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AN EXPLORATORY STUDY OF FACTORS ASSOCIATED
WITH ADULT RESIDENCE AND OCCUPATION OF
RURAL YOUTH GRADUATING FROM TWO
MICHIGAN HIGH SCHOOLS

By

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A THESIS

Submitted to the College of Agriculture of Michigan
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INTRODUCTION

The Situation

Agriculture as an industry and as an institution is in a period of rapid refinement. Competition has yielded a more alert and capable profession with a decreasing marginal group. Increased social intercourse with the total society has led to more poise among the people of the profession and a keener public appraisal. There is an increasing difference between large farm enterprise and small types. There is an ever increasing number of dual enterprise (or part time) families having a combined farm and non-farm economic base. Combined with these is an increase in rural residence among those who labor elsewhere and an industrial expansion that demands ever increasing numbers of workers of all categories.

This evolution of maturity in agriculture has a profound effect upon the generations being reared in rural areas that is demanding of scientific analysis and practical solution. Higher investment and less arable land are barriers to those who would make a profession of agricultural production while the agricultural services, processing, distributions, and equipment

trades absorb increasing numbers applying to farm oriented fields. But a high percentage must look to non-farm pursuits in order to satisfy life's needs.

Out of the rural areas come the younger generations who supply the trades, the professions, the services, and the government with a substantial percentage of their personnel requirements, their brains, their leadership and their labor force. As a grouping, these rural youth harbor probably no less and probably no more potential talent for maximum contributions to society than any other grouping of young people. Yet unfortunately as in the instance of any grouping, this potential lies dormant in many during adult life or becomes inactive for want of inspiration toward further development.

Faced with the challenge of improving the opportunities for rural youth, many disciplines are exhibiting interest in the development of effective and productive citizens and in establishing satisfying pursuits and climates in which full expression of talents can be realized. Industry is interested in a productive labor force. Education is concerned with full educational opportunity. The government is interested in a capable and participant citizenry of maximum production. Agriculture is interested in the perpetuation of its kind, and others are interested for a variety of reasons.

This study then is dedicated to the belief that more effort is needed and that bold new steps are in order on many fronts toward maximizing the opportunity for fullest development of youths' potential talents. That traditional methods are in need of repair. That in response to increased national population and increased international intercourse, the free democratic society must search its imagination for methods of improving the cultivation of talents among both leaders and followers, the highest profession and the lowest labor classifications in order to effect the greatest contribution of all citizens. New ideas, new methods, must meet the challenge of predicting the most effective pursuits on the basis of performance and characteristics of each succeeding generation and then provide the opportunity for developmental success and successful training and placement for the various pursuits. The obligation rests not alone with education, neither with the parent, but rather with the total society.

What happens to rural youth under conditions existant in Michigan at mid-century? How much do they participate in the youth organizations and clubs in their neighborhoods? How well do they achieve in high school and to what extent do they participate in extra-curricular activities? How many go on to college and what are the curricular and occupational choices they

make? Where do they select their adult residence and how mobile are they in terms of residence and occupation? Are they given maximum opportunity for aptitude development?

This becomes the problem of the study, what happens to rural youth? The interest in the problem results from experience in the Cooperative Extension Service which concerns itself program wise with the problems and development of rural youth, as well as, (more recently) urban youth. It is appropriate that Extension, basically and traditionally almost totally agriculturally oriented, should seek to determine the trends in the differential dispersion of the youth of the areas it serves. In an age in which agriculture as an industry absorbs fewer and fewer of the youth it produces, there is little merit in staying within the framework of a traditional program that enhances rural values to the virtual exclusion of non-rural values. More justifiable, considering current trends, is an attempt to embrace broad new programs that expose rural youth to the opportunities that exist outside of farming and render all possible stimulation toward intelligent choice of life endeavors under circumstances of interpretive information and experience. This is not to condemn the continuance of rural value systems, but rather to suggest the need of interpretation of these

values and their symbols in the broader concepts of total society.

But what will this involve in terms of transition to a fundamentally different kind of life? Reisman and fellow authors¹ suggest three stages of transition in cultural development. The first of these is called the tradition directed period in which individuals live and labor within a framework of values, securities, and validations derived from family group traditions. This period is best typified by agricultural societies. The authors term the second period as a period of inner directions in which the individual tends to move out of the structure of family tradition and to assume more personal goals under the shadow of the values and securities obtained in the family during childhood. This period is best typified by the industrial growth period. The final period of transition suggested is called the other directed period in which the individual is highly cosmopolitan, taking his value cues from those about him, playing multiple roles among multiple daily contacts. His achievements must be as great as or greater than those within this circle of wide contacts. This period is one of wealth and abundance.

These periods of transition are not mutually

¹David Reisman, Nathan Glazer, and Ruel Denny, The Lonely Crowd, (Garden City, New York: Doubleday & Company, 1955).

exclusive in our culture but are rather coexistent with the population being made up of all three types. Under the conditions of ease of transportation and communication as exemplified in our present culture, there is a relatively high degree of upward mobility among the three types and the extremes tend to be drawn together. But for the sake of identification, the farming fraternity tends to be representative of traditionalism in our society, the upper middleclasses to represent the inner directed, and the upper class group to be indicative of the other directed.

Assuming these characteristics, it would seem that Extension programs can be interpreted as traditional, from its agricultural orientation. It has espoused the cause of agriculture and is now faced with the challenge of stimulating mobility toward inner and other directed tendencies. This challenge cannot be upheld within the bias of any value judgement, but must look rather to existent circumstances of social and economic intercourse that will be the empirical stage on which its constituents assume the varied roles. In its attention to youth programs, it must look to the ultimate social contributions attainable by rural youth with the necessary aptitudes.

Purpose of the Study

This study was conceived in the need for re-

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search knowledge relative to the adjustments faced by rural youth in the transition to adulthood. Its purpose, however, is primarily exploratory to assist in the determination of areas for deeper study. It seeks to determine what happens to a sample of rural youth. Its scope is limited to observation of the characteristics exhibited by five year graduating groups in two Michigan high schools. In the exploratory framework, it emphasizes the need for broad research in the different economic areas of the state and cannot assume representation of the broad area. In one sense it is comparative, since the two areas represented are different in terms of emphasis upon agriculture and in terms of alternative opportunities for the youth of the areas.

The purpose of this study is to explore the characteristics associated with the occupational and residential dispersion of rural youth. Extension is involved with rural youth programs and as such has both the obligation and the challenge to utilize its resources in an effort to help prepare rural youth for occupational, social, and economic well being. The necessary preparation must undergo constant change in order to remain in constant tune with the trends of social and economic developments. Those methods and programs that are sufficient to train one generation are insufficient in the following generation.

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We are concerned with the residence and occupation migration of rural youth in this study. We need to know the direction of flow of the movement of rural reared young people if we are to evaluate our programs in the proper perspective. Other than observation and historic trends, we have little to go on. "Basically, we need to determine the ways in which and the extent to which those who leave the rural districts for the towns and cities differ from those who remain on the farms", comments T. Lynn Smith² in Rural Sociology.

Smith speaks from a sociologist's standpoint; yet his comments are as true for Extension. For change in the social complex of individuals is the major goal of extension. We need much more information on the selectivity processes that result in one individual's staying on the farm while another migrates. We need stronger methods of measuring and interpreting whatever selectivity processes are in operation. Then we need ^{and} to refine our methods of aiding abetting the processes of development that best prepare rural youth for positions in adult life.

Such research will involve much energy over a long span of time. The current study can only take a look at some of the characteristics associated with the dispersion of rural youth and, as a subsidiary, attempt

²T. Lynn Smith, "Levels and Trends in Rural Migration", Rural Sociology, XIX (March, 1954), 80.

to examine the extent to which rural students in a limited sample continue their aptitude development.

Parts of the study attempt to challenge specific hypotheses while other parts are less formalized reports of findings. It is submitted in an attempt to further give emphasis to the need and method for Extension's program direction in the field of youth work without assuming any singular priority of consideration but rather to supplement the thinking and action of personnel of the Extension service. The contribution of other research assumes importance as it is interpreted in relation to the present study area.

Areas Sampled

In arriving at the decision of where to do the study and who to include, several important factors were considered. It is felt that the final decision was made in the best interest of the overriding purpose of the study. This purpose, directly concerned with interests of the Cooperative Agricultural Extension Service, is to attempt to determine what happens to rural youth. Since Extension's broad charter carries its obligation and works beyond the limits of agricultural people even into the urban areas, it was felt that the study should include more than farm youth. It should follow these rural youth into whatever fields they chose and into whatever areas they chose to reside. It should also

attempt to determine the same characteristics among rural non-farm youth and the youth of rural communities. It was assumed from historical trends that appreciable numbers of rural farm, non-farm, and rural community youth would find both employment and residence in urban or suburban areas, thus encountering certain social and psychological adjustments. Again, since Extension experts increased efforts in fully urban areas, the study could conceivably reveal important characteristics and problems of rural reared people who migrate to urban areas as well as a better understanding of those who remain rural.

The thought prevailed that the study should include a typical rural community as well as one with a more industrial context. Since the current industrial expansion in Michigan covers much of the most important agricultural areas as well as those of more or less marginal farm lands, in both of which Extension serves, it would be desirable to include both in the study. The further desirability to include the cut over or low income areas was impossible with the limitations of the procedure.

The early desire to include non-high school youth and high school drop outs was abandoned because of the limitations of the current study. It was determined that a relatively small percentage of the high school age group fall into this category and in the two areas

chosen for the study, this fact was true.

It was felt necessary that some common characteristic or experience should be found among respondents to establish a starting point in both areas of the study. High school enrollment, since certain performance characteristics are permanently recorded, fulfilled this requirement.

There then remained the decision of what time expanse would best fulfill the requirements. The sample should represent near current trends. It should have had time for respondents to have made some of the adult adjustments following high school. It should be free as possible from such interruptions as military training and wars. For these reasons the graduating years of 1946 through 1950 inclusive, were chosen. This would allow up to ten years for respondents to have made their adult decisions.

Two Michigan high schools were chosen for the study. One, Midland, is located in an industrial center, and drawing students from throughout Midland County, fulfills the requirements of rural students entering an industrial centered school. Saline, located in a typical rural community in Washtenaw County, meets the opposite needs.

Comparative Description of the Two Counties

The 1950 United States Census reveals the fol-

• The first step in the process of the scientific method is to make an observation or ask a question. For example, you might notice that plants in a sunny location grow faster than those in a shady location. This leads to a question: "Does the amount of sunlight affect the growth rate of plants?"

• Next, you formulate a hypothesis, which is a tentative answer to your question. In this case, you might hypothesize: "If a plant receives more sunlight, then it will grow faster." This hypothesis is based on your initial observation and is something you can test.

• The third step is to design an experiment to test your hypothesis. You would need to set up two groups of plants: one group in a sunny location and one group in a shady location. You would then measure the growth rate of each group over a period of time. It's important to control other variables, such as the amount of water and the type of soil, to ensure that the only difference between the two groups is the amount of sunlight.

• After you have collected data from your experiment, you analyze the results. If the plants in the sunny location grew faster than the plants in the shady location, your data would support your hypothesis. If not, your data would contradict your hypothesis, and you would need to revise it.

• The final step in the scientific method is to draw a conclusion. Based on your analysis of the data, you would conclude whether your hypothesis was supported or not. If it was supported, you might conclude: "The amount of sunlight does affect the growth rate of plants, with more sunlight leading to faster growth." If it was not supported, you might conclude: "The amount of sunlight does not affect the growth rate of plants, at least in the conditions tested." This conclusion is based on the evidence you gathered and is a key part of the scientific process.

lowing comparison between Midland and Washtenaw Counties:

Midland		Washtenaw
520	Land Area, Square Miles	716
69	Population Per Square Mile	188
35,662	Population Total	134,606
14,285	Urban Population	86,698
13,288	Rural Non-farm Population	34,369
8,089	Rural Farm Population	13,539
31.6%	Ten Year Increase	66.6%
1,760	Migration--Lived Elsewhere 1949	12,380
\$3,630	Median Family Income	\$3,435
23%	Income \$5,000 or More	24.3%
7,655	Total Persons 7 to 17	17,120
83%	Persons 14 to 17 in School	88.8%
10.3	Median School Years Completed	12.1
40.1%	High School or More	53.0%
12,036	Labor Force (14 Yrs. or Older)	104,160
11,504	Total Employed	48,110
21.1%	Labor Force, Females	32.4%
81.1%	Labor Force, Males	63%
1,192	Employed in Agriculture	3,059
123	Employed in Mining	60
664	Employed in Construction	2,430
5,628	Employed in Manufacturing	12,667
	Employed in Transportation, Co-	
333	mmunication & Public Utility	2,481
1,529	Wholesale and Retail Trades	7,378
146	Finance, Insurance, Real Estate	1,035
387	Business and Personal Service	2,761
766	Professional & Related Fields	12,534
10.4%	Employed in Agriculture	6.4%
48.9%	Employed in Manufacturing	26.3%
34.9%	Structures Built Since 1940	30.7%
\$9,257	Av. Value Per Farm of All Farms	\$17,563
\$13,080	Av. Value of Commercial Farms	\$20,522

These Census figures reveal the important contrasts in the two counties in which the study was made and also support the contention that the Saline area is a much more substantially large farm area than Midland

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which in turn reflects itself in the attraction farming will have upon its youth as well as the effect of larger farm business enterprise upon the post high school educational planning of its youth. It is also evident from the Census that the range of occupational opportunities in the area of Saline is much broader than at Midland. Under these conditions, the high school graduate at Saline has much better opportunity to explore different potential jobs, or earlier to plan his preparatory schooling for a specific field of work with which he is interested or familiar. The greater population in Washtenaw demands a greater number of personnel in the business, personal service and professional fields. Thus, not only is the breadth of occupational opportunity greater at Saline, there also seems to be a greater perpendicular (prestigious and rewarding) flexibility to motivate the maturing rural youth.

There was a large ten year increase (86%) and 1949 migration (12,380) into Washtenaw County. The huge Willow Run Bomber Production Plant, built in the defense movement of World War II brought with it a tremendous labor force. It is located in Ypsilanti Township but many of the employees reside throughout the county. After the war, this plant was converted to automobile production while the airport continued to serve the area on a commercial basis. By 1949, the

movement to decentralize industry was in full swing and resulted in increased populations throughout the county. At the same time, the suburban developments continued and the many educational institutions in the county experienced considerable growth with the resultant increase in resident faculties and servicing groups.

Midland, during the same period, experienced a less dramatic increase in its population, though its 31% increase is a significant one. Much of the labor force needed in its main industry, the Dow Chemical Company, during the expansion period was drawn from near by cities and communities outside the county. Workers drove to the factories from the surrounding counties and cities, many of whom maintained more or less permanent residence outside the county. If one applies the pattern of migration noted by Thorntwaite³ and others, then it will be expected that the young and most productive workers are the most mobile group, and this would result in a relatively young population in areas of industrial expansion. This in addition to the marked increase in establishment of homes and families following the second world war substantially accounts for the suburban and rural non-farm development in Midland County as well as Washtenaw County.

³Warren C. Thorntwaite, Internal Migration In The United States, (Philadelphia, Penn.: The Univ. of Penn. Press, 1935).

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The census indicates there was virtually no difference in the median family income in the two counties nor in the percentage of families with incomes of \$5000 or more. This is not necessarily a refutation of previous statements regarding prestigious occupations since income in itself does not account for prestige. There was a greater percentage of males employed in manufacturing at Midland (48% at Midland, 26% in Washtenaw).

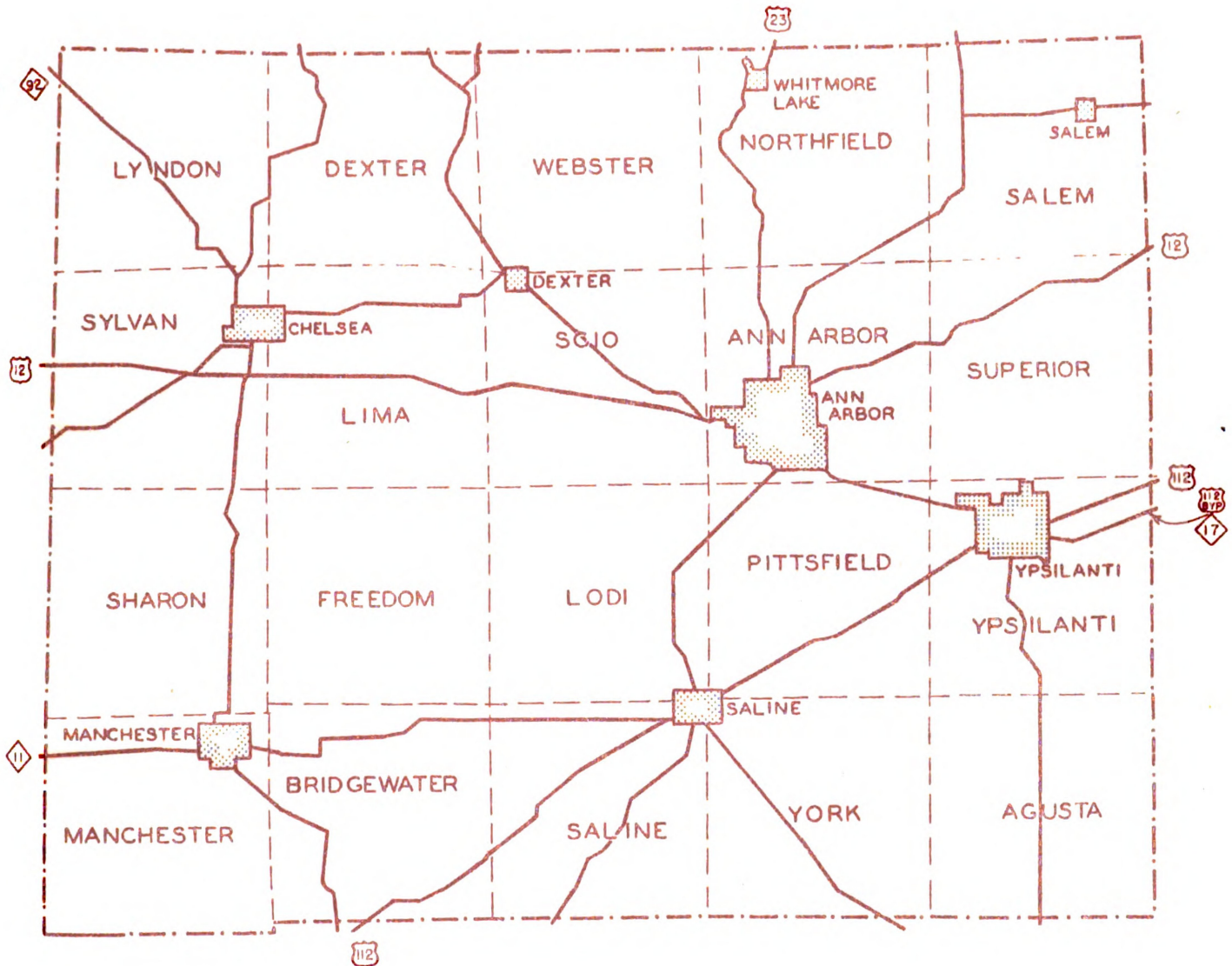
An important difference, in light of the present study, is in regards to the education level or attainment of students. Washtenaw shows five percent more of the 14 to 17 year age group in school, almost two years more on median years of school completed, as well as 13% more attaining high school completion or more. This latter, may be a result of both the motivations of prestigious positions and the values accruing to education as the result of there being a large number of post high school educational institutions in the area while this factor is much less evident in the Midland area.

The Saline High School district includes about one-sixth of Washtenaw County in the central southern two tiers of townships (Figure 1). It is primarily a rural area of large farm enterprise and small farm oriented businesses. There is of course an increasing incidence of rural non-farm residences in the area.

The school plant, at the time of the sample, served both primary and secondary classes. More recently, a new plant has been built to serve the primary grades separately, leaving the junior and senior high group in the older plant. It is a university accredited school. It normally presents from 30 to 50 high school diplomas each year.

