants†							-00
Same as high school town	21	28.8	4	10.0	4	11.8	29
Within area	3	4.1	5	12.5	2	5.8	10
Within state	35	47.9	16	40.0	12	35.3	63
Out of state	14	19.2	15	37.5	16	47.1	45
Totals	73	100.0	40	100.0	34	100.0	147

<sup>•</sup> Chi-square: 15.448 d.f.: 6 P> 0.02  $\overline{C} = 0.38$ 

<sup>†</sup> Chi-square: 12.692 (using Yates' correction) d.f.: 6 P > 0.05  $\overline{C} = 0.35$ 

not specialized technicians had nearer

points of origin.29

Within the state of Ohio, Thompson found that white collar workers moved the furthest. 30 This is closer to this study's results. However, among all migrants who left a North Carolina county, it was discovered that professional and government workers went the farthest. Agricultural workers stayed nearest the hometown. 31 Another study in New York obtained the same results. 32 Since these two last mentioned studies dealt with older migrants, the age factor may have accounted for the difference in results.

An additional difficulty in comparing these other findings to those of the present study is that the use of the professional and governmental worker categories juxtaposes an occupational group with an industrial category. In summary, it appears that an intervening variable (such as distribution of employment opportuni-

ties or perceptions of social expectations) mitigates the association here examined.

Military experience and occupational aspiration were each significantly associated with distance of migration among both the southwestern and the northeastern respondents. Thus, experience related to the different social structure of military life has a significant association with range of spatial movement. Such an experience may also foster higher occupational aspirations since the youth has been able to learn of other "opportunities." Higher aspiration could then lead to a willingness to try adventures in other social structures. One can conceive of these two factors as reinforcing each other in their encouragement of migration involving substantial distances.

As expected, range increased with age and time elapsed since high school graduation. Whether this relationship would

Table 14. Degree and significance of association between two patterns of migration and 10 potentially explanatory variables for 129 northeast LAI and 146 southwest HAI rural Minnesota mule high school graduates of the years 1948, 1952, and 1956 who migrated

	Zon	of add	ress (rang	e)	Outwa	rd linear	moves (ra	nge)
	LA	l	НА	.1	LA	I	НА	1
Variable .	P		Р		P	č	P	<u>c</u>
Childhood residence	0.95	N.S.*	0.70	N.S.	0.80	N.S.	0.10	N.S.
Father's occupation	0.70	N.S.	0.30	N.S.	0.05	0.38	0.10	N.S.
Adalescent residence	0.70	N.S.	0.30	N.S.	0.30	N.S.	0.10	N.S.
	0.05	0.37	0.01†	0.49	0.02	0.41	0.01†	0.48
Present occupational aspiration	0.001	0.50	0.05†	0.37	0.01	0.39	0.01†	0.41
Year graduated	0.001	0.50	0.20†	N.S.	0.10	N.S.	0.10 <del>†</del>	N.S.
Present age		0.38	0.05†	0.35	0.02	0.36	0.50	N.S.
Military duty	0.02	0.36 N.S.	0.20	N.S.	0.50	N.S.	0.10	N.S.
Reasons for moving	0.90		0.20	0.43	0.05	0.30	0.001†	0.53
Career advancementYoung adult residence	0.20 0.20†	N.S. N.S.	0.30	N.S.	0.05†	0.34	0.50	N.S.

<sup>\*</sup> N.S. = not significant at the 0.05 probability level of confidence.

† Computed with Yates' correction.

32 Anderson, Mobility of Rural Families, II, pp. 34-36.

<sup>\*\*</sup>Maurice C. Benewitz, "Migrant and Non-Migrant Occupational Patterns," Industrial and Labor Relations R. 9, Jan. 1956, pp. 235-40.

\*\*Warren S. Thompson, Migration Within Ohio, Oxford, Ohio: Scripps Foundation, Miami Univ.,

<sup>1951,</sup> p. 183.

si W. A. Anderson and C. P. Loomis, Migration of Sons and Daughters of White Farmers in Wake County, 1929, Agr. Exp. Sta. of North Carolina State, Bull. 275, June 1930, p. 183.

persist for a population well above 30 years in age is questionable. The direction of association might reverse if sufficient numbers during their later years return to the region of their rearing. This study provided no data pertinent to this

conjecture.