The Midland High School (Figure 2) serves only the secondary grades, nine through twelve. It has a very progressive adult education program serving up to 2000 out of school students per year. Its in school student body comes from all areas of the county as well as several adjacent areas outside the county. An appreciable percentage of its students (this narrative refers to the time span of the sample) enter after two years of high school experience in outlying schools both inside and outside the county. The entire high school will transfer to a new plant in 1956 leaving the older building to the intermediate grades. Average graduating classes number approximately 200 students usually from 40 to 50% rural students. It also is university accredited.

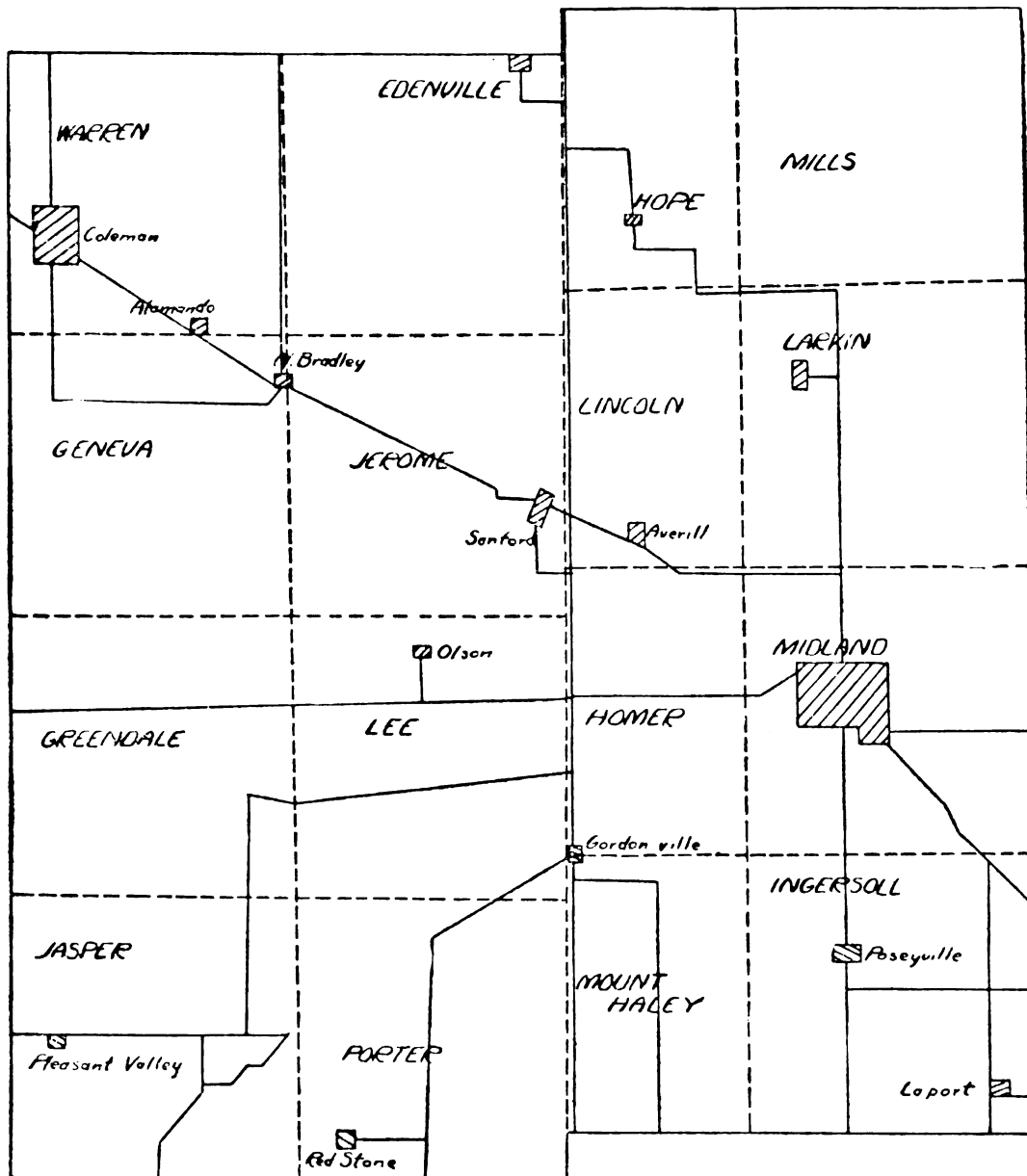
Whereas Saline students are drawn primarily from farming areas, the Midland student body includes more non-farm and small farm youth from the outlying districts. A greater percentage of the family incomes are non-farm



WASHTENAW COUNTY

Table 1

Saline High School students are mostly located in Saline and Lodi Townships with smaller numbers residing in adjacent areas in Freedom, Bridgewater, York, and Pittsfield.



MIDLAND COUNTY

Table 2

Midland High School students come from all areas in the county plus some from adjacent areas in Gladwin, Bay, and Saginaw Counties.

in the Midland School. The whole economic and social complex at Midland is centered in the Dow Chemical Company in contrast to the variety exhibited at Saline and Washtenaw County.

It seems evident that the expansion of business and industry in both areas is sufficient to absorb the bulk of the graduating youth. If, however, we evaluate the higher level opportunities for the youth being studied, and in terms of opportunity to develop the more gifted aptitudes, the circumstances in the Saline area seem more conducive to upward and outward motivation.

Methods Used In The Study

Distribution of the Questionnaire

Early in the preparations for the study, a decision was necessary regarding the choice of a method for collecting the information. The writer and his advisors fully realized the importance and desirability to conduct interviews among the sample. However, with the time and scope limitations involved, it was decided that a larger sample and potentially greater number of respondents would be possible through the use of a mail questionnaire.

Once this decision was reached, the writer visited with the high school administrators at Midland and Saline and was assured of their cooperation in the use of respective school records. Tabulation of information

in high school records was then begun, utilizing the graduating classes of 1946 through 1950 inclusive. The questionnaire (Appendix 12, 1b, and 1c) was then constructed to complete the necessary additional information.

Eighteen questionnaires were sent to Midland subjects as a trial or pilot. These resulted in a 65% response and the questionnaire was again refined. Questionnaires were then mailed to graduates using direct mailings for those for whom known addresses could be determined. In the case of undetermined addresses, a "please forward" letter was sent with the questionnaire to the last known address of the parents. There were 168 graduates at Saline and 409 at Midland and only thirty pieces of mail were returned for lack of receipt by the addressee. The complete enrollment for the five year period at Saline was used since all students there met the requirements of place of residence according to high school records. At Midland, the rural group was sorted on the basis of high school records and only the rural residence group was included.

Several resources were utilized in the location of addresses of respondents. The writer was assisted in both areas by one or more relatives resident in locations of the study. Contacts were made principally through the use of the telephone, either directly with

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the graduates or with their parents, to determine the present addresses. The purpose of the study was explained in each case and cooperation was achieved in all instances. After about 100 such addresses were so obtained at Midland, it was felt that the please forward mailing to parents would yield sufficient responses for the purposes of the study and this method was then used. At Saline, the phone calls resulted in almost 100% results and the forwarding method was not used.

Each questionnaire was accompanied by a cover letter explaining the purposes of the study (Appendix 1d). After ten days, a follow up request (Appendix 1e) was mailed to both groups to those who failed to respond. This resulted in a substantial increase in responses usable in the study. Instead of using a key system to correlate the responses with the high school rolls, each respondent was asked to include his name on the response. In the total, only one returned form was unusable due to lack of signature. In defense of the failure to key responses to high school rolls, the conclusion was drawn that--especially in the case of female respondents--certain of the items would be more meaningful, complete, and useful when both family and married name were available. This was especially helpful in view of the fact that the writer was familiar with family names and characteristics.

In a two page questionnaire the first page was the same for both male and female. The second page was constructed to reflect male and female differences in several items (Appendix 1b and 1c).

Under the conditions of different types of school records in the respective high schools, it was early evident that it would constitute misrepresentation to group the results from the two schools. Therefore, in the main, the analysis has been made separately and then comparisons drawn. This is defensible under the terms of an exploratory study and it has yielded recognition of the need for more complete studies in areas where each school is representative.

Response to the Questionnaire

As responses began to accumulate, layout sheets were designed to associate high school records with the information received from respondents. When the receipt of responses had reached a diminutive stage, the tabulation was checked to determine any evident bias (Chapter 5). Tables were then completed to prove or reject the stated hypotheses and necessary statistical measurements were calculated.

The largest single group of respondents was the rural farm group at Midland (Appendix 1f). The largest total group was the males at Midland. One hundred males and 86 females at Midland answered the request for in-

formation and 46 males and 44 females at Saline responded.

TABLE 1
RESPONSE TO THE QUESTIONNAIRE
MAILED TO MIDLAND

	Total	Male	Female
Total Universe	409	191	218
Less Dead & Other	2	0	2
Sub Total	407	191	216
Less Unclaimed Mail	25	11	14
Potential Respondents	382	180	202
Responses Received	186	100	86
Non Responses	196	80	116
% Response	48.9	55.5	42.1

TABLE 2
RESPONSE TO THE QUESTIONNAIRE
MAILED TO SALINE

	Total	Male	Female
Total Universe	168	77	91
Less No Known Address	11	4	7
Sub Total	157	73	84
Less Unclaimed Mail	4	3	1
Potential Respondents	153	70	83
Responses Received	90	46	44
Non Responses	63	24	39
% Response	59.0	65.4	53.0

In total, there were 108 male and female farm group responses at Midland; there were 63 rural non-farm and 8 rural community responses. At Saline there were 47 farm, 5 non-farm and 35 rural community respondents. Seven Midland and three Saline respondents reported either

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urban or suburban residence during high school despite school records indicating they had resided in the rural district during that period. This is probably a result of change of address during high school and or changes in district boundaries. The Midland universe had been sorted from high school records on the basis of rural and urban school districts. There were an additional ten responses received after computation was begun.

Chi-square tests of goodness of fit and association were computed in the determination of bias and for proof of the several hypotheses. A set of working hypotheses were constructed at the beginning and these were refined or revised as the data either supported or fell short of the requirements of statistical applications. Of the latter, most were submitted as other findings. In several instances, the number of cases in the sample were too small for conclusive evidence. Data were either grouped together for both samples or analyzed separately as the circumstances applied. In the main, comparisons of the two areas, reflecting the variety of differences, was the objective. Within the samples, comparisons and associations were made according to sex. Where information rendered it possible, the respondent and non-respondent groups were compared also.

CHAPTER 1

A CONCEPT FOR EXTENSION YOUTH WORK

The Cooperative Extension Service, as an instrument of an educational system branching out in many directions, becomes a system of multiple concepts, ordered in definition by the specific fields of interest it serves. There is the single meaningful complex, related to the subject at hand, as held by the individual or group active in a single phase of the extension program (youth work, home economics adult work, adult farmers' work, etc.). There is a multiple context held by the publics who participate in more than one action phase of extension and often a confusion of concepts on part of those employed in the Extension Service. Administrators at the different levels may harbor a single concept of the entire field of operation; yet they must render the operational aspects of extension according to specific areas of concept and employ personnel according to abilities measured within concept areas.

This multiple aspect has disadvantaged both server and served at different times and in different ways. To the extension field worker and to the people he serves, the definition of concept is unimportant in

relation to accomplishing a needed work in the specific field or fields. Yet those whose duty it is to render judgement on extension's means have difficulty in visualizing the overall reducable concept held in effect by the administrators. And the yield of its traditional agriculturally oriented programming, at least from the standpoint of public reference, has been the increase of problems associated with extension's transition into non-agricultural fields of human relationships. This in turn indicates that if there is a relatively singular concept of extension on part of the public, then it is an agricultural concept.

This agricultural concept of extension work has resulted from the direction given the program throughout its existence. It was conceived in agriculture's interest to meet primarily agricultural needs. Under the original definition of its operational area in the enabling act, the obligations go beyond agricultural interests.

It has been the interpretation of the original language of the legislation creating extension coupled with limitations of means and staff that has held it in the agricultural context. An indication of the interpretation of extension goals is given in Kelsey and Hearne's¹ text

¹Lincoln D. Kelsey & Cannon C. Hearne, Cooperative Extension Service, (Ithaca, N.Y.: Comstock Publishing Co., Inc., 1949), p. 35.

printed as recently as 1949. They list five major extension goals, each of which includes the rural connection. Workers at all levels of extension activities have variously searched their conscience for the decision of a concept of duty between almost exclusively agriculture and of branching out into other fields of human problems. There is, however, evidence of a recent trend in policy direction that promotes expansion of extension activities outside of agriculture proper.² Forward thinking leadership has noted both the need and the obligation for extension types of programs in urban and suburban areas.

There is record and evidence that extension, however conceived and however implemented, has rendered a monumental educational service to the people of the rural areas of the nation and the balance of society as well. But under the stimulation of change human relationships, differential opportunity, and social and economic achievement, extension must maneuver its influence in the direction of the trends of the times. Under the traditional programming, the emphasis was upon increasing the appreciation, indeed the love, of

²The Smith-Lever Act clearly states that extension's field of educational responsibility extends to all the people of the United States. Hence, growing demands on extension from non-farm rural residents and urban residents should be met as far as resources will permit". Joint Committee Report on Extension Programs, Policies, and Goals, Washington, D.C., Aug., 1948, U.S. Dept. of Agriculture and Association of Land Grant Colleges and Universities, U.S. Gov't Print. Office, p.61

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

2. Once the problem is identified, the next step is to define the objectives and goals of the project. This helps to clarify what needs to be achieved and provides a clear direction for the team.

3. The third step is to develop a plan or strategy to address the problem. This involves breaking down the problem into smaller, manageable tasks and determining the resources needed to complete them.

4. The fourth step is to implement the plan. This involves putting the strategy into action and monitoring progress to ensure that the project is on track.

5. The final step is to evaluate the results of the project. This involves assessing the outcomes against the objectives and goals to determine the effectiveness of the intervention.

rural life and rural living, the need to improve farm life by solving farm problems. Out of necessity and or desire, the interpretation of the importance of the interrelationships with the balance of society often went untended. The expression of attachment to agriculture was necessary for successful communication with farm people. It was a matter of working with rural folks through a meaningful value system in an effort to accomplish orderly adjustments. The personnel that staffed the various extension departments were recruited out of farm backgrounds, and had for the most part, been students of agricultural colleges. This type of background was considered essential in order to be able to work successfully among farm people.

The concept of extension programs for rural youth that resulted in this study is that the program must be an increasingly outward oriented one. As a successor to the traditionally farm oriented concept, it would retain the character building aspects that have resulted in wholesome, worthwhile, and effective lives for so many of the rural youth who have worn its banners. But the strong emphasis upon the values of rural life and farm occupations that has been the hallmark of 4-H programs for more than a generation are far out of proportion to the opportunities offered rural youth of the present. We actually do a disservice if we are guilty of stimu-

lating an individual to prepare himself for an occupation which then has a shrinking opportunity to absorb his abilities. Yet at the same time we are aware of the need within agriculture and its related fields for properly trained alert individuals to carry on the work of producing food and fibre and the greater need for effective citizenship in whatever field of endeavor the individual eventually finds himself.

It is extension's opportunity--and its obligation to assist in the development of rural youth, not for the sake of agriculture nor for any other singular interest save that of the social welfare of the entire nation. Potential talent exists among these rural youth in like proportion to the urban youth. Yet talent does not assert itself without proper stimulant. The rural youth is often beset by absence of opportunity for the stimulating experiences that lead to the desires for improvement, and the absence of opportunity for expression of talents unless these talents contribute to the family welfare. In other instances, budding talents are frustrated by competitive immediate needs of life. But an even greater need in many rural areas, despite modern communication, is the need for an interpretation of the opportunities that exist in the order outside the rural sphere that may kindle the stimulation of potential aptitudes. This in turn calls for assistance in

the identification of goals once the broader fields of opportunity have been focused, and in the end, a consideration of the social and psychological adjustments that will result from these decisions. The goal that challenges the extension youth worker is one of contributing to the orderly transition of youth to adulthood under circumstances of maximizing the potential contribution of the individual as well as the individual's life satisfactions in the field of his choice.

Personnel wise, this concept suggests that the extension service might recruit and train more youth workers from outside the field of agriculture. This trend in effect has been developing recently on the Michigan staff. There will be a continued need for able workers from the farms and rural areas, but as programs shift into the broader horizons, there will be increasing needs for workers with specific abilities that both interpret and activate the potential of youth, within and without agriculture.

This concept suggests some new methods as well as some redirection of the most successful methods of the past. Already suggested is a dampening of emphasis upon agricultural careers as such and this carries with it the suggestion that more farm and rural youth should be advised of the opportunities that exist in farm related fields. There is sufficient opportunity for absorption

1. The first step in the process of the scientific method is to ask a question. This question should be based on observation and should be specific and measurable. For example, "Does the amount of sunlight affect the growth of a plant?"

2. The second step is to form a hypothesis. A hypothesis is a statement that can be tested. It should be based on the question and should be a prediction of the outcome. For example, "If a plant receives more sunlight, then it will grow taller." This hypothesis is testable because it can be measured and compared.

3. The third step is to design an experiment. The experiment should be designed to test the hypothesis. It should include a control group and an experimental group. The control group is the group that does not receive the treatment being tested. The experimental group is the group that does receive the treatment. In this example, the control group would be plants that receive a normal amount of sunlight, and the experimental group would be plants that receive more sunlight.

4. The fourth step is to collect data. Data is the information that is gathered during the experiment. It should be recorded in a table or graph. In this example, the data would be the height of the plants in the control group and the experimental group.

5. The fifth step is to analyze the data. This step involves looking at the data and seeing if it supports the hypothesis. In this example, if the plants in the experimental group are taller than the plants in the control group, then the data supports the hypothesis.

6. The sixth step is to draw a conclusion. A conclusion is a statement that summarizes the results of the experiment. It should be based on the data and should answer the original question. In this example, the conclusion would be that the amount of sunlight does affect the growth of a plant.

7. The seventh step is to communicate the results. This step involves sharing the results of the experiment with others. This can be done through a presentation, a poster, or a paper. In this example, the results would be shared with other scientists or students.

of many gifted farm and rural youth in expanding farm oriented occupations. And for the less gifted, there is ample opportunity for well directed programs to prepare them for more effective lives.

Philosophically, the project part of 4-H Club work has always been considered a means to an end. That end being the development of the individual enrolling in the project activity. In actual operation, however, this objective has been overlooked at the expense of project achievement. The present concept suggests that even greater emphasis should be placed upon the individual and less emphasis upon projects and project requirements. Objectively, the project should operate as the measure of the individual to conform with given instruction and his ability to assume progressive responsibility while acting within a group of his fellows. There is every indication, however, that there should be a less standardized system of requirements according to areas or conditions. It seems an injustice to expect rural and urban boys for instance, or boys in a highly agricultural area and others in the cut over areas, to have to work within an identical framework of requirements.

It seems feasible that efforts in extension youth work might be directed toward activities that stimulate the choice of occupation for the youth being

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served. Career days have been instituted in many progressive schools throughout the state. It is not beyond the realm of possibility to suggest some type of career day for those youth in extension programs who are nearing the age of decision as to the field of work most desirable under individual characteristics. Visits between youth and the representatives of industry, professions, trades and other fields of endeavor, tours to observe varied occupations, movies, film strips, brochures all depicting occupations and working conditions and the like would contribute to the expansion of outward exposures. Also possible as a project activity for the maturing youth would be occupational study and discussions in which each member would be responsible for a portion of the research and individual contributions. The agent or the club leader should not interfere with the responsibilities of the individual but should rather stimulate the individual to assume the responsibility under a sound system of assistance and guidance.

Exchange programs have proven their worth on many levels and should be expanded. Joint meetings of the more mature youth in extension programs with the maturing members of urban youth groups in which experiences and information could be shared are more realistic and rewarding than they are visionary. At the adult levels, these individuals will find their relationships

and interdependence ever increasing. Shared relationships at the youth level would tend to render ease and order to the adjustments of those rural youth who migrate to urban jobs and residences.

Observations of the outside world are possible for rural youth through a wide variety of tours and study or discussion groups.

There is need for increased cooperation with school teachers and administrators in an effort to identify and then establish procedures to assist both high and low achievers in the rural groups, as well as the non-rural groups now being served. Education, including extension education, needs to develop such methods of prediction that will contribute toward the maximum development of both high and low achievers.

Counseling should encourage a basic general type of high school program in the initial years rather than an immediate indication of curricular preference. Most rural youth, and presumably all other youth, are generally unprepared to make wise choice of curriculum immediately upon entering high school. It is conceivable that a more mature choice could be made after some high school level experience in observing wide fields of occupational opportunity. The final decision on a field of endeavor should be with-held until the maximum consideration of alternatives has been possible.

Extension should, within the means possible, expand its efforts in working with that portion of rural youth which will enter farming, both at the advanced youth and the young adult levels. This is a field of ever increasing competition and demands increasingly alert and capably trained individuals.

New self help and scholarship programs are needed in order to stimulate increasing college entrance when appropriate.

A system of counseling for extension youth groups nearing the age of decision should be considered. Volunteer comments in the questionnaire used in this study resulted in fifty statements of desire for more counseling out of a return of 275 questionnaires.

The whole emphasis in youth work should be toward the consideration of the individual as a potential contributor to the general welfare of the broad social arena and toward assisting the individual toward the area of his potential aptitudes. Actually, the central focus should be placed upon the continual development of aptitudes (both high and low) with the thought that once development has been achieved, there will be greater opportunity for useful labor in many rather than singular fields.

This concept cannot be successful if confined to the youth program alone. It is not entirely by in-

dividual choice of alternatives that occupational choices are made, but through the interactions of family, school, community, the entire environment, that the decision is shaped and formed. In fact, Grant Bogue,³ in a 1954 Master's Thesis suggests that:

Any attempt by educators to structure the paths of rural youth toward urban socialization should be founded upon a realization that the preferences of youth may have little to do with their actual future needs.

This indicates the additional need for parents, school teachers, the whole local social structure to better understand the elements operating to affect the future of rural youth in their choice of occupation and residence.

In brief summary, this concept does not detract from the great works already achieved in almost a half century of extension interest and action in the area of rural youth. The concept rather places the challenge of change upon extension youth work, the change that is dictated by the evolution of agriculture and the increasingly complex interrelationships of the modern culture. It does not presume this is extension's problem alone, nor that extension does or will have at its disposal the means for bringing about the maximum change. It satisfies itself with the presumption that thought has been aroused.

³Grant Bogue, "Development of Occupational and Community Preferences Among Youth of a Rural Community", (Unpublished M.A. Thesis, M.S.C., 1954), p. 89.

1. The first part of the report is a general introduction to the subject of the study. It discusses the importance of the study and the objectives of the research.

2. The second part of the report is a detailed description of the methodology used in the study. It includes information about the sample size, the data collection methods, and the statistical analysis techniques used.

3. The third part of the report is a discussion of the results of the study. It presents the findings of the research and discusses their implications for the field of study.

4. The fourth part of the report is a conclusion and a summary of the findings. It provides a final assessment of the study and its contributions to the field.

5. The fifth part of the report is a list of references. It includes all the sources of information used in the study, such as books, articles, and other documents.

6. The sixth part of the report is an appendix. It contains additional information that is not included in the main body of the report, such as raw data, detailed calculations, and other supporting materials.

CHAPTER II

DETERMINATION OF BIAS

In terms of the classidal design of research, the question of bias introduced through the use of the questionnaire would have greater significance than in the exploratory study. But even at the level of the present study, full recognition of the pitfalls of bias as introduced through the questionnaire must be recognized. Goode and Hatt, in their text on method give the following discussion on the topic:

Emphasis has been placed on the fact that a substantial segment of the population cannot answer a questionnaire is a still further problem. The researcher is not there to add his own pleas to those which are printed or typewritten in the letter of introduction.

Both the "cannot" and the "will not" group bias the sample in a known direction, but to an unknown degree. Since questionnaire studies with a fairly wide population base have reported the percentage answering as from 20 per cent to around 70 percent, it is clear that this type of sampling bias could be fatal to the validity of the study.

The direction of this bias is toward those who are interested in the subject matter, those who are higher in socioeconomic status, and those who have had more education.¹

The objective at this stage of the study is to determine the degree to which the sample is represen-

¹Wm. J. Goode & Paul K. Hatt, Methods in Social Research, (New York: The McGraw Hill Book Company, Inc., 1952), pp. 172-3.

tative of the universe. If there is a relatively insignificant difference in the characteristics of the sample and the theoretic occurrence of them in the universe, then the sample is not representative.

In the search for bias in the sample, the hypothesis that no differences exist (at least no significant differences) between sample and non-respondents or total universe is assumed. If the computations show any significant differences, then these differences must be accounted for and considered in the interpretation of the other hypotheses in the study.

In the determination of bias, the chi-square test for goodness of fit has been used. The theoretical frequency was computed by multiplying the percentage of the universe falling into the various categories by the total number of respondents in the problem. The difference between the observed and theoretical frequencies for each cell was then squared and divided by the theoretical frequency and the sum of these results become the chi-square. The chi-square figure was then plotted on the table of percentiles of chi-square distribution according to the degree of freedom existent in the computed tables.

Table 3 exhibits two tendencies between respondent and nonrespondent groups. The male nonrespondents seemed to cluster about the middle grade category while

the respondent males were distributed slightly more throughout the three grade classifications. The female universe exhibits exactly the opposite trend and the nonrespondent females seem to have a slightly higher composite grade achievement than respondents. The chi-square result (Chapter 5, Tables 1 and 2) falls between the .50 and .70 percentiles and does not reject the bias hypothesis.

TABLE 3
PERCENTAGES OF MIDLAND RESPONDENTS AND
NON-RESPONDENTS FALLING INTO
THREE GRADE CATEGORIES

Grade Points	Males		Females	
	Resp. Percent.	Non-Resp. Percent.	Resp. Percent.	Non-Resp. Percent.
1.0 to 1.5	10.1	6.6	3.4	24.5
1.6 to 2.5	70.7	79.1	70.9	62.8
2.5 and up	19.1	14.3	25.6	32.4
Total cases	99	91	86	132

The records at the Saline High School did not include the composite grade achievements of students. There were some recorded results of intelligence tests, but these were varied and incomplete and as such were not usable in the computations.

The results showed a marked difference in the grades received between males and females. The evidence of female superiority in grade achievement has been

1. The first part of the document is a list of names and addresses of the members of the committee. The names are listed in alphabetical order, and the addresses are listed below each name.

2. The second part of the document is a list of the names and addresses of the members of the committee who have been elected to the office of the chairperson. The names are listed in alphabetical order, and the addresses are listed below each name.

3. The third part of the document is a list of the names and addresses of the members of the committee who have been elected to the office of the secretary. The names are listed in alphabetical order, and the addresses are listed below each name.

4. The fourth part of the document is a list of the names and addresses of the members of the committee who have been elected to the office of the treasurer. The names are listed in alphabetical order, and the addresses are listed below each name.

5. The fifth part of the document is a list of the names and addresses of the members of the committee who have been elected to the office of the clerk. The names are listed in alphabetical order, and the addresses are listed below each name.

6. The sixth part of the document is a list of the names and addresses of the members of the committee who have been elected to the office of the assistant clerk. The names are listed in alphabetical order, and the addresses are listed below each name.

7. The seventh part of the document is a list of the names and addresses of the members of the committee who have been elected to the office of the assistant treasurer. The names are listed in alphabetical order, and the addresses are listed below each name.

8. The eighth part of the document is a list of the names and addresses of the members of the committee who have been elected to the office of the assistant secretary. The names are listed in alphabetical order, and the addresses are listed below each name.

9. The ninth part of the document is a list of the names and addresses of the members of the committee who have been elected to the office of the assistant chairperson. The names are listed in alphabetical order, and the addresses are listed below each name.

found in numerous studies and reports reviewed.

Another factor to challenge the bias hypothesis is the level of participation in extra-curricular activities. However, with an observed difference in the number of activities in the two schools, the two universes were computed separately.

Participation in extra-curricular activities can, under the assumption of voluntary membership, be considered as one measure of aggressiveness among students. It is true that there may be varying degrees of opportunity for students to enter these activities, but the central tendencies that appear when samples of sufficient size are available give evidence of the trend in membership and participation. Thus, under the generalization that each student has a relatively similar opportunity to participate, it is possible to compare the highly participant with the less participant.

Extra curricular activities in this study included athletics, music, band, and special contests such as public speaking. But the bulk of the activities were in the grouping of student clubs and student government. At Saline, there was a high degree of participation in class plays, an activity in which none of the Midland universe had participated.

There seems to be less difference between respondent and nonrespondent here than in the grade a-

chievement. The same tendency for the females to over-achieve the males is evident in the record of participation. Martinson² found the same pattern in his Minnesota study on the personal adjustments in migration. He attributes the females with an ability to adjust more rapidly to the environment of the high school than the males.

TABLE 4
EXTRA-CURRICULAR PARTICIPATION AMONG
STUDENTS IN THE MIDLAND UNIVERSE

Club Membership	Male		Female	
	Resp. Percent.	Non-Resp. Percent.	Resp. Percent.	Non-Resp. Percent.
Belonged to No Clubs	36	34	22	25
Belonged to Some Clubs	64	66	78	74
Total Cases	100	100	86	132

Neither the above percentages nor the chi-square application (Chapter 5, Tables 3 and 4) are significant enough to reject the bias hypothesis. When the total number of clubs each individual participated in was compiled (Chapter 5, Tables 5 and 6) there were still no significant differences between respondent and nonrespondent.

²Floyd M. Martinson, "Personal Adjustment and Rural-Urban Migration", Rural Sociology, (June, 1955), XX, 102.

Information was available to compare respondent and nonrespondent on the basis of student office holding experience. This again is one factor in the complex of aggressiveness resulting either from popularity among fellow students or high motivation on part of the individual or both.

Membership and officeholding experience on the part of youth is also a part of the personality forming complex that assists the process of maturity. Each individual who participates does so for one or more specific reasons, each of which carries with it a status giving attachment. Many of the roles developed in youth activities blossom out in the adult world later and lend themselves to a higher degree of social intercourse. A later section of this report deals with the possibility that youth club activities result in a higher degree of participation in the adult activities.

Analysis of the data has shown that the students at Saline had greater opportunity to play the roles of officers in the school activities. Again the two universes were computed separately.

Both male and female respondents exhibit a tendency to have held office more frequently than nonrespondents. This difference is the greatest that has yet been observed, but the chi-square falls between the .10 and .20 percentile and, therefore, does not reject

the bias hypothesis (Chapter 5, Tables 7 and 8). There was no great significance when the chi-square was computed for the number of offices held by respondents and nonrespondents (Chapter 5, Tables 9 and 10).

TABLE 5
OFFICE HOLDING EXPERIENCE AMONG STUDENTS
IN THE MIDLAND UNIVERSE

Offices Held	Males		Females	
	Resp. Percent.	Nonresp. Percent.	Resp. Percent.	Nonresp. Percent.
Held No Office	79	91	73	84
Held Some Offices	21	9	26	16
Total Cases	100	91	86	132

TABLE 6
EXTRA-CURRICULAR PARTICIPATION AMONG THE
STUDENTS IN THE SALINE UNIVERSE

Club Membership	Males		Females	
	Resp. Percent.	Nonresp. Percent.	Resp. Percent.	Nonresp. Percent.
Belonged to No Clubs	8.6	3.5	4.5	2.1
Belonged to Some Clubs	91.4	96.5	95.5	97.9
Total Cases	46	21	44	47

There is very little difference in participation levels between respondents and nonrespondents in the

Figure 1. The effect of the number of trials on the number of correct responses. The number of correct responses was significantly higher for the 10-trial condition than for the 5-trial condition. Error bars represent the standard error of the mean.

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1. **Identify the main components of the system.** The system consists of a **client** and a **server**. The client is responsible for sending requests to the server and receiving responses. The server is responsible for processing requests and returning responses.

2. **Describe the flow of data.** Data flows from the client to the server and back. The client sends a request to the server, and the server returns a response to the client.

3. **Explain the role of each component.** The client's role is to initiate requests and receive responses. The server's role is to process requests and return responses.

4. **Discuss the system's architecture.** The system is a **client-server architecture**. The client and server are separate entities that communicate over a network.

5. **Identify the system's dependencies.** The system depends on a **network** for communication between the client and server.

6. **Describe the system's security.** The system uses **encryption** to protect data in transit.

7. **Explain the system's scalability.** The system is **scalable** because it can handle a large number of clients.

8. **Discuss the system's performance.** The system has **high performance** because it can process requests quickly.

9. **Identify the system's limitations.** The system has **limited bandwidth** because it relies on a network.

10. **Describe the system's future plans.** The system will be **updated** to support new features.

• **What is the purpose of the study?**

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1. **Introduction**

• **What is the purpose of the study?** The purpose of the study is to determine the effect of the use of a mobile phone on the performance of a simulated driving task.

• **What is the research design?** The research design is a quasi-experimental design, as the researchers did not randomly assign participants to the two groups.

• **What are the independent and dependent variables?** The independent variable is the use of a mobile phone (texting vs. no texting). The dependent variables are the time taken to complete the driving task and the number of errors made.

• **What are the results of the study?** The results of the study show that participants who used a mobile phone took significantly longer to complete the driving task and made significantly more errors than participants who did not use a mobile phone.

• **What are the conclusions of the study?** The conclusion of the study is that the use of a mobile phone while driving significantly impairs performance, leading to longer completion times and more errors.

• **What are the limitations of the study?** The limitations of the study include the use of a simulated driving task, which may not fully represent real-world driving conditions, and the lack of random assignment, which may introduce bias.

• **What are the implications of the study?** The implications of the study are that the use of a mobile phone while driving is a significant risk factor for accidents and should be discouraged.

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Saline universe. The tendency is for the nonrespondents to be slightly more participant than the respondents. The chi-square (Chapter 5, Tables 11 and 12) yields an insignificant difference and therefore fails to reject the bias hypothesis. But there was a tendency for the respondents to exceed the nonrespondents in the direction of maximum number of clubs participated in per individual, reaching a point of significance among males (Chapter 5, Table 13).

TABLE 7
OFFICEHOLDING EXPERIENCE AMONG THE STUDENTS
IN THE SALINE UNIVERSE

| Offices Held | Males | | Females | |
|-------------------|-------------------|----------------------|-------------------|----------------------|
| | Resp.
Percent. | Nonresp.
Percent. | Resp.
Percent. | Nonresp.
Percent. |
| Held No Office | 40 | 50 | 61 | 57 |
| Held Some Offices | 60 | 50 | 39 | 42 |
| Total Cases | 45 | 28 | 44 | 47 |

This same trend was evident among males in the comparison on officeholding experience. But the number of respondent males had more members of their group holding office, while female respondents were less active in office positions than the nonrespondents. In this instance, the chi-square was large enough to reject the bias hypothesis among females (Chapter 5, Tables 15 through 18).

There was no differences great enough to reject the hypothesis that the sample is representative of the universe. There were several minor differences with the greater grade achievements of the females and the greater participation levels by females in the Midland universe, being the most marked difference between sexes. There was a tendency evident in the officeholding experience at Midland with the respondents most active. The members of the Saline universe had opportunity to participate in more extra-curricular activities. The objective was to treat the two universes separately in view of the observed differences in areas and schools. It can now be concluded that, except for minor tendency differences cited, that the sample is representative of the universe.

- **Explain the importance of the following factors in the development of a country's economy:**
 - **Human Resources:** The quality and quantity of the labor force, including education, skills, and health, are crucial for economic growth.
 - **Capital Resources:** The availability of financial resources for investment in infrastructure, technology, and human capital.
 - **Technology:** Technological innovation and adoption drive productivity and economic growth.
 - **Infrastructure:** Efficient transportation, communication, and energy networks are essential for economic activity.
 - **Government Policy:** Sound economic policies, including trade, taxation, and regulation, influence the growth environment.
 - **Geographical Location:** Access to international markets and trade routes can significantly impact a country's economic prospects.
 - **Political Stability:** A stable political environment is necessary for long-term economic development.
 - **Natural Resources:** The presence of valuable natural resources can provide a source of income and raw materials for industry.
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 - **Geographical Location:** Access to international markets and trade routes can significantly impact a country's economic prospects.
 - **Political Stability:** A stable political environment is necessary for long-term economic development.
 - **Natural Resources:** The presence of valuable natural resources can provide a source of income and raw materials for industry.

CHAPTER III

HYPOTHESES AND THEIR PROOF

Throughout the formulation of this study, there has been two general hypotheses from which the several testable hypotheses are derived. This one is that the extension youth program is in need of adjustment toward fulfillment of the needs of current trends and the other is that there is a significant failure of youth to fully develop potential aptitudes or talents. The information collected in the research for this study is not of a nature to challenge directly either of these general hypotheses. But the derived hypotheses are of such nature that they contribute toward their proof. The derived hypotheses in their turn are supported by nonhypothesis findings.

There are nine testable hypotheses, listed as follows:

1. That college entrance (as one indication of talent development) will occur more frequently among students in an area where there are many colleges and universities.
2. That participation levels will be greater among students in the schools where there is a singular agricultural economic base than among students in areas of varied economic enterprise.

3. That participants in youth (out of school) activities will be more participant in high school and adult activities than non-participants.
4. That farm youth are less migrant (toward urban areas) than rural non-farm youth.
5. That the high achievers (as measured by participation and grades) are more migrant than the low achievers.
6. That farm reared youth are not as mobile (occupationally) as the non-farm rural youth.
7. That the more participant will tend to enter more prestigious occupations than the less participant.
8. That 4-H and F.F.A. members will be more likely to reside in the rural areas after high school than nonmembers.
9. That the more aggressive (as measured by participation) will enter college at greater rates than the less aggressive.

The first hypothesis is derived from the general hypothesis that aptitude development is not completed. The test offered in this study, college entrance, is not an exclusive one. Many factors contribute to the complex of talent development, and college entrance itself does not assure the maximum development. The lower achievers often are able to use other means of talent development short of college entrance. But college entrance is utilized here as contributing to the stated hypothesis in the belief that counseling by extension will help stimulate the youth it serves to use this avenue of continued development.

Hypothesis one states that the students in areas

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where there are many colleges and universities are more likely to go to college than students where there are fewer such institutions. It assumes that the fact of exposure to more colleges will stimulate the high school graduate to attend. It further assumes that these exposures will result in a variety of motivations derived from the fact that the community social structure will place additional values upon attendance. These motivations will be less evident in areas where there is a minimum of colleges. There is the added fact that closeness makes certain budgetary easements that allow more youth to attend.

L. E. Barber¹ conducted a study in which respondents listed lack of finances as the predominant single reason for not going to college. However, when he grouped together as motivational the reasons listed as lack of academic interest, lack of serious purpose, and the large number of others designated as preference for (other work, marriage, and freedom from parental control) he found them applying to 56% of the cases as chief reasons. This compared with the 43% for whom lack of finances was assigned as the chief reason. His sample included 69% females; the present study shows that

¹Leroy E. Barber, "Why Some Able Graduated Do Not Go To College", The Education Digest, (April, 1951), XVI, No. 8, 37-39.

1. The first part of the document is a list of the names of the persons who have been appointed to the various offices of the city of New York.

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females are less inclined to enter college than males, a factor that, if it applied, would possibly bias the result.

Percentage wise, the Saline sample exceeded the Midland sample in college attendance--37% to 28%. This includes both male and female respondents. When comparisons based upon sex were made, Saline again exceeded Midland with the greatest (7%) difference being in the male samples. When the chi-square test was applied to the total sample, the result was between the .20 and .30 percentiles approaching the maximum figure (Chapter 5, Table 28). This does not reject the hypothesis. It should also be noted that the Midland sample does not represent the entire student body there since the urban district students are not included in the universe. The results show, therefore, that there is a tendency for the rural students at Saline to attend college at a greater rate than the rural students at Midland, although the difference is less than significant. It will be recalled from the description of the areas that there are more colleges and universities near Saline than there are near Midland.

There were two interesting facts revealed in the Midland sample in regards to college entrance. There were several who entered after having been out of high school for several years and there were several who

entered with a very low record of grade achievement in high school. Undoubtedly the fact of experience in the armed forces plus the earning of enough money to enter college were the important causes of entering at the more advanced age. The incidence of low grade record entrants raises the question of this criteria as an entrance requirement to advanced schooling. Stanley Smith quotes in his study that:

. . . it is not so much what the pupils mental capacity is but rather the degree of initiative and willingness to work that really counts² . . .

. . . regardless of the native mental ability of the graduate, if he or she works diligently and develops good work habits in school, those habits will carry over after graduation³ . . .