Combining the findings relative to range of migration with findings on the association between range of linear outward movements (patterns of migration in which the migrant moves mainly away from the hometown in a relatively straight line in contrast to movements which might be characterized as oscillating or zig-zagging) and the independent variables reinforced the foregoing observations (table 14). When only those who demonstrated this undirectional pattern of migration were considered, the associations between range and present occupational aspirations as well as year graduated both showed significant association. In addition, career advancement was associated significantly and father's occupation approached it for both groups. Moreover, military experience and residence during young adulthood were as-

sociated with range among the LAI mi-

Assuming the legitimacy of interpreting this migratory pattern as reflecting a higher degree of planning in migration, it is reasonable to expect the social environment to exhibit a stronger influence than where this directionality is absent. Most striking at this point was the contrast between the HAI and LAI groups. For example, the proportions of respondents who moved out of state and whose fathers were: (1) farmers, (2) proprietors and white collar workers, and (3) blue collar workers were 28, 37, and 40 percent for the HAI group and 47, 44, and 23 percent for the LAI group.

These results harmonize with the aforementioned suggestion that in the LAI area, agriculture offers limited opportunities for achieving social and economic success. Each association just noted was in a pattern similar to that already observed relative to simple range of migration. This was as expected because better than 9 of every 10 migrants exhibited a linear outward movement

pattern (table 15).

Table 15. Association between range of outward linear moves and father's occupation for northeast LAI and southwest HAI migrants

			Father's o	ccupation			
	Fa	rmer	White	collar	Blue	coilar	
Outward-moving range	Number	Percent	Number	Percent	Number	Percent	Totals
LA1 migrants*		•••	•	8.8	13	32.5	29
Within area	, 13	24.5	3		18	45.0	49
Within state	15	28.3	16	47.1	• -		49
Out of state	25	47.2	15	44.1	9	22.5	
Totals	53	100.0	34	100.0	40	100.0	127
HAI migrants†			•	20	0	0	8
Within area	7	13.7	1	2.0	•	60.0	75
Within state	30	58.8	30	61.3	15		
Out of state	14	27.5	18	36.7	10	40.0	42
Totals	51	100.0	49	100.0	25	100.0	125

 $<sup>\</sup>overline{C} = 0.38$ d.f.: 4 P> 0.05 • Chi-square: 11.101 d.f.: 4 P> 0.10 † Chi-square: 8.375

Of particular interest, in view of the frame of reference used, are the findings relative to career advancement.

Three of the four sets of data dealing with migratory range and career advancement generated significant associations. These support the specific hypothesis that migration is utilized as a vehicle to vocational achievement and financial success and confirm previous studies as well. Since pursuit of vocational success was a central factor in the theoretical framework, these findings support much of the reasoning behind this analysis.

However, data dealing with young adult residence revealed only one significant set of results. In this case the residential data provided a cross-check on type of residential site versus range of migration. So conclusions take on a somewhat different hue. They suggest that it is not the destination itself which attracts migrants, but that people who migrate in certain patterns of range and destination do so for other reasons. The "success theme" is, of course, viewed as the underlying reason for migration, according to the frame of reference used.

# **Destination**

By Population Size of Place of Current Mailing Address

The theory of migration, or frame of reference, selected for this study generates the following proposition: That the destination of migrants should be influenced by their (1) definition of desirable levels of income, and (2) perception of cultural or social advantages offered by a given type of community. This is turn should affect their choice of community when selecting a destination.

It was therefore pertinent to examine the association of each independent variable with size of community of destination. The only two variables consistently significantly associated with size of community of 1958 mailing address were military experience and young adult residence (table 16). Childhood residence, present age, year graduated, and career advancement were each only significant for one or the other group of migrants.

For graduates from both areas, active military duty was associated with greater frequency of residence in cities of 100,000 or more population. This was particularly true for those who made at least

one migratory move prior to active military duty. Residence in cities of 100,000 or more was reported by 64 percent of the LAI group and 47 percent of the HAI group with premilitary migration history, but by only 34 percent of the LAI group and 32 percent of the HAI group without premilitary migration.