Among Midland females who entered college, the average grade of those who graduated was a lower figure than those who had entered college and failed to graduate. It would seem then, that in agreement with Smith, there are other motivational factors that may exceed the singular mental capacity in terms of assuring success in college entrance and graduation.

In the Midland sample, a comparison was made between those who had entered college and those who had

²Stanley S. Smith, "A Thesis Based Upon An Occupational Study Of the Graduates of the Fordson High School, Dearborn, Michigan", (Unpublished M.A. Thesis, Dept. of Education, Michigan State College, 1932), p. 60.

³Ibid, p. 65.

achieved as great or greater high school grades but did not enter college. This comparison relies upon the grade point average as the standard for college entrance. It does not assume this as the exclusive factor nor does it suggest the evident grade point figure as a standard except for the present sample. It defends itself upon the basis that these students operating under mutual school circumstances had similar opportunity to continue their education beyond high school by this singular grade standard. In this regard it becomes a measure of the student's capacity to continue his or her aptitude development.

The 18 females in the Midland sample who went to college had an average high school grade of 2.45 (A equal to 4.0, B equal to 3.0 etc.). There were 25 other females in the same sample who received a similar grade but who failed to go on to college. Among males in the Midland sample, the 34 who entered college received an average all high school grade of 2.4. There were an additional 13 with similar grades who failed to attend college. Two males in the sample receiving less than a composite grade of C have entered college while the two females with the highest grades in the sample did not attend college.

Thus, if we use the high school grade average of those who entered college as the standard, there are

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significant numbers meeting the same standard who do not continue their education. The evidence of lower grade achievers entering college indicates that motivational action is necessary to improve the percentage using this method of continued aptitude development.

It seems important at this point to underscore the fact that the less gifted are in as much need of the maximum development of their aptitudes as are the more gifted. This is suggestive of the continued development of methods of predicting and dealing with those whose tendencies show they are in need of improvement. Charles Woodbury, in a 1950 Boston study aptly states this point as follows:

If, however, the over achievers and the under achievers in these skills and subject matter content areas are considered as one deviant group from the normal achievement, then this proportion to the total group assumes significance and implies that teachers must make every effort to appraise achievement deviating from the expectation, explore the possible causes of such behavior, and take methodological steps to see that underachievement is remedied and over achievement is continued if such educational therapy is not at the expense of the child's total adjustment.⁴

⁴Charles A. Woodbury, Jr., "The Effect of Community Status Upon the Differential Achievement of School Children", (Unpublished Ph.D. Thesis, Boston University, 1950), p. 191.

- The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

- Once the problem is identified, the next step is to define the objectives and goals of the project. This helps to clarify what needs to be achieved and provides a clear direction for the team.

- The third step is to develop a plan or strategy to address the problem. This involves breaking down the problem into smaller, manageable tasks and determining the resources needed to complete each task.

- The fourth step is to implement the plan. This involves putting the strategy into action and monitoring progress regularly to ensure that the project is on track.

- The final step is to evaluate the results of the project. This involves comparing the actual outcomes against the objectives and goals to determine the effectiveness of the project.

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Hypothesis Number Two

The second hypothesis states that participation levels will be greater among students in schools where there is a singular agricultural economic base than among students in areas of varied economic enterprise. This statement is based upon the belief that there will be more social homogeneity as the number of enterprises decreases. There would conceivably be fewer activities or at least the variety of activities would be toward the minimum in the area of singular enterprise. (The assumption of singular enterprise does not assume there are no other enterprises in the area but that the other enterprises are primarily in service of agriculture.) If these assumptions can be made, then it leads to the belief that belonging and not belonging becomes a significant mark of distinction for members of the community or neighborhood.

The challenge in this area of the study is to determine what differences exist between youth in the rural areas where agriculture provides the central focus on the society and economy and youth in rural areas where agriculture plays a less dominant role. In the rural community of Saline, at the time of the sample, primary function of the business and trade was in service to the surrounding farms. Thus, even those who grew up within the community limits, were conscious of the agricultural

REPORT

ON THE PROGRESS OF THE WORK DURING THE YEAR 1900

BY THE SECRETARY OF THE BOARD OF AGRICULTURE

AND THE CHIEF OF BUREAU

OF THE BUREAU OF AGRICULTURE

WASHINGTON, D. C.

1901

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base. The whole area consisted of fertile farmlands.

At Midland, the situation was different. There was a much smaller proportion of fertile farm land and a higher incidence of marginal type farms whose income failed to return enough singly to support the families possessing them. There were no agricultural communities the size of Saline although the sample does include a few in smaller agricultural communities on the fringe of the county. At the time of the drawn sample, the central focus of the county had become smaller industry, principally the Dow Chemical Company in the city of Midland. The Midland High School, however, was the primary high school in the whole county that could serve the boys and girls growing up in the rural areas.

In the study then, the Saline sample represents the tendency toward the singular enterprise community and Midland assumes the position of the diversified enterprise community.

With this knowledge in mind, the general hypothesis is made that differences exist between maturing youth under the different influences in regards to the type and frequency of participation and in the other experiences. These differences will result both from any difference in opportunity and from any difference in social traditions and values in the separate areas. It is less the purpose of this study, however, to show

cause than to point out the situational differences. Under these conditions, one cannot expect to say that the observed differences are representative on broad scales. This chapter is entered into with the belief that existing opportunity rather than personality traits is the basic determinative factor in differences.

The primary factor in this determination of participation is the degree to which students participate in high school extra-curricular activities. As additional factors, the youth (out of school) participation and the participation of these respondents in adult and community activities were investigated along with several different contributing experiences.

An examination was made of the participation by respondents at Midland and Saline in the youth clubs and organizations existant in the respective areas. Clubs that are active in both places include church youth, 4-H clubs, Junior Farm Bureau, Juvenile Grange, and Boy and Girl Scouts. It should be kept in mind that the membership in these clubs is to a considerable extent due to the efforts of adults in the respective areas to maintain such groups and these efforts will vary. This in essence places some of the determination of membership outside the realm of the youth; but since all these clubs exist in both areas, the opportunity does exist for youth to participate in them. In searching the

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degree of participation then, some reflection must be placed upon the social function and value with which the adults in the two areas in the study regard them.

In terms of total male and female respondents at Midland and Saline, 20% of Midland respondents belonged to no out of school clubs and organizations. This compares with 26% of the Saline respondents who similarly failed to participate in the youth clubs in their neighborhoods. This results in a relatively consistent proportion of 74% to 80% participation in the organizations by respondents in both areas.

When the two sexes are compared on participation levels, the males in both areas trail the females in participation with the greatest difference (12%) resting with the Saline sample. No consistent differences were found between the two samples when comparisons of participation were made between farm, rural non-farm, and rural community residing respondents.

The most consistent participation throughout both samples was in church youth activities. In general, both samples had a larger proportion in farm oriented youth clubs (except church) than in scout work with a noticeable increase in the latter in the rural community residence group.

This measurement by use of out of school participation rejects the hypothesis that differences



exist in activity characteristics in the two samples.

Size of the student body alone may be the determinant factor in the degree to which students participate in high school extra-curricular activities, since again, a certain degree of homogeneity exists in the smaller number. In this study the Saline School is located in the agricultural community from which it takes its name. Its students come from a small section of the county. The Midland School has both rural students and urban students and the number of students is much greater than at Saline.

TABLE 8
PERCENTAGE PARTICIPATION BY RESPONDENTS

| Type Participation | Midland | Saline |
|--------------------|---------|--------|
| Youth Clubs | 76% | 73% |
| High School Clubs | 64% | 93% |
| Adult Activities | 52% | 54% |
| Total Cases | 186 | 90 |

The differences in high school participation (30%) were expected in the hypothesis and the assumption has been made that the size and student make up in the respective high schools has been given as a causative factor. Saline students are all classified in the rural category giving the entire student body a relatively constant set of values accruing in the activities in school. The Midland student body also includes ap-

proximately half of its total falling into the urban centered classification. One observed difference in types of activities lies in the high proportion in class plays at Saline and the complete absence of them among Midland respondents. In such activities as athletic teams, the smaller student body at Saline has a higher proportionate opportunity to participate.

A comparison of the officeholding experience in high school activities among respondents reveals the same trend as the participation level at the two schools. A higher proportion of Saline respondents held some type of organizational office than Midland. The same was true of the non-respondents.

An investigation was made to determine the adult participation level among respondents to contribute to the hypothesis. It was recognized that the sample--having graduated from high school five to ten years ago--would probably be less participant than an older group. However, since the samples at the two schools were consistent in terms of years in which to assume membership in adult groups, a comparison could be made.

The anticipated higher degree of adult participation in the smaller community of Saline was rejected by the data. Both male and female respondents at Midland were proportionately more participant in the adult organizations than the Saline respondents. The actual

percentages favored Midland males by 4% and females by 6%, a relatively non-significant difference.

These actual percentages are effected, among other things, by the fact that more Saline graduates went to college and as a result were delayed by that action in becoming established in adult roles.

On the adult level, as on the youth level, activity in church functions was the most consistent incidence of participation among all respondents. One significant finding was that of Parent Teacher's organizations or youth club leadership. This would conceivably indicate the interest in youth work in young adult life as a possible carry over or a result of the values attached to participation in youth clubs. This type of participation ranks next to church participation throughout the respondent sample with the Midland females more proportionately involved than the others.

In a later section on occupational mobility among male respondents, it is revealed that the Saline respondents are more inclined to change jobs in early adult life than the Midland respondents. This difference is given greater significance when it is found that a higher proportion of the Saline graduates entered farm occupations and did not change jobs at all. Among female respondents, there was less difference between the two areas with both samples entering primarily the sec-

tarial type positions.

Residence mobility was also measured. This evidence is presented in a later section and reveals relatively consistant trends among all respondents to stay in the rural areas. The major difference is between male and female respondents with the females showing greater percentage moving from rural to urban places of residence. In all respondent groups there was in excess of 60% staying in the rural areas.

In a later section on spouses origin among respondent marriages, the evidence again shows a majority of marriages occurred between couples having the same residence classification than between rural and urban residents. The percentages were greater, however, in the Saline area.

It was found that proportionately more Saline respondents continued their education.

A complete exploration of differences in areas becomes a very detailed, even elusive effort, enough so that a complete thesis could be arranged around the topic. There are a multitude of factors, each more or less measurable, which might be helpful. These differences, individually and in total, set up variant motivation patterns in the separate areas. Yet, in the school systems, the organizational complexes, government and economic patterns, there is enough similiarity in the

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two areas to more or less minimize the basic differences. The local control systems over these functional groups, however, necessarily lead to enough variation to result in developmental differences.

The studies by Boles and Woodbury explore some of the differences that conceivably could effect the achievement of students of different areas and conditions. Boles sought to prove that size of school attended would not consistently effect the achievement of seniors in a large sample of Florida schools' students. After thorough statistical applications he concluded that:

This study indicates that for the two years studied, there was an association between size of school and the achievements of high school seniors. It does not demonstrate that school size per se caused high or low achievement. The study suggests, however, that there are certain factors associated with school size which do have a causal relationship to achievement. Additional research is needed to identify these factors⁵

With a younger student sample, Woodbury explored the effect of community status upon student achievements. His findings show that:

With but very few exceptions the findings of this study are such as to conclude that community status of children does not have a significant bearing upon the differential achievement in academic skills, and subject matter content at the fourth, sixth, and eighth grade levels.

⁵Ralph Corral Boles, "Some Relationships Between Size of School and Academic Achievement of High School Seniors in Florida", (Unpublished Doctoral Thesis, Univ. of Florida, Gainesville, 1952).

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The only ones showing a tendency for community status to effect differential achievement were elementary science and social studies in two grades, language usage in only one grade.⁶

These results seem to indicate that the factors associated with physical size of plant have a greater effect upon the differential student achievement than do the factors of the socioeconomic complex. They admit, however, that other factors in the motivational and social systems may have greater influence, individually and collectively, upon individuals.

In summary then, many differences in motivation and response exist between the two samples. But in answer to the stated hypothesis, Midland respondents exceeded the Saline respondents in participation only in the out of school youth club activities. The advantage, however, was only 3% and the Saline sample exceeded in adult participation by about 2%. Thus in these two categories, there was no significant difference. The participation in high school activities, suggested as the main factor in the proof of the hypothesis, renders the hypothesis acceptable. In this regard, the Saline sample, representing the tendency toward singular enterprise and smaller school had almost a 30% advantage over the Midland sample.

When the samples were sorted by sex and by place,

⁶Woodbury, op. cit..

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there was a very inconsistent pattern. Saline males exceeded Midland males in youth club participation but the females were reversed. In the high school participation, the Saline sample exceeded the Midland sample in both sexes. In the participation in adult activities, Midland males exceeded Saline males but the females were again reversed. Midland females exceeded Midland males in only one classification and Saline females exceeded Saline males in two classifications.

The only clear result of this test then is the significance of the Saline sample over the Midland sample in high school participation. Two factors are cited as causes of this result; size of student body and singular community enterprise interest. Clarification of these two factors rests with further research.

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Hypothesis Number Three

Rural youth have a varying degree of opportunity to take part in youth activities within any neighborhood. Throughout this study, there were three activities in prominence offering evidence of participation by youth in the rural farm, rural non-farm, and rural community groupings. These included the church, 4-H clubs, and Scouts, with church the most consistent throughout the groupings. 4-H Clubs were more in evidence in farm and rural non-farm groups and a tendency for scout work to be more frequent in the rural communities was observed.

These activities, for the purposes of this study, are considered as out of school activities, although admitting that any or all three types of activity might have direct or indirect connection with schools. For the most part, in this community youth participation designation, student status does not preclude nor determine membership as in the case of high school activities. Basically the ten to twenty years age group are included in these activities and membership represents the first formal participation on the part of the youth.

The interest evolving in this section is the determination of the degree to which this type of participation is associated with later participation in high school and adult group activities. Is there a



tendency for those who participate at this level to be more or less participant in later stages of development? Are non-participants at this level also non-participant in later life?

The hypothesis derived from the question is that participants in youth (out of school) activities will be more participant in high school and adult activities than non-participants. This statement of the hypothesis does not presume youth club membership as the exclusive precursor of participation in later activities but rather emphasizes the obvious fact that there may be a complex of motivational stimulants that result in membership in activities by individuals in any grouping or classification. This opportunity-stimulation complex (presence or absence of clubs plus the presence or absence of stimulation) is ever present to determine individual participation. But this analysis of sequential participation assumes that the stimulation that resulted in the individuals first participation is rekindled and results in a continual and growing stimulus to participate in a variety of activities within the context of the individuals age and interest group. It is further believed that membership itself tends to result in status roles that provide expressive outlets stimulating further development of the individual.

In making the comparison between participation

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in out of school youth activities with participation in high school clubs, it was found that 79% of those who had been members of youth clubs later participated in high school extra-curricular activities. Among those who failed to participate in the youth clubs, 71% became participant in the high school activities (one distinction should be noted in that athletic teams were included in the high school activity group but not in the out of school activities). This difference is much smaller than anticipated in the hypothesis and as such tends to reject the hypothesis.

TABLE 9

THE RELATIONSHIP BETWEEN OUT OF SCHOOL PARTICIPATION
AND HIGH SCHOOL PARTICIPATION IN THE TWO SAMPLES

| | In Both Out of
School and High
School Clubs | Not in Out of School
Clubs but in High
School Clubs |
|-------------|---|---|
| Midland | 106 | 24 |
| Saline | 65 | 18 |
| Total Cases | 216 | 59 |

When the chi-square statistic is applied to these totals, the result falls between the .50 and .70 percentile (Chapter 5, Table 25), again less significant than was anticipated. When the sample was analyzed separately by sex, the male and female segments each had the same relationship between out of school partici-

pation--high school participation as the total sample. However, when a sort between farm and non-farm respondents was analyzed, 81% of the farm youth who were members of out of school clubs participated in high school activities while 66% of those who had no out of school memberships were active in high school clubs. Among non-farm youth, 73% of those who had been active in youth clubs were also active later in high school clubs, but 76% who had not been in youth clubs were later active in high school organizational activities.

The relationship between out of school club participation and participation in adult activities was more pronounced in the sample. In the total respondent group, 65% of those who had been members of the various youth clubs outside school were participant in adult organizations and functions at the time of response, while only 39% of those who had failed to participate in out of school youth activities had become active in the adult universe of organized activity at the time the sample was drawn. The chi-square yields a significant difference with the result falling between the .10 and .05 percentiles (Chapter 5, Table 26).

The Midland sample exhibited a difference of 29% between the respondents having both youth out of school and adult participation and those who had no youth participation but entered adult activities while

the Saline sample had a 25% difference both in favor of the participants in out of school activities at the youth level. Total males had 61% of their number with membership in youth clubs followed by participation in adult activities and 36% who entered adult activities without having had youth club membership. Among female respondents, 68% had membership in both youth clubs and later--adult clubs and organizations--while 37% became active in adult affairs without the experience of youth participation.

TABLE 10

THE RELATIONSHIP BETWEEN OUT OF SCHOOL
YOUTH PARTICIPATION AND PARTICIPATION
IN ADULT ACTIVITIES

| | Youth Participa-
tion and Adult
Participation | No Youth Participa-
tion but Adult
Participation |
|-------------|---|--|
| Midland | 99 | 14 |
| Saline | 42 | 7 |
| Total Cases | 218 | 57 |

Farm and non-farm respondents were compared using the incidence of youth and adult participation association. The farm youth who had participated in youth activities were 11% more active at the adult level than non-farm youth. Those having had no experience in youth activities were separated by 18% difference with the farm group being again more active. The signi-

ficant finding was in the comparative tendency for youth club members and nonmembers to go into adult activities. Among the farm respondents, 69% of those who had been youth members were later active in adult activities, while only 45% of those without youth club experience were active at the adult level. In the non-farm group, 85% had been active in both youth and adult activities while those who had no youth club participation record were only 27% participant at the adult level.

TABLE 11

A COMPARISON OF THE PARTICIPATION LEVELS
OF FARM AND NON-FARM RESPONDENTS
AT MIDLAND AND SALINE

| Origin | Youth Clubs and
Adult Clubs | Not In Youth Clubs But
Active in Adult Work |
|----------------|--------------------------------|--|
| Farm Youth | 69% | 45% |
| Non-farm Youth | 58% | 27% |

The relationship between high school participation and participation at the adult age level was more pronounced than the out of school-high school participation relationship but not so large as the out of school-adult association. Females were more participant than males and farm respondents and more active in both high school and adult levels than non-farm respondents. Only a slight difference occurred between the Midland and Saline samples (Chapter 5, Table 27). (Tables 19 through

27, Chapter 5 show the chi-square values of each of several participation tests.)

Only the relationship between youth and adult participation levels assumed significance in this study. The other two factors tend to reject the stated hypothesis on the basis of insignificant differences; yet the tendency is toward more of those who were members in youth activities to become active later than among those who did not participate in youth activities.

These results suggest then that there is a tendency toward sequential participation in this study but that the only statistically significant tendency is between participants in youth (out of school) activities followed later by adult level participation. More research is needed to determine both the specifics and the significance of these tendencies.

Hypothesis Number Four

That farm youth are less migrant (toward urban areas) than rural non-farm youth.

The exploration to determine what happens to rural youth logically includes the patterns of migration among the samples. It will contribute to the purpose of the study if these patterns in the modern era are consistant with those of the past.

One of the most consistant migration tendencies throughout the growth of this nation has been that of rural people moving into the urban areas. The most characteristic of this movement has been the urbanward migration of rural people during times of economic well being. The reversal of this pattern has been both result of and cause for continuation of some of our most significant depressions.

Lively and Taeuber say of migration that:

The people of the United States are traditionally restless. The resultant redistribution of the population has signal influence upon many of the nations basic programs such as those concerned with land use, education, public health, employment and relief.⁷

A review of the research on migration points up the importance which was attached to it during the depression period of the 1930's. Much of the research

⁷C. E. Lively and Conrad Taeuber, "Rural Migration in the United States", W.P.A. Research Monogram, XIX (1939), 11.

was government sponsored in an attempt to alleviate through whatever means seemed necessary, the conditions resulting from large numbers unemployed and drifting in and out of cities. When employment in the cities went down, migrants moved to the rural areas, only to come back to the cities when employment picked up again. The significant change, from an agricultural viewpoint, rested with the fact that what net migration from farms occurred from 1930 to 1934 was from the major farming areas, while what net migration to rural areas occurred in the same period was toward the cutover or poor land areas.⁸ The economic and social consequence of this movement is still with us after two decades and finds expression in the attempts to curb poverty or to expand opportunity in the so called low income farm areas.

Characteristic of most migrations is the fact that it occurs primarily among the young adult portion of the population. Females, from the rural areas, are consistently more inclined to migrate to urban areas than are the rural males. Speaking on the subjective factors that influence migration, Lively and Taeuber state that:

Some leave because of intolerance . . . migrants don't leave primarily because the level of living where they are is low, but because something else looks better . . . the choice preceding

⁸Ibid., 16.

migration is not always a rational one, frequently it consists of a comparison of poorly defined alternatives and chance . . .⁹

In discussing migration in the United States, Thornthwaite states that:

In America, as elsewhere, migration is a process which is dependent upon the establishment of means of communication between areas having different intensities of population pressures.¹⁰

This emphasizes the fact that current means of transportation and communication may respectively keep migrations involving short distances at a minimum and tend to improve the knowledge of more distant opportunities. But, "Mobility usually is a movement about an area of polarization and involves only short distances".¹¹

Smith¹², considers the importance of communication in his Indianapolis study under the statement that, "Formal media such as the Employment Service and newspaper information played a minor role in job acquisition". Subjects in his study listed contacts with friends and relatives as the most important motivations for job acquisition and migration to Indianapolis.

⁹Ibid., 80.

¹⁰C. Warren Thornthwaite, Internal Migration In the United States, (Philadelphia, Penn., Univ. of Penn. Press, 1934), 1.

¹¹C. E. Lively, "Spatial Mobility of the Rural Population with Respect to Local Areas", American Journal of Sociology, XLIII (July 1937), Introduction.

¹²Eldon D. Smith, "Migration and Adjustment Experiences of Rural Migrant Workers in Indianapolis", (Unpublished PH.D. Thesis, Univ. of Wisconsin, 1953).

One must conclude then that the periods of economic unrest are most productive of migrations, but at the same time, there are current in any era certain motivations that invite migration.

The current hypothesis of low level of migration from rural residence to urban areas is based two-fold upon the ease of transportation from place of residence to place of occupation and the current tendency for living outside urban centers, especially among the rural reared population.

The current study considers migration from the standpoint of place of longest residence during high school. Residence changes within the rural catagories of farm, non-farm and rural communities was not considered as migration out of rural areas. Rather, the movement from any of these residence catagories to the suburbs or cities were regarded as migrations. This is a deviation from the full definition of migration what would include any change of residence from one place to another. The adjusted definition is, however, consistant with the purposes of the study. Also, present residence only, as contrasted to total changes ~~of residence only, as contrasted to total changes~~ of residence by respondents, is used as the measurement of migration. The number of places lived at after high school is later added to the data as contributive.

A comparison of migrations to urban residence between the Midland and Saline respondents reveals only 2% difference. A total of 46 out of 172 Midland respondents migrated while 21 out of 87 Saline respondents moved to the city or suburbs. Both samples were consistent with migration tendencies in that more females, both by number and by proportion, migrated to urban or suburban centers. At Midland, the bulk of present residences centered about the farm and rural non-farm categories while the central tendency at Saline was farm or rural community.

When the chi-square (Chapter 5, Tables 32 and 33) was applied to both male and female respondents when both samples were grouped, the results reject the hypothesis. The results fall between the .10 and .90 percentiles and percentage wise the rural farm respondents were more migrant to urban areas than the non-farm respondents though the differences were small. Thus, when the males and females in both samples were grouped together, the non-farm group was still slightly less migrant than the farm reared respondents (Chapter 5, Table 31). When the results were computed according to sample, the Midland sample showed the greatest tendency toward migration. But the differences are still insignificant (Chapter 5, Tables 34 and 35).

The number of places lived at since high school

shows a somewhat different trend--principally in the Midland sample. The rural group had 67% in the 0 or one move classification while the rural non-farm group had 60% in this minimum moves classification. In the Saline sample, there was only 3% difference in farm and rural non-farm groups, but the change from the Midland sample is striking. Only 40% of the farm reared group and 43% of the rural non-farm reared group were in the minimum moves classification. This is roughly 20% less than the comparative group at Midland. This means that in the present samples, the members of the agricultural area sample were more residentially mobile than the more diversified Midland sample. This appears true for both farm reared and rural non-farm reared classifications.

TABLE 12

THE ASSOCIATION BETWEEN HIGH SCHOOL PERIOD RESIDENCE
AND THE NUMBER OF PLACES LIVED AT SINCE HIGH
SCHOOL AMONG THE MIDLAND RESPONDENTS

| Number of Moves | Longest Residence During
High School | |
|-----------------|---|----------------|
| | Rural Farm | Rural Non-Farm |
| 0 or 1 Move | 41 | 20 |
| 2 or More Moves | 20 | 13 |
| Total Cases | 61 | 33 |



Figure 1. A scatter plot showing the relationship between the number of species (S) and the number of individuals (N). The x-axis is labeled "Number of individuals" and ranges from 0 to 1000. The y-axis is labeled "Number of species" and ranges from 0 to 100. The data points show a positive correlation, with the rate of increase in species number decreasing as the number of individuals increases. A dashed line represents a theoretical model, and a solid line represents the observed data.

TABLE 13

THE ASSOCIATION BETWEEN HIGH SCHOOL PERIOD RESIDENCE
AND THE NUMBER OF PLACES LIVED AT SINCE
HIGH SCHOOL AMONG SALINE RESPONDENTS

| Number of Moves | Longest Residence During
High School | |
|-----------------|---|----------------|
| | Rural Farm | Rural Non-farm |
| 0 or 1 Move | 18 | 15 |
| 2 or More Moves | 29 | 21 |
| Total Cases | 47 | 35 |

C. E. Lively has indicated that:

1. Rural farm population is most native and the urban population is the least native to state of residence.
2. Urban population is drawn from a wider geographical area than rural farm or rural non-farm.
3. Rural non-farm is between rural farm and urban population in regards to nativity.

Lively further states that:

We may regard any local area as possessing a certain polarizing power for its inhabitants. Listed they include local economic opportunity, supposed economic opportunity elsewhere, occupations to be followed, strength of family and group ties, differential rate of population growth.¹³

The data not only rejects the hypothesis, but on a less than significant basis, it reverses the anticipated result. In the two samples studied, the rural non-farm group is less migrant from an area standpoint than the farm reared group.

¹³Lively, op. cit., 89-102.

Hypothesis Number Five

That the high achievers (as measured by participation and grades) are more migrant than the low achievers.

In the movement of rural youth to urban jobs and residence, the question obtains as to the relative ability to achieve. Are the high achievers the most migrant? Is the agricultural society composed of the low achievers?

Many studies have explored the question. Many have cited their evidence as proof that the farmers are the less aggressive. Others are just as emphatic in suggesting that the evidence is not proof. Martinson, in a study of high school graduates in Minnesota, sought to associate certain personality factors with the migration of rural youth. He concludes that:

In general, the results indicate that social aggressiveness was an important factor in the complex of influences in the migration of girls, while academic achievement in high school and urban oriented interests were more important in the complex of factors resulting in the migration of boys,¹⁴

Smith and McMahan, in reviewing the migration studies, hold that:

At the present time it is not well established, but it appears that (1) The rural to urban migration processes select the extremes, the most intelligent and the most stupid, where as the rural areas retain

¹⁴Martinson, op. cit., 102-110.

the means, There may be no net qualitative gain to either rural or urban areas. (2) It has not been established that the rural to urban migrants are more intelligent than non-migrants in spite of the fact that intelligence test scores are usually higher for migrants to urban areas.

They also suggest that:

One must be extremely cautious in projecting or attaching validity to generalizations which imply that the urbanization process selects the most intelligent and leaves the dullards in rural areas.¹⁵

W. P. Mauldin relates that:

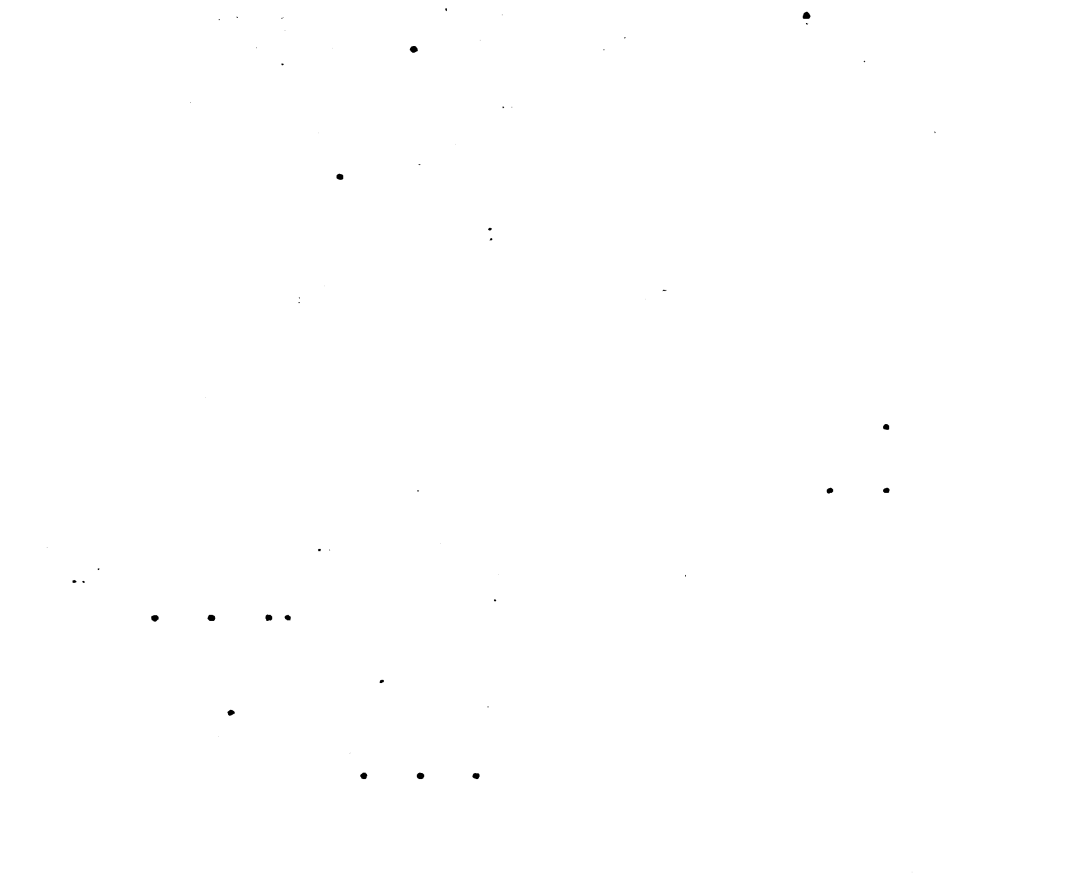
It was found that more than one-half of all those studied migrate and the largest proportion of migrants came from the superior group . . . Superior boys are much more strongly attracted to cities than are any other groups, and they are particularly drawn to metropolitan areas. Below average boys are less likely to seek the cities than are the average boys . . .¹⁶

TABLE 14
THE ASSOCIATION BETWEEN HIGH SCHOOL GRADES
AND MIGRATION OUT OF THE RURAL AREAS
IN THE MIDLAND SAMPLE

| Present Residence | Grade Averages | |
|-------------------|----------------|---------|
| | Males | Females |
| Rural | 2.1 | 2.1 |
| Urban | 2.1 | 2.3 |
| Total Cases | 87 | 82 |

¹⁵T. Lynn Smith and C. A. McMahan, The Sociology of Urban Life, (New York: Dryden Press, 1951), pp. 334-340.

¹⁶W. Parker Mauldin, "Selective Migration From Small Towns", American Sociological Review, V, No. 5, (1940), 748-758.



There are no composite grade records computed for the students in the Saline sample. The grades were obtained for the Midland sample and averages were computed to compare the migrants with non-migrants.

There was virtually no difference in the grade point averages of those who migrated and those who did not. The greatest difference was .2 in favor of migrant girls over non-migrant girls. When the sorts were made between area of residence, there again was no consistent difference between grades of migrants and non-migrants.

Data were collected in the study to associate the high school participation level of respondents and the migration out of the rural areas. There was no significant differences in the participation levels of migrants and non-migrants. The female migrants were slightly superior to non-migrants at Midland while the male migrants at Saline were slightly more participant than non-migrants.

When comparisons were made on the basis of offices held in student organizations, there was no consistent pattern of difference between migrant and non-migrant.

The results of this study are sufficient to reject the stated hypothesis. They are also inconsistent with the findings of Martinson and others.

TABLE 15

THE ASSOCIATION BETWEEN HIGH SCHOOL PARTICIPATION
AND MIGRATION OF RESPONDENTS

| Present Residence | Average Number of Activities
Participated In | | | |
|-------------------|---|---------|--------|---------|
| | Midland | | Saline | |
| | Males | Females | Males | Females |
| Rural | 1.5 | 1.7 | 3.8 | 4.1 |
| Urban | 1.5 | 2.3 | 4.9 | 4.2 |
| Total Cases | 100 | 86 | 46 | 44 |

Hypothesis Number Six

That farm youth are not as mobile (occupationally) as the non-farm rural youth.

This area of the present study seeks to determine the degree to which rural males move about in the labor and professional occupations. Such information will contribute to the knowledge of what happens to rural youth and as such may contribute to the determination of certain extension programs.

There have been many fruitful studies in this general area. Following are quotations from these studies as they contribute to the present compilation:

. . . sons who migrate out of small or moderate size communities are more likely to rise above their parents' occupational status than sons who remain in the home town.¹⁷

A disproportionate number of boys are not only hoping but expecting to enter the professions. Actually the bulk of the high school graduates of the past have entered, manual, clerical, or sales jobs. It is highly probable that many will be disappointed with the jobs that will actually be open to them.

It is not possible to predict with accuracy whether any one individual can succeed in a given job . . . success is often achieved with mediocre ability when there are strong motivations.¹⁸

The school is the most urban influence in the rural community or neighborhood. To an amazing

¹⁷Richard Scudder and C. Arnold Anderson, "Migration and Vertical Occupational Mobility", American Sociological Review, XIX (1954), 329-334.

¹⁸Youth and the World of Work, Bulletin: Social Research Service, East Lansing, Mich., (1949), pp. 20-22.

100

degree it fails to prepare students for life in the rural community, where the majority of them are certain to spend their lives.¹⁹

The findings indicate that the larger a person's community of orientation (the community in which he spent his teens), the more likely he has been upward--mobile. This suggests a continuing pattern of social mobility in which migrants to metropolitan centers from rural areas or small urban communities take over the lower status positions, while native urbanites move up in the occupational structure.

More than three-quarters of them (respondents) have worked in two or more communities; as many as a third have held jobs in five or more areas.

The data clearly points to the role which original community background plays for residents of large cities. Those coming from a rural background are most likely to have been manual workers for most of their careers.²⁰

In examining the reasons given by graduates stating why they changed occupations, advancement is given by 21% while service no longer required is also given by 21%. The remaining graduates listed various reasons such as entering college, financial, and marriage.²¹

In the present study, the Midland farm reared respondents are less job mobile than the rural non-farm males by 13%. This result was obtained when the number of jobs was broken into two categories, those with two or less and those with three or more. The chi-square was applied to a breakdown into one job, two jobs, three jobs and four or more jobs (Chapter 5, Table 39). The result falls between the .20 and .30 percentiles. The

¹⁹Smith and McMahan, op. cit., p. 311.

²⁰Seymore M. Lipset, "Social Mobility and Urbanization", Rural Sociology, XX, (Sept., 1955), 220-228.

²¹Stanley S. Smith, op. cit., p. 49.

result at Midland was considerably different from the Saline results when the same methods were applied. The non-farm males at Saline were less job mobile than the Saline farm males by more than 20%. The number of cases was smaller at Saline. The chi-square result was smaller than in the case of Midland (Chapter 5, Table 40).

TABLE 16

THE RELATIONSHIP BETWEEN HIGH SCHOOL PERIOD
RESIDENCE AND THE OCCUPATIONAL MOBILITY
OF MALES IN THE MIDLAND SAMPLE

| Number of Jobs | Longest Residence During High School | |
|----------------|--------------------------------------|----------------|
| | Rural Farm | Rural Non-farm |
| 1 or 2 Jobs | 41 | 20 |
| 3 or More Jobs | 17 | 15 |
| Total Cases | 58 | 35 |

TABLE 17

THE RELATIONSHIP BETWEEN HIGH SCHOOL PERIOD
RESIDENCE AND THE OCCUPATIONAL MOBILITY
OF MALES IN THE SALINE SAMPLE

| Number of Jobs | Longest Residence During High School | |
|----------------|--------------------------------------|----------------|
| | Rural Farm | Rural Non-farm |
| 1 or 2 Jobs | 11 | 15 |
| 3 or More Jobs | 12 | 5 |
| Total Cases | 23 | 20 |

The two samples were grouped together and the

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result was almost evenly divided with the farm group having a 1% advantage over the non-farm group as to job mobility. The chi-square was of course insignificant (Chapter 5, Table 38).

These results would tend to indicate that there are factors of community and opportunity that are more significant than place of residence in the influences that result in occupational mobility of rural youth. The data tend to reject the hypothesis, but there is an indication that place of residence at the high school age is associated with occupational mobility at Midland.

Hypothesis Number Seven

That the more participant will tend to enter more prestigious occupations than the less participant.

It has been stated that one of the less testable hypotheses of this study is the effort to determine the degree to which rural youth continue the development of talents after high school. It is suggested that the challenge of the present hypothesis will contribute to this generalization. The prior hypothesis on job mobility also contributes indirectly. We are here concerned with establishing the degree of consistency with which achievement and social aggressiveness are associated with entry into prestigious occupations.

For the purposes of this study, occupations were broken down into three categories. These include farming and other owned business, industrial, mechanical or other hourly labor, and technical, business or professional positions. The first and last classifications are included as the more prestigious occupations, since they involve ownership or highly responsible positions.

The Midland sample again is the only one for which the composite high school grade averages are available. Males only are included in this area of the study. The grade averages of 1.0 to 2.2 were included as the lower achievers and the grades of 2.3 to 4.0 were used as higher achievers.

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TABLE 18

RELATIONSHIP BETWEEN HIGH SCHOOL GRADE
ACHIEVEMENT AND THE OCCUPATIONS OF
MIDLAND MALE RESPONDENTS

| Occupations | Low Achievers | High Achievers |
|-------------------------------------|---------------|----------------|
| Farming or Other Owned Business | 7 | 4 |
| Industrial, Mechanical Other Labor | 38 | 17 |
| Technical, Business or Professional | 6 | 8 |
| Total Cases | 51 | 29 |

There were 74% of the lower achievers employed in what has been termed the lower prestige occupations, while 58% of the higher achievers were in this classification. When the chi-square test was applied (Chapter 5, Table 37) the result was insignificant between the .30 and .50 percentiles. This would reject the stated hypothesis despite the differences cited percentage wise.

If the prestige level of the occupation held can be used as one criterion of talent development or lack of it, then two significant factors are derived from this result. First, 58% of those in the high achievers classification are in lower job classifications than their high school performance predicted for them. The second is that of the high percentage of the lower achievers in the lower job classifications. There is reason to believe that many could improve their effect-

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iveness through proper training and counseling. It has previously been suggested that there is room for increased effort toward improving both low and high achievers through identifying and analyzing their aptitudes. It has also been suggested that mentality and particularly scholastic achievement is a rather insufficient measure of abilities. The Education Policy Commission comments that:

A considerable proportion of the potential abilities of gifted individuals is at present lost to society through underdevelopment, underuse, or misuse. Some of this waste is attributable to economic barriers to educational and vocational opportunities. Some is caused by social attitudes that tend to lower both incentives and opportunity for gifted children of families with low socio-economic status. Some loss results from mental illness and emotional maladjustment. And some human talent is wasted because the schools fail to identify, to challenge, to hold, or to educate adequately some of their gifted students.²²

Featherstone also comments relative to the slow learner:

In conclusion, the most important and conclusive thing we know about slow learners is this. Given an opportunity and a kind of guidance and instruction that is well adjusted to his capacities and his rate and pattern of development, the slow learner can and does arrive at maturity as a well adjusted well behaved, self supporting, cooperative and contributing member of the community.²³

²²Education Policies Commission, Education of the Gifted", The Education Digest, XVI, No. 4 (Dec., 1950), 1-3.