Association data between the population size of 1958 residence and young adult residence (ages 18-22) facilitated a cross-check on destination for a given period of time (i.e., from the year of graduation through ages 18-22) against present location. The factor of age was also held constant for one aspect (the

Table 16. Association between population size of current mailing address and other variables for migrants from both areas

	No	rtheast LA	(I migran	ıts	Sou	thwest HA	l migran	ts
Variabl <del>e</del>	Degrees of freedom	Chi-	P	<del>-</del>	Degrees of freedom	Chi-	P	<u>_</u>
at it it is a little was	. 3	1.521	0.70	N.S.*	3	14.131	0.01	0.40
Childhood residence		2.550	0.90	N.S.	6	11.267	0.10	N.S.
Father's occupation		1.490	0.70	N.S.	3	7.496	0.10	N.S.
Adolescent residence			0.50	N.S.	9	13.886†	0.20	N.S.
Occupational aspiration	_	5.727 33.450†	0.001	0.53	6	3.142	0.80	N.S.
Year graduated		22.793†	0.001	0.45	6	5.829	0.50	N.S.
Present age	_	26.938†	0.001	0.48	6	13.781	0.05	0.37
Military experience		4.169	0.70	N.S.	6	10.545	0.20	N.S.
Reasons for moving		5.815	0.40	N.S.	6	15.184†	0.02	0.38
Career advancementYoung adult residence		15.134†	0.40	0.38	6	15.584†	0.02	0.39

<sup>•</sup> N.S. = not significant at the 0.05 probability level of confidence.

† Using Yates' correction.

population size) of residence. It thereby provided some clue to the time pattern of migration by these respondents.

The data yielded a degree of association significant for both sets of migrants. The hypothesis that there is a significant association between the population size of 1958 residence and young adult residence was therefore supported. However, the differences between population size of 1958 area of residence and young adult residence showed varying patterns for the two groups of respondents.

Migrants from both areas more often resided in a community of less than 2,500 population if their residence during young adulthood was located in the open country (LAI = 57 percent, HAI = 37 percent) rather than in a small town (LAI = 48 percent, HAI = 10 percent) or in the city and military service (21 percent for either group). HAI migrants consistently more often resided in communities of 2,500 to 10,000 or of 10,000 to 100,000.

These data may partly reflect the greater accessibility to moderate sized towns in the southwest HAI area. Nevertheless, the tendency for the northeast LAI migrants to gravitate towards extremes in community size may also be partly explained as already suggested; that is, limited resources or less knowledge of opportunity. A more modest definition of "success" may also contribute to the explanation. The LAI group did not migrate so frequently. Those who migrated did so for shorter distances, except for the more limited number who went beyond commuting distance of the community. In the latter case they more often left the state than did those from the HAI area.

Size of community of current residence and residence during childhood were significantly associated with migration per se for only the HAI group. This association reflected particularly the greater tendency for those with an early town rather than an open country background to reside less often in cities of 10,000 to

Table 17. Association between population size of current mailing address and young adult residence for northeast LAI and southwest HAI migrants

			Young	adult resid	ence		
Danulation des	' Open	country	Smal	l town	City an	ed mili- ervice	
Population size of present address	Number	Percent	Number	Percent	Number	Percent	Totals
LAI migrants*	_						
Under 2,500	13	56.6	19	47.5	19	21.1	51
2,500-9,999	3	13.0	6	15.0	12	13.3	21
10,000-99,999	1	4.3	5	12.5	11	12.2	17
100,000 and over or military service	6	26.1	10	25.0	48	53.4	64
Totals	23	100.0	40	100.0	90	100.0	153
HAI migrants†							
Under 2,500	7	36.8	4	9.5	18	21.2	29
2,500-9,999	7	36.8	20	47.6	15	17.6	42
10,000-99,999	3	15.8	6	14.3	19	22.4	28
100,000 and over or military service	2	10.6	12	28.5	33	38.8	47
Totals	19	100.0	42	100.0	85	100.0	146

<sup>•</sup> Chi-square: 15.134 (using Yates' correction) d.f.: 6 P > 0.02  $\overline{C} = 0.3$ † Chi-square: 15.584 (using Yates' correction) d.f.: 6 P > 0.02  $\overline{C} = 0.3$ 

Table 18. Comparison between findings of three studies and present results regarding the variable of population size of current address