²³W. B. Featherston, "What Can We Do About Slow Learners?", The Education Digest, XVI, No. 8, (April, 1951), 17-20.



Results of the comparison of participation levels are similiar to those using the grade achievement. In the Midland sample, males in the lower participation level had 77% of their members in the lower prestige jobs while 45% of the higher participant group were in the same job classification. There was a smaller difference in the Saline sample, 43% of the low participants and 38% of the high participants. The chi-square test, when applied to the grouped participation sample, yields a significant product between the .02 and .05 percentiles (Chapter 5, Table 36). The Midland sample exhibits a greater extreme between the low and high participants.

TABLE 19

THE RELATIONSHIP BETWEEN PARTICIPATION LEVEL
AND OCCUPATIONS ENTERED BY MALE RESPONDENTS

| Occupations | Participation Levels | | | |
|-------------------------------------|----------------------|------|--------|------|
| | Midland | | Saline | |
| | Low | High | Low | High |
| Farming, and Other Owned Business | 7 | 4 | 5 | 4 |
| Industrial, Mechanical, Other Labor | 47 | 9 | 7 | 8 |
| Technical, Business or Professional | 7 | 7 | 4 | 9 |
| Total Cases | 61 | 20 | 16 | 21 |

The data makes the stated hypothesis acceptable and shows tendencies that suggest there is some

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry, no matter how small, should be carefully documented to ensure the integrity of the financial data. This includes recording dates, amounts, and the nature of the transactions.

The second part of the document outlines the procedures for reconciling the accounts. It states that the accounts should be reconciled at the end of each month to identify any discrepancies. This process involves comparing the internal records with the bank statements and ensuring that they match.

The third part of the document describes the methods for analyzing the financial data. It suggests that the data should be analyzed on a regular basis to identify trends and patterns. This can help in making informed decisions about the future of the organization.

The fourth part of the document discusses the importance of transparency and accountability. It states that all financial transactions should be clearly documented and accessible to all relevant parties. This helps in building trust and ensuring that the organization is operating in a transparent manner.

The fifth part of the document outlines the responsibilities of the financial team. It states that the team should be responsible for maintaining accurate records, reconciling the accounts, and analyzing the financial data. They should also be responsible for ensuring that the organization is compliant with all relevant financial regulations.

The following table provides a summary of the financial data for the first quarter of the year. It includes the total revenue, total expenses, and the resulting net income. The data is presented in a clear and concise manner, making it easy to understand.

| Category | Revenue | Expenses | Net Income |
|--------------------|-------------|-------------|------------|
| Sales | 1000 | 0 | 1000 |
| Cost of Goods Sold | 0 | 600 | -600 |
| Operating Expenses | 0 | 400 | -400 |
| Other Income | 50 | 0 | 50 |
| Other Expenses | 0 | 20 | -20 |
| Total | 1050 | 1020 | 30 |

The data shows that the organization has a positive net income of 30 for the first quarter. This is a good result, indicating that the organization is profitable. However, it is important to note that the net income is relatively small, and the organization should continue to work on reducing its expenses to improve its profitability.

The following table provides a summary of the financial data for the second quarter of the year. It includes the total revenue, total expenses, and the resulting net income. The data is presented in a clear and concise manner, making it easy to understand.

| Category | Revenue | Expenses | Net Income |
|--------------------|-------------|-------------|------------|
| Sales | 1200 | 0 | 1200 |
| Cost of Goods Sold | 0 | 700 | -700 |
| Operating Expenses | 0 | 500 | -500 |
| Other Income | 100 | 0 | 100 |
| Other Expenses | 0 | 30 | -30 |
| Total | 1300 | 1230 | 70 |

The data shows that the organization has a positive net income of 70 for the second quarter. This is a good result, indicating that the organization is profitable. However, it is important to note that the net income is still relatively small, and the organization should continue to work on reducing its expenses to improve its profitability.

relationship between the achievement and participation levels and the occupation classification of respondents in this sample. There is more evidence that this is true at Midland than at Saline.

Hypothesis Number Eight

That 4-H and F.F.A. members will be more likely to reside in the rural areas after high school than non-members.

An attempt was made in this study to find out what association there might be between the membership in 4-H clubs or Future Farmers of American work and the staying in farming or residing in the rural areas. Do these activities have an effect upon the decisions of the youth who participate; does membership influence their choice of occupation and residence?

Three tests were made in this reference. One was the investigation of the present residence of former members. This test is the direct reference to the hypothesis. A second test was made to determine the present occupation of former members, and a third test was made to associate college entrance with membership in these organizations. Only the male respondents are used in these tests.

When the samples were computed separately, only the non-member group at Midland showed a definite trend for an association between migration and non-membership in the sample. Both members and non-members were slightly more inclined to move out of the rural areas at Saline than at Midland. When the chi-square test was applied to the samples (Chapter 5, Tables 42 and 43) the results

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were less than significant. These data then tend to reject the hypothesis.

TABLE 20

THE ASSOCIATION BETWEEN MEMBERSHIP IN 4-H AND F.F.A.
AND PRESENT RESIDENCE OF RESPONDENT MALES

| Present Residence | Midland | | Saline | |
|-------------------|---------|-------------|---------|-------------|
| | Members | Non-members | Members | Non-members |
| Rural | 37 | 30 | 16 | 15 |
| Urban | 5 | 13 | 5 | 4 |
| Total Cases | 42 | 43 | 21 | 19 |

The next test applying to the present hypothesis, is that of the occupational trends among members and non-members. This is based upon a sub-hypothesis that members will become engaged in agriculture at greater rates than non-members. There are many factors beyond the fact of membership in these two rural oriented programs that influence the decisions of rural youth. The trends of the times, social, economic, cultural, all influence the selections. Beegle and Thaden have reported these factors that will play an important part in the direction of rural youth:

The number of farms in Michigan decreased by 32,000 (17%) during the decade with only two northern counties showing an actual increase (Alcona and Oscoda). In general, the percentage losses were greatest in the northern sections of the state and in the major metropolitan areas. This loss occurred

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at a more rapid rate during the last half of the decade. Some of the loss is attributable to the change in the census definition of farms.

The availability of urban employment, coupled with economic prosperity, serve to stimulate the migration of farmers in Michigan. High levels of industrial production and high wage rates were sufficient to lure many farmers from their farms. At the same time, economic prosperity permitted the remainder of farmers to buy additional equipment and expand their farming operations.

. . . the farm-operator level of living index increased by 36% between 1940 and 1950. In general, those areas with the lowest indexes in 1940 exhibited the larger increases in level of living during the decade came in those areas which experienced the heaviest rural population losses.²⁴

Beegle and Thaden report in the text that a larger percentage of the farms in all economic areas of the state reported cash wage expenditures at the end than at the beginning of the period. The volume of wage expenditures, however, declined 20%. They report that a 79% increase in number of farms with tractors occurred with an increase of 125% in total number of tractors in the state. They further note that despite an increase in most crop yields, there was only a slight increase in the value of farm products in the decade.

On migration, the authors report that the northern, less industrialized, areas of the state experienced an out-migration both from rural areas and from urban

²⁴J. Allen Beegle and J.F. Thaden, "Population Change in Michigan, With Special Reference to Rural Urban Migration, 1940--1950", (Dept. of Sociology and Anthropology, M.S.C. Ag. Exp. Sta., East Lansing, Mich.), p. 27.

centers. This area includes all the state north of a line running roughly from Saginaw to Muskegon. The rural parts of the remainder of the state gained through net migration.

Because of the small samples, the respondents at Midland and Saline were grouped into one table for the test of association between 4-H and F.F.A. membership and the present occupation. It was also impossible, because of the smallness of the sample, to test the 4-H and F.F.A. membership separately. The sample was, therefore, divided into those who had had no membership in either 4-H or F.F.A. and those who had been members of one or both. The result of the chi-square (Chapter 5, Table 44) is significant at the .01 percentile and as such proves the sub hypothesis that there is an association between membership in these organizations and entrance into farming.

Hugh Bartley found the following characteristics among students who had been in vocational agriculture:

Those who remained in farming came from larger and more productive farms, had fewer brothers and sisters, had more cases of fathers deceased; enjoyed better parental working relationships, belonged to families which had had a greater prosperity on the farm and were more likely to have married a farm girl.²⁵

²⁵Hugh J. Bartley, "A Follow Up Study of Pupils Enrolled in Vocational Agriculture in the High School At Mason"; (Unpublished M.A. Thesis, Dept. of Education, M.S.C., 1942).

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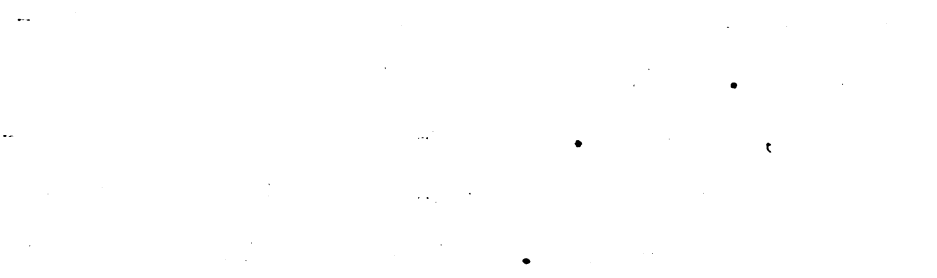
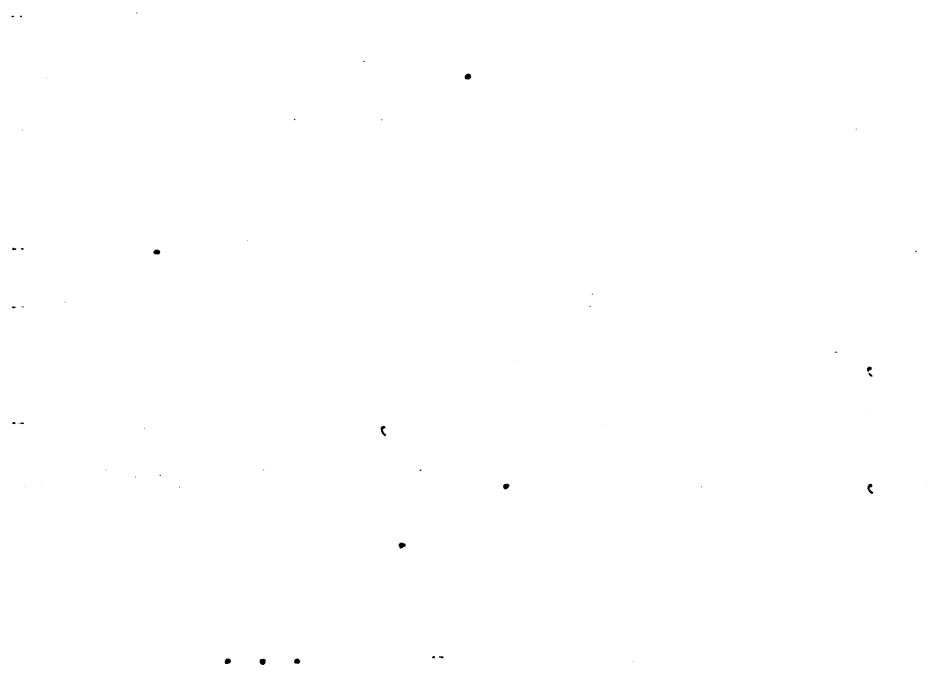
The final test applying to this hypothesis is an effort to associate membership in the two organizations with college entrance. It is suggested that the more or less personalized attention given in these two organizations should result in certain outward exposures and special attention toward college entrance. In reviewing several studies on former vocational agriculture, it was found that roughly 35% of those who had received the highest state award, the State Farmer Degree, had entered college. This group is selective and would compare to high achievers.

TABLE 21

THE ASSOCIATION BETWEEN 4-H AND F.F.A. MEMBERSHIP
AND COLLEGE ENTRANCE OF RESPONDENT MALES

| College
Entrance | Midland | | Saline | |
|--------------------------|-----------------|---------|-----------------|---------|
| | Non-
Members | Members | Non-
members | Members |
| Went to College | 22 | 11 | 14 | 5 |
| Did Not Go to
College | 31 | 35 | 8 | 16 |
| Total Cases | 53 | 46 | 22 | 21 |

The members of the two organizations in this sample were less likely to go to college than the non-members were. This data then rejects the hypothesis (Chapter 5, Table 45). Twenty-four percent of the members went to college while non-members in this sample had 48% going to college. This assumes importance for



extension workers if the same tendency is found on a wider scale.

The data tends to reject the stated hypothesis in this section although there are specific trends in areas of origin. At Midland, there was an observed association between membership and remaining in the rural areas while the Saline respondents were more likely to move away from rural areas. The tests support the sub hypothesis that membership is associated with remaining in agriculture, but reject the sub hypothesis that membership is associated with college entrance.

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Hypothesis Number Nine

That the more aggressive (as measured by participation) will enter college at greater rates than the less aggressive.

An attempt was made in the present study to determine the association between participation levels and college attendance. The participation in all high school extra curricular activities form one test of the hypothesis while the officeholding experience of respondents forms a second test.

TABLE 22

THE ASSOCIATION OF MEMBERSHIP IN EXTRA-CURRICULAR
ACTIVITIES AND COLLEGE ENTRANCE BY
RESPONDENTS

| College | Members | Non-members |
|-----------------------|---------|-------------|
| Entered College | 71 | 15 |
| Did Not Enter College | 138 | 51 |
| Total Cases | 209 | 66 |

In this sample, 34% of the respondents who participated in extracurricular activities went on to college as opposed to 23% of the nonparticipants. The chi-square test result falls between the .30 and .50 percentiles and is less than significant (Chapter 5, Table 46). The evidence does show a slight tendency in favor of the hypothesis, however.

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The test of association between officeholding experience and college entrance among respondents is more pronounced. There was a 46% of those who had held offices entering college as against 24% of those who had not held office. The chi-square result falls above the .30 percentile level (Chapter 5, Table 47).

TABLE 23

THE ASSOCIATION BETWEEN OFFICEHOLDING EXPERIENCE
AND COLLEGE ENTRANCE ON PART OF RESPONDENTS

| College | Held Office | Held No Office |
|-----------------------|-------------|----------------|
| Entered College | 42 | 44 |
| Did Not Enter College | 48 | 141 |
| Total Cases | 90 | 185 |

The results of these tests show that there is a significant tendency for the high participants to enter college in greater proportion than do the non-participant. This would reject the hypothesis. There is, however, a significant tendency for the officeholders to be more likely to enter college than those who held no offices in high school. Using these two factors as evidence of aggression, there is no consistent trend toward college entrance on part of respondents in this sample.

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CHAPTER IV

OTHER FINDINGS AND CONCLUSIONS

Findings

Any fruitful research results in findings that may indicate needs for further research. Some of these findings may be anticipated while others may become evident as the study proceeds. Some come from original hypotheses that are rendered unusable for lack of or incomplete evidence in the process of data gathering.

The present study has its fair share of these findings. They are presented as useful areas needing further thought, refinement, and proof.

Farm Youth Entering Farm Or
Farm Related Occupations

Early in the study, a generalized hypothesis was made that farm youth would enter farm or farm related occupations. This hypothesis was useful in construction of the instrument, but as stated it fell short of the requirements of a provable hypothesis in the scientific sense. When the data were computed, the small number of respondents entering such occupations



suggested that there was insufficient numbers to draw conclusions of validity. The anticipated difference in percentages returning to farm related fields from the two areas of the study show up even in the small numbers and only suggest further study.

At Saline, the typical agricultural area, 34% were engaged in farming or farm oriented occupations. Of a total of 23 farm respondents, 7 or 30% were working on farms or owning farms (part time farmers were included as farm oriented job holders). At Midland, an area of lesser farming opportunity, only 14% were engaged in farming, part time farming, or other farm related work. Only five, out of a respondent group of 60 farm reared men had become farmers. In both places, a far greater percentage indicated that they were living on farms without listing farm occupations.

There were no instances in this study in which farm boys had pursued the occupations of agricultural teachers, researchers, or extension workers. It had been anticipated that there would be some out of the respondent group of 83 farm boys who would follow these professions. Less than five had attended college short courses in agriculture. One can only conclude that the motivation of local occupations was greater than the motivation to seek employment in agricultural professions in the group studied.

Which Son Enters Farming?

There was a desire throughout the study to locate any trends or tendencies that would indicate which son enters farming as an occupation. Again, the number of respondents who did become farmers was too small to form conclusions. It is interesting though that out of the total of sixteen who have become farmers, thirteen were either only sons or were the youngest son in the family. This leaves only three out of sixteen in the classification of middle or oldest sons as farm operators.

Eldon Smith¹ in his Indianapolis study found evidence that "younger members of the farm family are more likely to continue in farming; the older members are more likely to move into urban employment".

With the opportunity for farm ownership decreasing, this might be a fruitful area of study. We are far removed from the age in which there was enough land for as many farm sons as chose to do so could either obtain a farm for themselves or share the farm operation with parents or other relatives. There are specific personality and psychological factors that could be measured in regards to the effect of numerical position upon the choice of career in agriculture.

¹Eldon D. Smith, op. cit., p. 57.

Occupations of Rural Reared Females

With the interest extension has in both rural girls and rural women, an effort was made to determine what types of occupations the rural girls would enter. The untestable hypothesis that rural females enter temporary occupations rather than professional occupations was formed early in the study.

There were 76 Midland and 39 Saline female respondents who had either worked for a short time after completing high school or were employed at the time of the study. Sixty-four Midland and 30 Saline respondents had been employed in the temporary occupation classification. As was anticipated, the great majority of these were secretarial positions with a very small number in industrial or other labor classifications.

The information in regards to female occupations was sought in the belief that it would contribute to the direction of some 4-H and Home Economics programs in the rural areas. It would also be helpful in future research to determine the length of time that the rural female remains employed. One of the persistent problems in Home Economics Extension work is the inability to reach the young housewife with the programs that are available. An indication of the job classification, length of time employed, and number employed out of the rural female group would contribute to the understanding

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of the problem.

It has been earlier stated that it might be worthwhile to promote more professional occupations among the females. The contribution of the housewife and mother to the nature of each generation is of great magnitude. The current culture accepts the employment of females as a matter of course. Why then is it not advisable to encourage further development of the aptitudes of females, both for the contribution they could make to society in general and in the improvement of their indirect contribution through preparation of children for adulthood. This contribution is possible without undue strain upon the homemaker-motherhood role if a new concept of time on the job and wage adjustments for women can be thought out.

Whom Do Rural Youth Marry?

There was formulated a working hypothesis that marriage occurs more frequently between rural reared individuals than between one rural reared and one urban reared individual. This hypothesis would yield information relative to the need for assistance in adjustment problems in the household if the frequency of opposite background were significant. Girls programs might benefit if consistent predictability were observed (as well as adult home economics programs).

Out of 79 cases of marriage involving rural reared males at Midland, 32 or 40% married urban reared girls. In 77 marriages involving rural reared girls in the Midland sample, 26 or 33% married urban reared males. The proportion of females migrating to urban centers of residence, however, was greater than among males at Midland. The percentages of marriages involving urban reared spouses dropped sharply at Saline. Twenty-four percent of the males and 17% of the females found their help meet in the urban areas. Since more females than males migrated to the urban centers at Saline as well as at Midland and since rural males married rural girls more frequently than urban ones, it seems to indicate that more than half of the rural homemakers were reared in the nonurban centers. It was found that a greater percentage of respondents at Midland have married than at Saline.

The trend for females to be more migrant than males in this study follows the pattern cited by C.A. McMahan. He reviewed a number of migration studies and concluded that;

These studies generally support earlier findings with regard to net migration. . . (1) Migrants are predominantly young people; (2) Female migrants tend to outnumber male migrants in the movement to urban areas.²

²C. A. McMahan, Bulletin Reviews, Rural Sociology, XX, (March, 1955), 78.

More research would be helpful to determine if these are significant trends, in that it becomes significant programwise to understand the variation in background of the homemakers who enter the extension home economics activities.