	Prese	nt study	Gee and	l Corson*	Anderso Loo		And	erson‡
Population size of present address	Number		Number	Percent	Number	Percent	Number	Percent
		26.7	120	17.5	239	59.0	570	54.0
Under 2,500		20.7	75	11.0	10	3.0	245	23.0
2,500-9,999 10,000 and over		<b>52.6</b>	489	71.5	153	38.0	245	23.0
Totals		100.0	684	100.0	402	100.0	1,060	100.0

• Wilson Gee and John J. Corson, Rural Depopulation in Certain Tidewater and Piedmont Areas of Virginia, Institute for Research in the Social Sciences, Univ. of Va., 1929, pp. 42-43, tables 22 and 23. The data are for males only, to be more comparable with the present study. However, their sample covered these recent study.

† Anderson and Loomis, op. cit., p. 15, table XII. The data used above are those which pertain to all males of the sample. This study used all farmers' sons and so has no town dwellers in it, nor

† Anderson, Mobility of Rural Families, II, p. 19, tables 17 and 18; pp. 22-24. This data is limited to only the male migrants of the sample. The data were reclassified according to Anderson's comments so as to be usable in this table. The sample covered all sons and daughters of farm families, and so has a did it cover any other occupational group. much greater age span than the present study.

100,000 and of over 100,000 than in communities of less than 2,500. This reflected the tendency of migrants with a farm residence during childhood, more often than those with a town residence background, to migrate toward the smaller town during their adult years.

This finding is consonant with the theory that cityward migration tends to occur via several shorter moves rather than directly from farm to metropolis. Although the data of this study indicate that many migrants took the "big leap," a significant number followed the shorter intermediate steps pattern. The necessity for migrants from agricultural communities to seek larger communities when they do move was reflected in this and several other pertinent studies (tables 17 and 18).

Size of community of 1958 residence and (a) year of high school graduation, as well as (b) age of migrant, were each associated for migrants from the LAI but not the HAI area. The older LAI migrants who had been out of high school longer more often resided in cities of 100,000 or over.

Career advancement and population size of the migrant's 1958 community of

residence were significantly associated only for the HAI group. Obviously those migrants who had entered farming more often were in communities under 2,500 (54 percent) or of 2,500-9,999 population (46 percent). At the other extreme was the white collar and professional group. These migrants less often resided in a small town and more often were in metropolitan centers.

Those who had advanced into blue collar occupations distributed between these two extremes in relatively equal proportions among the community size categories. The pattern for the LAI group was indistinct. The tendency was for migrants in unskilled trades to concentrate in smaller communities while those in higher level occupations concentrated at both extremes in similar proportions.

### Within the State

This discussion includes only migrants who never left Minnesota. Since their number was relatively few, only a dichotomy of destinations could be analyzed. The division of most theoretical import was to distinguish between those individuals who never entered the social structure of a large metropolis and those who established residence at least once in such a community.

Duluth, St. Paul, and Minneapolis were the three Minnesota cities classified as metropolitan centers for this analysis. All have a population over 100,000 and all have surrounding suburbs. According to the 1960 Census, only one city (Bloomington) in Minnesota has between 50,000 and 100,000 population. Six Minnesota cities (Austin, Edina, Richfield, Rochester, St. Cloud, and St. Louis Park) have populations between

25,000 and 50,000. This dichotomy was regarded as best representing an actual break in the types of urban social structure in Minnesota.

Contrary to expectations, these two sets of respondents did not significantly differ in area of origin. The pattern of association between migration and the other variables studied held also for migrants who never left Minnesota (table 19). The reduced number of respondents in this category (N=178) partly accounted for the greater incidence of associations which approached (P>0.10 or 0.20) but did not achieve statistical significance at the 0.05 level.

Table 19. Association between destinations of migrants within the state and other variables for migrants from both areas

	No	rtheast L	N migran	its	Sou	thwest HA	i migran	\$
Voriabl <b>e</b>	Degrees of freedom	Chi-	P		Degrees of freedom	Chi-	P	c
Childhood residence	. 1	0.0216	0.90	N.S.*	1	0.6476	0.50	N.S.
Father's occupation		0.6202	0.80	N.S.	2	5.084	0.10	N.S.
Adolescent residence	. –	3.434	0.10	N.S.	1	0.1457	0.80	N.S.
Present occupational aspiration	., 2	3.135	0.30	N.S.	3	4.173	0.20	N.S.
Yeor graduated	2	4.366	0.20	N.S.	2	3.499	0.20	N.S.
Present age	_	0.7724	0.70	N.S.	2	3.704	0.20	N.S
Military experience	_	5.675	0.10	N.S.	2	8.306	0.02	0.41
Reasons for moving		11.034	0.01	0.47	2	10.233	0.01	0.41
Career advancement	. –	7.349	0.01	0.45	2	5.354†	0.10	N.S
Young adult residence		19.664†	0.001	0.20	2	4.418	0.20	N.S

<sup>•</sup> N.S. = not significant at the 0.05 probability level of confidence.



Using Yates' correction.

# Theoretical Implications

The foregoing notes that the patterns of geographic mobility showed significant differences between the northeast and southwest Minnesota areas in regard to range, size of community of destination, and occurrence of migration. However, no significant differences were found between graduates of the two areas with respect to migration "to only one size of community," intrastate movements, and frequency of migration.

Since only special subcategories of migration and data on frequency of moves failed to show statistically significant association with area of residence at high school graduation, some inferences may be noted. The overall hypothesis concerning differences in the geographic mobility of youth from the two areas is definitely supported by the bulk of the data. Only the specialized subgroup analyses and the limited data on frequency of moves fail to sustain the hypothesis.

These observed differences between respondents of northeastern and southwestern Minnesota can then be linked to the frame of reference used in this study. These differences in migratory patterns are attributed in a measurable degree to the ways individuals define the social situation. Factors in each area's subculture have produced different "definitions of the situation." These, in turn, influenced individual decisions to migrate or not, and where to go if one chose to move.

The purely economic view of migration as a simple response to variations in potential income is an inadequate explanation. Observations in Oklahoma and the Appalachians showed that unless the social group defines an area as undesirable, people remain in a relatively impoverished site. The findings in this study agree since the LAI northeastern area had less migration than did the more prosperous southwestern Minnesota area.

The overall more general success-oriented frame of reference received only

partial substantiation from the gross findings. A total of 138 tests for significant association were computed; of these 56 proved statistically significant. This proportion of approximately one-third of the hypotheses being sustained also prevailed in the separate tabulations done on migrants alone—43 out of 120 tests yielded significant associations (table 20).

The absence of more statistically significant associations is partly a consequence of sample size and power of the test rather than absence of association. Only tests with larger samples and more powerful statistical tools could verify the absence of the originally hypothesized associations. But the hypotheses supported by the analyses here reported should stand up in tests with larger samples and more powerful tests of statistical significance. Therefore, it is legitimate to claim partial support for the general explanation (theory) of migration herein advanced and to expect further corroboration from more extensive

Concerning the associations between the 10 independent (explanatory) variables and data on simple range and destination alone, another pattern appeared. The relatively recent experiences of career advancement, military experience, and year of graduation, and of present occupational aspiration produced significant associations in at least four of six instances. Using these data as a point of departure, the frame of reference may need revision.

Table 20. Degree and significance of association between six patterns of migration and 10 potentially explanatory variables for 129 northeast LAI and 1956 who migrated and 146 southwest HAI rural Minnesota male high school graduates of the years 1949, 1950, 1952, and 1956 who migrated