Does High School Curricula Predict Occupation?

Earlier studies prompted an investigation of the degree to which students became employed in fields related to their high school choice of curricula. It also raises the question of the importance of indicating a curricular preference at the high school level.

The Saline school records did not include curricular indications which left only the Midland respondents as source material. In a total of 74 male respondents who had entered four major curricular fields, 52 entered fields of employment related to that curricula while 22 had entered nonrelated fields. There were 61 females who were employed in related fields as against 12 in the nonrelated fields. The majority of the girls had entered the commercial or the college preparatory curricula, with slightly more than 50% of the college preparatory group actually enrolling in college. Fifty-three percent of the boys who had enrolled in agriculture in high school were employed outside of agriculture while 70% of the rural males who enrolled in college preparatory courses later enrolled in college.

Stanley S. Smith³ found that personal interest and love of the work was the most frequently cited influence as aiding the choice of occupation. Respondents in his Dearborn study listed necessity next most often, then followed influence of parents and teachers and desire for an education. Personal ability, promotion and former training were last on the list of influences. These indicate the variety of motivations, in addition to high school curricula, that help formulate the decision on occupations.

Group Participation by Rural Reared Youth

Two items on the questionnaire dealt with the participation of the respondents in out of school youth activities and their adult participation after high school. The rate of participation has been recorded in earlier chapters of this study. But there is further interest here in the types of activities that rural youth participate in both as children and as adults,

In the Midland sample, 43% of the male respondents and 46% of the female respondents had been members of 4-H Clubs was greater among the farm boys and girls than among rural non-farm and rural community youth. Participation in scout activities was greater on part of the rural community youth than either farm or rural

³Stanley S. Smith, op. cit., 43.

non-farm boys and girls. The trends at Saline were approximately the same as at Midland and in both places, the most consistent membership pattern throughout was the participation in church youth activities. Slightly more than 50% of the Saline sample and slightly less than 50% of the total Midland sample had participated in the various church youth clubs in their areas.

The adult participation shows similar trends in membership in church activities. In only one classification (Midland rural non-farm females who were more active in P.E.A. and youth club leadership) was there any activity that drew more members than church sponsored activities. However, it was found that the percentage participating as adults was much lower than the percentage who had participated as rural youth. This does not mean that they were less diligent in church attendance as adults since the question referred to memberships in church clubs, church government, or church recreation rather than just church membership.

Less than one-fourth of the males in the Midland sample of farm males had become members of adult farmer organizations while almost half of the Saline male farm respondents became members. Including the total samples at each place, one in eight at Midland and one in four at Saline had become active in the adult farmer organizations.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and the role of the accounting department in ensuring the integrity of the financial statements. It emphasizes the need for transparency and accountability in all financial dealings.

2. The second part of the document outlines the various methods used to collect and analyze data, including surveys, interviews, and focus groups. It highlights the importance of using a mix of qualitative and quantitative techniques to gain a comprehensive understanding of the research topic.

3. The third part of the document describes the results of the research, including the findings from the surveys and interviews. It discusses the implications of these findings for the organization and provides recommendations for future research and action.

4. The fourth part of the document concludes the report and summarizes the key findings and recommendations. It emphasizes the importance of ongoing monitoring and evaluation to ensure that the organization remains effective and efficient.

5. The fifth part of the document provides a detailed analysis of the data collected from the surveys and interviews. It includes a breakdown of the data by demographic group and a comparison of the results to previous studies.

6. The sixth part of the document discusses the limitations of the study and the potential for bias. It acknowledges the challenges of conducting research in this area and provides suggestions for how to minimize these challenges.

7. The seventh part of the document provides a detailed analysis of the data collected from the surveys and interviews. It includes a breakdown of the data by demographic group and a comparison of the results to previous studies.

8. The eighth part of the document discusses the limitations of the study and the potential for bias. It acknowledges the challenges of conducting research in this area and provides suggestions for how to minimize these challenges.

9. The ninth part of the document provides a detailed analysis of the data collected from the surveys and interviews. It includes a breakdown of the data by demographic group and a comparison of the results to previous studies.

10. The tenth part of the document discusses the limitations of the study and the potential for bias. It acknowledges the challenges of conducting research in this area and provides suggestions for how to minimize these challenges.

Females in both samples were more active than males in the Parent Teacher and youth club leadership roles. The highest rate of participation in these activities was among the females at Midland and when they were sorted according to area, the rural non-farm residence group was clearly the most participant. Fifty percent of these women had become active in these affairs connected with the rearing and training of youth; this is a significant finding if applicable in broader areas in which extension serves.

In both the Saline and the Midland sample, there were significant numbers not active in adult activities in their communities. This is partially explainable in the fact that they comprise the youngest adult group and as such have not all assumed the adult participation roles. Approximately one-third of the respondents were not active in adult organizations.

Respondents were asked to answer the question "What help would you have liked to have received, but did not, in preparing yourself for an occupation?". No clues were indicated as to the type of answer desired; in a sense, the respondent was on his own to comment as he saw fit. It seems highly significant, therefore, that more than fifty of the 276 respondents made mention of the desire for more and better counseling at the high school level. In essence they are saying that, "We need

the help of interested, conscientious people in the selection of and training for an occupation". As voluntary expressions, they seem to indicate the respondents are aware of the opportunities they might have had under different circumstances of training and preparation.

It is further significant that the females in the study were more inclined than males to mention the need for specific courses or training as opposed to the males listing the generalized need for counsel. Females in many cases indicated a need for more budgeting, child care, meal planning and other household sciences.

These are the major non-hypothesis findings in this study. It was also found that there was very little admission of any dissatisfaction with job and community have been orderly for the most part. There is some indication that for some individuals, the experience and training in the armed forces was helpful in obtaining civilian jobs. Among those who entered college, there was a very wide variation in the high school scholastic achievement, resulting in the assumption that motivation at a given moment of decision and diligence in pursuit of goals may be more important factors in college entrance and success than grades received in high school.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and the role of the accounting department in ensuring the integrity of the financial statements.

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5. The third part of the document discusses the importance of having a clear understanding of the company's financial position and the role of the accounting department in ensuring that the financial statements are accurate and reliable.

6. It also highlights the need for regular audits and the importance of having a clear understanding of the company's financial position at all times.

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10. It also highlights the need for regular audits and the importance of having a clear understanding of the company's financial position at all times.

Conclusions

This study has explored the differential achievement and dispersion of two samples of Michigan rural youth. It has sought to answer the question, "What happens to rural youth?". Its goal has been to contribute to the knowledge and understanding of the direction our rural youth follow in an age and area of rapid industrial expansion and agricultural evolution, in order that the Extension Service, in considering such trends as might be evident in this and other research, can better establish and maintain useful and meaningful programs for the youth it serves.

It has been increasingly obvious that farm oriented occupations, especially farming itself, offers a decreasing number of jobs for rural reared youth. The result is that rural youth in young adulthood must move away from their native areas (in substantial numbers) and enter strange occupations. In so doing, certain adjustments are called for and there is some loss of potential talent among those who are so dispersed. This report concludes that the Extension Service, in order to render the maximum contribution to maturing rural youth, must blend into its agriculturally traditional programs a substantial outward-looking concept that embraces the need for maximum opportunity for the development of aptitudes



for useful service outside of agriculture as well as within. Extension has an obligation and challenge to assist the orderly selection and training of rural youth for non-farm pursuits, as well as maintaining stimulating programs for those who make the choice to stay in agriculture.

There is some evidence in this study, and substantial evidence in other studies, that much of the potential talent exhibited by youth does not reach maturity in adulthood. This results both from failure to identify the potential and lack of opportunity for development in the home, school, and community of origin. It is the conclusion of this study that maximization of counseling and opportunity to explore occupational opportunities will contribute to improvement of these circumstances and that the Extension Service should become a participating agent in this effort with the youth it serves. Extension can become one of the prime agents in a motivational complex leading to the necessary migration out of agriculture.

Many of the findings in this study are in substantial agreement with previous research. Among them are: (1) females are higher academic achievers than males, (2) females are more socially participant than males, (3) females are more migrant than males, (4) high achievers --by high school grades--and high participants were classified in more prestigious occupations than

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than low achievers and low participants, (5) that a higher percentage of 4-H and F.F.A. members than non-members were occupied in farm and farm related occupations.

Results obtained in this study suggest that there is only a small percentage of rural reared youth making the extreme shift from rural to urban residence in industrial Michigan. Rather, in keeping with current trends, the evidence shows a higher percentage of farm to rural non-farm or rural community moves by respondents in the two samples. This would suggest less extreme and more orderly adjustments than would be presented in the traditional farm to urban migrations.

There is little evidence in this study to indicate any substantial differences in the dispersion of youth reared in agricultural areas as opposed to those reared in rural areas of less agricultural stature. From this evidence we may conclude that, for the types of area represented by the samples, only a minimum of variations in approaching extension rural youth programs will be necessary. As an observation it is, however, suggested that programs in such areas will necessarily vary from those in the less industrialized areas of the state and of course, in the urban areas. There is, however, in this study, evidence leading to the conclusion that rural youth enrolling in urban high schools are proportionately less participant than rural youth enter-

ing rural oriented high schools. This would suggest that these rural youth in urban high schools are faced with a sequence of felt, supposed, or real barriers that retard or frustrate orderly transition.

We may conclude upon evidence cited in this and other research, that youth are in the main attracted to the opportunities existant in the area of origin and rearing. Except in instances surrounding dire need, the major proportion of young people pass up the less familiar opportunities away from home despite promise of greater opportunity and reward. For this reason (and lack of understanding and stimulation) many rural young men are satisfied with the rewards of their first or early employment and fail to extend their aptitudes and talents to maturity. It is in exposing these rural youth to an increasing number of out-of-agriculture opportunities that extension can continue to contribute to their transition and adjustment.

CHAPTER V

STATISTICAL TABLES--CHI-SQUARE TESTS

The procedure for computation of the chi-square in this study is as follows:

1. The observed frequency and the total universe were placed in adjacent columns.
2. Percentages of the universe falling into each category were computed.
3. The percentages were multiplied by the total number of observed frequencies to obtain the theoretical frequencies in each category.
4. The difference between observed and theoretical frequencies was computed.
5. The difference in observed and theoretical frequencies was squared for each category in the column.
6. The square of this difference was divided by the theoretical frequency for each category.
7. The products of the above division were totaled to get the chi-square figure which was then related to the percentiles of the chi-square distribution, according to the degrees of freedom in the problem, to obtain the relative significance.

The following symbols were used in these computations:

f_o ---the observed frequency
 u ---the universe
 f_t ---the theoretical frequency
 df ---the degrees of freedom
 χ^2 ---the chi-square figure
 p ---the percentile of chi-square distribution to which the result corresponds

1. The first part of the document is a list of the names of the persons who were present at the meeting.

2. The second part of the document is a list of the names of the persons who were present at the meeting.

3. The third part of the document is a list of the names of the persons who were present at the meeting.

The first 18 tables in this chi-square series are tests of bias between the observed sample and the total universe. The remainder of the tables are association tests between the observed frequencies in challenge of the various hypotheses. The figure P refers to the percentile of the chi-square distribution.

| | fo | u | % | ft | fo-ft | (fo-fe) ² | $\frac{(fo-fe)^2}{ft}$ |
|----------------|----|-----|---------|--------|-------|----------------------|------------------------|
| <u>Table 1</u> | 10 | 16 | 8.42 | 8.34 | 1.58 | 2.49 | 0.299 |
| | 70 | 142 | 74.74 | 73.99 | -3.99 | 15.92 | 0.215 |
| | 19 | 32 | 16.84 | 16.67 | 2.16 | 4.67 | 0.280 |
| Totals | 99 | 190 | 100 | 99 | | χ^2 --- | 0.794 |
| | | | d.f.--2 | p--.70 | p .50 | | |

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|----------------|----|-----|---------|--------|--------|-------------|-------|
| <u>Table 2</u> | 3 | 9 | 4.12 | 3.55 | -0.550 | 0.30 | 0.685 |
| | 61 | 144 | 66.05 | 56.80 | 4.19 | 17.58 | 0.309 |
| | 22 | 65 | 29.81 | 25.64 | -3.64 | 13.27 | 0.519 |
| Totals | 86 | 218 | 100 | 86 | | χ^2 -- | 0.912 |
| | | | d.f.--2 | p--.70 | p .50 | | |

| | | | | | | | |
|----------------|-----|-----|---------|--------|-------|-------------|-------|
| <u>Table 3</u> | 36 | 67 | 35.07 | 35.07 | 0.92 | 0.85 | 0.024 |
| | 64 | 124 | 64.92 | 64.92 | -0.92 | 0.85 | 0.013 |
| Totals | 100 | 191 | 100 | 100 | | χ^2 -- | 0.037 |
| | | | d.f.--1 | p--.90 | p .80 | | |

| | | | | | | | |
|----------------|----|-----|---------|--------|-------|-------------|-------|
| <u>Table 4</u> | 19 | 53 | 24.31 | 20.90 | -1.90 | 3.63 | 0.173 |
| | 67 | 165 | 75.68 | 65.09 | 1.907 | 3.63 | 0.055 |
| Totals | 86 | 218 | 100 | 86 | | χ^2 -- | 0.229 |
| | | | d.f.--1 | p--.70 | p .50 | | |

| | fo | u | % | ft | fo-ft | (fo-fe) ² | $\frac{(fo-fe)^2}{ft}$ |
|-----------------|-----|-----|---------|--------|-------|----------------------|------------------------|
| <u>Table 5</u> | 36 | 67 | 35.07 | 35.07 | 0.92 | 0.85 | 0.024 |
| | 40 | 73 | 38.21 | 38.21 | 1.78 | 3.17 | 0.083 |
| | 17 | 35 | 18.32 | 18.32 | -1.32 | 1.75 | 0.095 |
| | 7 | 16 | 8.37 | 8.37 | -1.37 | 1.89 | 0.226 |
| Totals | 100 | 191 | 99.98 | 99.98 | | | x^2 --0.428 |
| | | | d.f.--3 | p--.95 | p .90 | | |
| <u>Table 6</u> | 19 | 53 | 24.31 | 20.90 | -1.90 | 3.64 | 0.174 |
| | 39 | 88 | 40.36 | 24.71 | 4.28 | 18.36 | 0.529 |
| | 21 | 55 | 25.23 | 21.69 | -0.69 | 0.48 | 0.022 |
| | 7 | 22 | 10.09 | 8.67 | -1.67 | 2.81 | 0.324 |
| Totals | 86 | 218 | 100 | 86 | | | x^2 --1.050 |
| | | | d.f.--1 | p--.80 | p .70 | | |
| <u>Table 7</u> | 79 | 162 | 84.81 | 84.81 | -5.81 | 33.82 | 0.398 |
| | 21 | 29 | 15.18 | 15.18 | 5.81 | 33.82 | 2.227 |
| Totals | 100 | 191 | 100 | 100 | | | x^2 --2.626 |
| | | | d.f.--1 | p--.20 | p .10 | | |
| <u>Table 8</u> | 63 | 174 | 79.81 | 68.64 | -5.64 | 31.83 | 0.463 |
| | 23 | 44 | 20.18 | 17.35 | 5.64 | 31.83 | 1.833 |
| Totals | 86 | 218 | 100 | 86 | | | x^2 --2.297 |
| <u>Table 9</u> | 79 | 162 | 84.81 | 84.81 | -5.81 | 33.82 | 0.398 |
| | 8 | 13 | 6.80 | 6.80 | 1.19 | 1.42 | 0.209 |
| | 13 | 16 | 8.37 | 8.37 | 4.62 | 21.37 | 2.55 |
| Totals | 100 | 191 | 100 | 100 | | | x^2 --3.159 |
| | | | d.f.--2 | p--.30 | p .10 | | |
| <u>Table 10</u> | 63 | 174 | 79.81 | 68.64 | -5.64 | 31.83 | 0.463 |
| | 13 | 24 | 11.01 | 9.46 | 3.53 | 12.46 | 1.316 |
| | 10 | 20 | 9.17 | 7.89 | 2.11 | 4.45 | 0.564 |
| Totals | 86 | 218 | 100 | 86 | | | x^2 --2.344 |
| | | | d.f.--2 | p--.50 | p .30 | | |

| | fo | u | % | ft | fo-ft | (fo-fe) ² | $\frac{(fo-fe)^2}{ft}$ |
|-----------------|----|----|-------|-------|--------|----------------------|------------------------|
| <u>Table 11</u> | 4 | 5 | 6.84 | 3.08 | 0.918 | 0.84 | 0.273 |
| | 41 | 68 | 93.15 | 41.91 | -0.918 | 0.84 | 0.020 |

Totals 45 73 100 45
d.f.--1 p--.70 p .50 $x^2--0.293$

| | | | | | | | |
|-----------------|----|----|-------|-------|-------|------|-------|
| <u>Table 12</u> | 2 | 3 | 3.29 | 1.45 | 0.54 | 0.30 | 0.207 |
| | 42 | 88 | 96.70 | 42.54 | -0.54 | 0.30 | 0.007 |

Totals 44 91 100 46
d.f.--1 p--.70 p .50 $x^2--0.214$

| | | | | | | | |
|-----------------|----|----|-------|-------|-------|------|-------|
| <u>Table 13</u> | 4 | 5 | 6.84 | 3.08 | 0.91 | 0.84 | 0.273 |
| | 8 | 15 | 20.54 | 9.24 | -1.24 | 1.56 | 0.168 |
| | 23 | 36 | 49.31 | 22.19 | 0.80 | 0.65 | 0.029 |
| | 10 | 17 | 23.28 | 10.48 | -0.48 | 0.23 | 0.022 |

Totals 45 73 100 45
d.f.--3 p--.95 p .90 $x^2--0.493$

| | | | | | | | |
|-----------------|----|----|-------|-------|-------|-------|-------|
| <u>Table 14</u> | 2 | 3 | 3.29 | 1.45 | 0.55 | 0.30 | 0.208 |
| | 1 | 10 | 10.98 | 4.83 | -3.83 | 14.70 | 3.041 |
| | 31 | 58 | 63.73 | 28.04 | 2.95 | 8.73 | 0.311 |
| | 10 | 29 | 21.97 | 9.67 | 0.32 | 0.10 | 0.011 |

Totals 44 91 100 44
d.f.--3 p--.50 p .30 $x^2--3.572$

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|-----------------|----|----|-------|-------|-------|------|-------|
| <u>Table 15</u> | 18 | 32 | 43.83 | 19.72 | -1.72 | 2.97 | 0.151 |
| | 27 | 41 | 56.16 | 25.27 | 1.72 | 2.97 | 0.117 |

Totals 45 73 100 45
d.f.--1 p--.70 p .50 $x^2--0.268$

| | | | | | | | |
|-----------------|----|----|-------|-------|-------|------|-------|
| <u>Table 16</u> | 27 | 54 | 59.34 | 26.10 | 0.89 | 0.79 | 0.030 |
| | 17 | 37 | 40.66 | 17.89 | -0.89 | 0.79 | 0.044 |

Totals 44 91 100 44
d.f.--1 p--.80 p .70 $x^2--0.074$

Figure 1 consists of two rows of five scatter plots each. The top row shows the relationship between the number of children (1, 2, 3, 4, 5) and the number of parents (1, 2, 3, 4, 5). The bottom row shows the relationship between the number of children (1, 2, 3, 4, 5) and the number of parents (1, 2, 3, 4, 5). The plots show a positive correlation between the number of children and the number of parents.