									·											
									=	ndebend	Independent variables	pies								
1	Child	Childhood residence	Father's occupation	er's ation	Adolescent residence	scent	Occupational aspiration	ational ation	Year graduated	ar iated	Present	ent •	Military duty	ary iy	Reasons for moving	ns for ing	Career	ement	Young adult residence	adult
Dependent variables	<b>a</b>	10	<b>a</b>	10	<b>a</b>	10	4	10	•	10	<b>a</b>	IO	•	ΙU	4	ΙU	۵.	10	•	ıυ
Zone of address (range)  LAI  HAI	0.95	X.S. X.	0.70	Z. Z. S. S.	0.70	Z Z S S	0.05 0.01†	0.37	0.001 0.05†	0.50	0.001 0.20†	0.50 N.S.	0.02 0.05†	0.38 0.35	0.90	X X Si Si	0.20 0.02†	N.S. 0.43	0.20† 0.30	S, S,
Cutward linear moves (range)  LAI	0.80 0.10	z. z. s. s.	0.05	0.38 N.S.	0.30	Z.S.	0.02 0.01†	0.41	0.01 0.01†	0.39	0.10 0.10†	Z Z S. S.	0.02	0.36 N.S.	0.50	S, S,	0.05 0.001†	0.30	0.05† 0.50	0.34 N.S.
Size of address (destination)  LAI  HAI	0.70	N.S. 0.40	0.90	z z si si	0.70	z. z. s. s.	0.50 0.20†	Z Z S. S.	0.001† 0.80	. 0.53 N.S.	0.001† 0.50	0.45 N.S.	0.001† 0.05	0.48	0.70	z z s. s.	0.40 0.02†	N.S. 0.38	0.02† 0.02†	0.38
Destination of "one-type" cases LAI HAI	0.80	N.S. 0.34	0.70	Z. S.	0.90	z z s. s.	0.10	Z. Z. S. S.	0.00	0.47 N.S.	0.20	X X 3. 3.	0.05	0.36 N.S.	0.01	0.47	0.001	0.50 N.S.	0.001	0.60 X.5.
Instate type (destination) LAI HAI	0.90 ∂.50	zi zi Si	0.80	Z. Z. S. S.	0.10	Z Z S. S.	0.30	સ્ટ્ર સ જ જ	0.20	X X X X	0.70	Z. Z. S. S.	0.10	N.S.	0.0	0.47	0.01 0.10†	0.45 N.S.	0.001† 0.20	0.20 N.S.
Number of moves (frequency) LAI HAI	0.50	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	0.05	0.31 N.S.	0.20	N.S.	0.10	Z Z Z Z S.	0.01	0.39	0.02	0.33 N.S.	0.10	N.S. 0.39	0.20	N.S. 0.28	0.50	Z. Z.	0.95	N.S.

ullet N.S. = not significant at the 0.05 probability level of confidence.  $\dag$  Using Yates' correction.

The infinence of relatively recent experiences appears to be the chief molder of an individual's ideas as to what is the best location, where opportunities are most likely to be found, or what occupational field one should enter.

The concept of reference group influence is often introduced to account for this importance of current experiences. A reference group usually affects its members most if they are in close contact with each other. As time goes by and as communication becomes more difficult, the earlier reference group contacts often enert only a tenuous influence on the members. Merton recognized this matter of duration of "sustained interaction."

In addition, he asserted that, ". . . re-

ference group theory and functional sociology address different questions to the same phenomena, but that these questions have reciprocal relevance." Following this lead, it is gratifying to discover that preliminary studies have already been made on the relative influence of different reference groups through time. These initial inquiries suggested that youth and young adults are largely influenced by their roles in present reference groups rather than past or anticipated ones. 35

The findings in this study of migration are consistent with this emphasis on contemporary reference groups. Future studies using a similar sample of high school graduates would do well to test

this observation further.

Merton, op. ett., pp. 312 and 332.

<sup>#</sup> Ibd., p. 226.

<sup>#</sup> Ibid., pp. 385-86.

# Practical Implications

Significant proportions of high school graduates leave their hometown to attend college and contemporary reference groups particularly influence their migration decisions. These observations suggest that the location of colleges and specialized training schools can greatly influence patterns of migration. Early migration and nonmigration of high school graduates are likely to be affected by the centralization or decentralization of these educational facilities.

Attendants at such schools must be expected to take on many perceptions of their schoolmates and teachers regarding relative advantages offered by different areas for success. In fact, their definition of success itself may be cast largely in the mold of this reference group.

Another point is that reform efforts to elevate the income of rural areas are likely to encourage outmigration, if these findings are generally applicable. In relatively prosperous southwestern Minnesota there was a greater tendency to migrate than in the northeast. However, this greater incidence of geographic mobility was over shorter distances than in the northeast.

The many significant associations between military experience and migration suggest other practical applications. It would seem possible, in the light of these findings, to partly influence migration by varying policies on compulsory military training. The age of eligibility could be altered, as well as policies on deferments, to encourage desired effects.

Another influence which could encourage outmigration from farming and rural communities is a widespread youth program which mixes rural and nonrural youngsters. The nonrural would tend to display and support perceptions of employment and residential opportunities otherwise largely beyond the experiences of the rural youngsters' reference group.