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99

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|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

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1. The first group of respondents (10%) was composed of individuals who had been involved in a sexual assault in the past 12 months. This group was further divided into two subgroups: those who had been the victim of a sexual assault (5%) and those who had been the perpetrator of a sexual assault (5%).

| | fo | u | % | ft | fo-ft | (fo-fe) ² | $\frac{(fo-fe)^2}{ft}$ |
|-----------------|-----|-----|---------|--------|-------|----------------------|------------------------|
| <u>Table 17</u> | 18 | 32 | 43.83 | 19.72 | -1.72 | 2.97 | 0.151 |
| | 14 | 24 | 32.87 | 14.79 | -0.79 | 0.63 | 0.042 |
| | 11 | 14 | 19.17 | 8.63 | 2.37 | 5.61 | 0.650 |
| | 2 | 3 | 4.10 | 1.85 | 0.15 | 0.02 | 0.012 |
| Totals | 45 | 73 | 100 | 45 | | x ² -- | 0.856 |
| | | | d.f.--3 | p--.90 | p .80 | | |
| <u>Table 18</u> | 27 | 54 | 59.34 | 26.11 | 0.89 | 0.79 | 0.030 |
| | 11 | 23 | 25.27 | 11.12 | -0.12 | 0.01 | 0.001 |
| | 6 | 14 | 15.38 | 6.76 | -0.76 | 0.59 | 0.087 |
| Totals | 44 | 91 | 100 | 44 | | x ² -- | 0.119 |
| | | | d.f.--2 | p--.95 | p .90 | | |
| <u>Table 19</u> | 106 | 130 | 70.27 | 102.59 | 3.4 | 11.56 | 0.112 |
| | 40 | 55 | 29.73 | 43.39 | -3.4 | 11.56 | 0.266 |
| Totals | 146 | 185 | 100 | 145.98 | | x ² -- | 0.379 |
| | | | d.f.--1 | p--.70 | p .50 | | |
| <u>Table 20</u> | 65 | 83 | 92.22 | 64.55 | .45 | .20 | 0.003 |
| | 5 | 7 | 7.87 | 5.45 | .45 | .20 | 0.036 |
| Totals | 70 | 90 | 100 | 70 | | | |
| | | | d.f.--1 | p--.90 | p .80 | | |
| <u>Table 21</u> | 99 | 113 | 61.08 | 90.40 | 8.60 | 73.96 | 0.818 |
| | 49 | 72 | 38.91 | 57.60 | -8.60 | 73.96 | 1.284 |
| Totals | 148 | 185 | 100 | 148 | | x ² -- | 2.102 |
| | | | d.f.--1 | p--.20 | p .10 | | |
| <u>Table 22</u> | 42 | 49 | 54.44 | 38.11 | 3.88 | 15.12 | 0.396 |
| | 28 | 41 | 45.55 | 31.88 | -3.88 | 15.12 | 0.474 |
| Totals | 70 | 90 | 100 | 70 | | x ² -- | 0.871 |
| | | | d.f.--1 | p--.50 | p .30 | | |

| | fo | u | % | ft | fo-ft | (fo-fe) ² | $\frac{(fo-fe)^2}{ft}$ |
|-----------------|-----|-----|---------|--------|--------|----------------------|------------------------|
| <u>Table 23</u> | 83 | 110 | 59.14 | 78.65 | 4.34 | 18.87 | 0.239 |
| | 50 | 76 | 40.86 | 54.34 | -4.34 | 18.87 | 0.347 |
| Totals | 113 | 186 | 100 | 133 | | | x ² --0.587 |
| | | | d.f.--1 | p--.50 | p .30 | | |
| <u>Table 24</u> | 55 | 57 | 63.33 | 52.56 | 2.43 | 5.92 | 0.112 |
| | 28 | 33 | 36.66 | 30.43 | -2.43 | 5.92 | 0.194 |
| Totals | 83 | 90 | 100 | 83 | | | x ² --0.307 |
| | | | d.f.--1 | p--.70 | p .50 | | |
| <u>Table 25</u> | 171 | 213 | 77.45 | 167.30 | 3.69 | 13.66 | 0.081 |
| | 45 | 62 | 22.54 | 48.69 | -3.69 | 13.66 | 0.280 |
| Totals | 216 | 275 | 100 | 216 | | | x ² --0.362 |
| | | | d.f.--1 | p--.70 | p .50 | | |
| <u>Table 26</u> | 141 | 162 | 58.90 | 128.42 | 12.57 | 158.18 | 1.231 |
| | 77 | 113 | 41.09 | 89.57 | -12.57 | 158.18 | 1.766 |
| Totals | 218 | 275 | 100 | 218 | | | x ² --2.997 |
| <u>Table 27</u> | 138 | 167 | 60.50 | 130.69 | 7.30 | 53.36 | 0.408 |
| | 78 | 109 | 39.49 | 85.30 | -7.30 | 53.36 | 0.625 |
| Totals | 216 | 276 | 100 | 216 | | | x ² --1.033 |
| | | | d.f.--1 | p--.50 | p .30 | | |
| <u>Table 28</u> | 33 | 85 | 30.79 | 27.71 | 5.28 | 27.91 | 1.007 |
| | 57 | 191 | 69.20 | 62.28 | -5.28 | 27.91 | 0.448 |
| Totals | 90 | 276 | 100 | 90 | | | x ² --1.455 |
| | | | d.f.--1 | p--.30 | p .20 | | |

| | fo | u | % | ft | fo-ft | (fo-fe) ² | $\frac{(fo-fe)^2}{ft}$ |
|-----------------|-----|-----|---------|--------|-------|----------------------|-------------------------|
| <u>Table 29</u> | 19 | 33 | 36.66 | 16.86 | 2.13 | 4.54 | 0.267 |
| | 27 | 57 | 63.33 | 29.13 | -2.13 | 4.54 | 0.156 |
| Totals | 46 | 90 | 100 | 46 | | | x ² --0.425 |
| | | | d.f.--1 | p--.70 | p .50 | | |
| <u>Table 30</u> | 34 | 52 | 27.95 | 27.95 | 6.04 | 36.57 | 1.306 |
| | 66 | 134 | 72.04 | 72.04 | -6.04 | 36.57 | 0.506 |
| Totals | 100 | 186 | 100 | 100 | | | x ² --1.813 |
| | | | d.f.--1 | p--.20 | p .10 | | |
| <u>Table 31</u> | 49 | 75 | 29.18 | 43.77 | 5.22 | 27.30 | 0.623 |
| | 101 | 182 | 70.81 | 106.22 | -5.22 | 27.30 | 0.257 |
| Totals | 150 | 257 | 100 | 150 | | | x ² --0.880 |
| | | | d.f.--1 | p--.50 | p .30 | | |
| <u>Table 32</u> | 29 | 44 | 35.48 | 24.83 | 4.16 | 17.31 | 0.687 |
| | 41 | 80 | 64.51 | 45.16 | -4.16 | 17.31 | 0.383 |
| Totals | 70 | 124 | 100 | 70 | | | x ² --1.080 |
| | | | d.f.--1 | p--.30 | p .20 | | |
| <u>Table 33</u> | 20 | 31 | 23.30 | 18.64 | 1.35 | 1.83 | 0.098 |
| | 60 | 102 | 76.64 | 61.35 | -1.35 | 1.83 | 0.029 |
| Totals | 80 | 133 | 100 | 80 | | | x ² --0.128 |
| | | | d.f.--1 | p--.80 | p .70 | | |
| <u>Table 34</u> | 13 | 24 | 27.58 | 12.96 | 0.03 | 0.01 | 0.0009 |
| | 34 | 63 | 72.41 | 34.03 | -0.03 | 0.01 | 0.0003 |
| Totals | 47 | 87 | 100 | 47 | | | x ² --0.0012 |
| | | | d.f.--1 | p--.95 | p .90 | | |

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Figure 1 illustrates the experimental setup. A subject is seated at a table, viewing a video screen. A video camera is positioned above the screen. A target is placed on the table. A horizontal arrow indicates the direction of movement from the starting point to the target. A vertical arrow indicates the direction of movement from the starting point to the video screen. A horizontal arrow indicates the direction of movement from the video screen to the target. A vertical arrow indicates the direction of movement from the video screen to the video camera.

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• **Prevalence** is the proportion of the population with a disease at a particular point in time. It is a snapshot of the disease in the population at a particular point in time. It is a measure of the burden of disease in the population.

1. $\frac{1}{2}$ 2. $\frac{1}{3}$ 3. $\frac{1}{4}$ 4. $\frac{1}{5}$ 5. $\frac{1}{6}$ 6. $\frac{1}{7}$ 7. $\frac{1}{8}$ 8. $\frac{1}{9}$ 9. $\frac{1}{10}$ 10. $\frac{1}{11}$ 11. $\frac{1}{12}$ 12. $\frac{1}{13}$ 13. $\frac{1}{14}$ 14. $\frac{1}{15}$ 15. $\frac{1}{16}$ 16. $\frac{1}{17}$ 17. $\frac{1}{18}$ 18. $\frac{1}{19}$ 19. $\frac{1}{20}$ 20. $\frac{1}{21}$ 21. $\frac{1}{22}$ 22. $\frac{1}{23}$ 23. $\frac{1}{24}$ 24. $\frac{1}{25}$ 25. $\frac{1}{26}$ 26. $\frac{1}{27}$ 27. $\frac{1}{28}$ 28. $\frac{1}{29}$ 29. $\frac{1}{30}$ 30. $\frac{1}{31}$ 31. $\frac{1}{32}$ 32. $\frac{1}{33}$ 33. $\frac{1}{34}$ 34. $\frac{1}{35}$ 35. $\frac{1}{36}$ 36. $\frac{1}{37}$ 37. $\frac{1}{38}$ 38. $\frac{1}{39}$ 39. $\frac{1}{40}$ 40. $\frac{1}{41}$ 41. $\frac{1}{42}$ 42. $\frac{1}{43}$ 43. $\frac{1}{44}$ 44. $\frac{1}{45}$ 45. $\frac{1}{46}$ 46. $\frac{1}{47}$ 47. $\frac{1}{48}$ 48. $\frac{1}{49}$ 49. $\frac{1}{50}$ 50. $\frac{1}{51}$ 51. $\frac{1}{52}$ 52. $\frac{1}{53}$ 53. $\frac{1}{54}$ 54. $\frac{1}{55}$ 55. $\frac{1}{56}$ 56. $\frac{1}{57}$ 57. $\frac{1}{58}$ 58. $\frac{1}{59}$ 59. $\frac{1}{60}$ 60. $\frac{1}{61}$ 61. $\frac{1}{62}$ 62. $\frac{1}{63}$ 63. $\frac{1}{64}$ 64. $\frac{1}{65}$ 65. $\frac{1}{66}$ 66. $\frac{1}{67}$ 67. $\frac{1}{68}$ 68. $\frac{1}{69}$ 69. $\frac{1}{70}$ 70. $\frac{1}{71}$ 71. $\frac{1}{72}$ 72. $\frac{1}{73}$ 73. $\frac{1}{74}$ 74. $\frac{1}{75}$ 75. $\frac{1}{76}$ 76. $\frac{1}{77}$ 77. $\frac{1}{78}$ 78. $\frac{1}{79}$ 79. $\frac{1}{80}$ 80. $\frac{1}{81}$ 81. $\frac{1}{82}$ 82. $\frac{1}{83}$ 83. $\frac{1}{84}$ 84. $\frac{1}{85}$ 85. $\frac{1}{86}$ 86. $\frac{1}{87}$ 87. $\frac{1}{88}$ 88. $\frac{1}{89}$ 89. $\frac{1}{90}$ 90. $\frac{1}{91}$ 91. $\frac{1}{92}$ 92. $\frac{1}{93}$ 93. $\frac{1}{94}$ 94. $\frac{1}{95}$ 95. $\frac{1}{96}$ 96. $\frac{1}{97}$ 97. $\frac{1}{98}$ 98. $\frac{1}{99}$ 99. $\frac{1}{100}$ 100. $\frac{1}{101}$ 101. $\frac{1}{102}$ 102. $\frac{1}{103}$ 103. $\frac{1}{104}$ 104. $\frac{1}{105}$ 105. $\frac{1}{106}$ 106. $\frac{1}{107}$ 107. $\frac{1}{108}$ 108. $\frac{1}{109}$ 109. $\frac{1}{110}$ 110. $\frac{1}{111}$ 111. $\frac{1}{112}$ 112. $\frac{1}{113}$ 113. $\frac{1}{114}$ 114. $\frac{1}{115}$ 115. $\frac{1}{116}$ 116. $\frac{1}{117}$ 117. $\frac{1}{118}$ 118. $\frac{1}{119}$ 119. $\frac{1}{120}$ 120. $\frac{1}{121}$ 121. $\frac{1}{122}$ 122. $\frac{1}{123}$ 123. $\frac{1}{124}$ 124. $\frac{1}{125}$ 125. $\frac{1}{126}$ 126. $\frac{1}{127}$ 127. $\frac{1}{128}$ 128. $\frac{1}{129}$ 129. $\frac{1}{130}$ 130. $\frac{1}{131}$ 131. $\frac{1}{132}$ 132. $\frac{1}{133}$ 133. $\frac{1}{134}$ 134. $\frac{1}{135}$ 135. $\frac{1}{136}$ 136. $\frac{1}{137}$ 137. $\frac{1}{138}$ 138. $\frac{1}{139}$ 139. $\frac{1}{140}$ 140. $\frac{1}{141}$ 141. $\frac{1}{142}$ 142. $\frac{1}{143}$ 143. $\frac{1}{144}$ 144. $\frac{1}{145}$ 145. $\frac{1}{146}$ 146. $\frac{1}{147}$ 147. $\frac{1}{148}$ 148. $\frac{1}{149}$ 149. $\frac{1}{150}$ 150. $\frac{1}{151}$ 151. $\frac{1}{152}$ 152. $\frac{1}{153}$ 153. $\frac{1}{154}$ 154. $\frac{1}{155}$ 155. $\frac{1}{156}$ 156. $\frac{1}{157}$ 157. $\frac{1}{158}$ 158. $\frac{1}{159}$ 159. $\frac{1}{160}$ 160. $\frac{1}{161}$ 161. $\frac{1}{162}$ 162. $\frac{1}{163}$ 163. $\frac{1}{164}$ 164. $\frac{1}{165}$ 165. $\frac{1}{166}$ 166. $\frac{1}{167}$ 167. $\frac{1}{168}$ 168. $\frac{1}{169}$ 169. $\frac{1}{170}$ 170. $\frac{1}{171}$ 171. $\frac{1}{172}$ 172. $\frac{1}{173}$ 173. $\frac{1}{174}$ 174. $\frac{1}{175}$ 175. $\frac{1}{176}$ 176. $\frac{1}{177}$ 177. $\frac{1}{178}$ 178. $\frac{1}{179}$ 179. $\frac{1}{180}$ 180. $\frac{1}{181}$ 181. $\frac{1}{182}$ 182. $\frac{1}{183}$ 183. $\frac{1}{184}$ 184. $\frac{1}{185}$ 185. $\frac{1}{186}$ 186. $\frac{1}{187}$ 187. $\frac{1}{188}$ 188. $\frac{1}{189}$ 189. $\frac{1}{190}$ 190. $\frac{1}{191}$ 191. $\frac{1}{192}$ 192. $\frac{1}{193}$ 193. $\frac{1}{194}$ 194. $\frac{1}{195}$ 195. $\frac{1}{196}$ 196. $\frac{1}{197}$ 197. $\frac{1}{198}$ 198. $\frac{1}{199}$ 199. $\frac{1}{200}$ 200. $\frac{1}{201}$ 201. $\frac{1}{202}$ 202. $\frac{1}{203}$ 203. $\frac{1}{204}$ 204. $\frac{1}{205}$ 205. $\frac{1}{206}$ 206. $\frac{1}{207}$ 207. $\frac{1}{208}$ 208. $\frac{1}{209}$ 209. $\frac{1}{210}$ 210. $\frac{1}{211}$ 211. $\frac{1}{212}$ 212. $\frac{1}{213}$ 213. $\frac{1}{214}$ 214. $\frac{1}{215}$ 215. $\frac{1}{216}$ 216. $\frac{1}{217}$ 217. $\frac{1}{218}$ 218. $\frac{1}{219}$ 219. $\frac{1}{220}$ 220. $\frac{1}{221}$ 221. $\frac{1}{222}$ 222. $\frac{1}{223}$ 223. $\frac{1}{224}$ 224. $\frac{1}{225}$ 225. $\frac{1}{226}$ 226. $\frac{1}{227}$ 227. $\frac{1}{228}$ 228. $\frac{1}{229}$ 229. $\frac{1}{230}$ 230. $\frac{1}{231}$ 231. $\frac{1}{232}$ 232. $\frac{1}{233}$ 233. $\frac{1}{234}$ 234. $\frac{1}{235}$ 235. $\frac{1}{236}$ 236. $\frac{1}{237}$ 237. $\frac{1}{238}$ 238. $\frac{1}{239}$ 239. $\frac{1}{240}$ 240

| | 1 | 2 | 3 | 4 | 5 |
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| 1 | 1 | | | | |
| 2 | | 1 | | | |
| 3 | | | 1 | | |
| 4 | | | | 1 | |
| 5 | | | | | 1 |

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| | fo | u | % | ft | fo-ft | (fo-fe) ² | $\frac{(fo-fe)^2}{ft}$ |
|-----------------|-----|-----|---------|--------|-------|----------------------|------------------------|
| <u>Table 35</u> | 36 | 51 | 30.00 | 30.9 | -5.1 | 26.01 | 0.847 |
| | 67 | 119 | 70.00 | 72.1 | 5.1 | 26.01 | 0.360 |
| Totals | 103 | 170 | 100 | 103 | | | $x^2--1.201$ |
| | | | d.f.--1 | p--.50 | p .30 | | |
| <u>Table 36</u> | 8 | 20 | 16.9 | 6.92 | 1.08 | 1.16 | 0.167 |
| | 17 | 71 | 60.1 | 24.64 | -7.70 | 59.29 | 2.406 |
| | 16 | 27 | 22.8 | 9.34 | 6.62 | 43.82 | 4.691 |
| Totals | 41 | 118 | 99.8 | 41 | | | $x^2--7.265$ |
| | | | d.f.--2 | p--.05 | p .02 | | |
| <u>Table 37</u> | 4 | 11 | 13.7 | 3.97 | .03 | .0009 | 0.0002 |
| | 17 | 55 | 68.7 | 19.92 | -2.92 | 8.52 | 0.4277 |
| | 8 | 14 | 17.5 | 5.08 | 2.92 | 8.52 | 1.6771 |
| Totals | 29 | 80 | 99.9 | 28.97 | | | $x^2--2.1050$ |
| | | | d.f.--2 | p--.50 | p .30 | | |
| <u>Table 38</u> | 52 | 87 | 63.97 | 51.81 | .18 | 0.03 | 0.0006 |
| | 29 | 49 | 36.02 | 29.18 | -.18 | 0.03 | 0.0025 |
| Totals | 81 | 136 | 100 | 81 | | | $x^2--0.0031$ |
| | | | d.f.--1 | p--.95 | p .90 | | |
| <u>Table 39</u> | 25 | 31 | 36.04 | 20.90 | 4.09 | 16.75 | 0.801 |
| | 16 | 30 | 34.88 | 20.23 | -4.23 | 17.91 | 0.885 |
| | 8 | 16 | 18.60 | 10.79 | -2.79 | 7.78 | 0.721 |
| | 9 | 9 | 10.46 | 6.06 | 2.93 | 8.59 | 1.415 |
| Totals | 58 | 86 | 100 | 58 | | | $x^2--3.824$ |
| | | | d.f.--3 | p--.30 | p .20 | | |
| <u>Table 40</u> | 9 | 17 | 39.53 | 9.09 | -0.09 | 0.008 | 0.0009 |
| | 2 | 9 | 20.93 | 4.81 | -2.81 | 7.91 | 1.664 |
| | 6 | 9 | 20.93 | 4.81 | 1.18 | 1.40 | 0.292 |
| | 6 | 8 | 18.60 | 4.27 | 1.72 | 2.96 | 0.692 |
| | 23 | 43 | 100 | 23 | | | $x^2--2.649$ |
| | | | d.f.--3 | p--.50 | p .30 | | |

| | fo | u | % | ft | fo-ft | (fo-fe) ² | $\frac{(fo-fe)^2}{ft}$ |
|-----------------|-----|-----|---------|--------|-------|----------------------|------------------------|
| <u>Table 41</u> | 37 | 67 | 78.82 | 33.10 | 3.89 | 15.16 | 0.458 |
| | 5 | 18 | 21.17 | 8.89 | -3.89 | 15.16 | 1.704 |
| Totals | 42 | 85 | 100 | 42 | | | χ^2 --2.2162 |
| | | | d.f.--1 | p--.20 | p .10 | | |
| <u>Table 42</u> | 16 | 31 | 77.50 | 16.27 | -2.75 | 0.07 | 0.004 |
| | 5 | 9 | 22.50 | 4.72 | 2.75 | 0.07 | 0.016 |
| Totals | 21 | 40 | 100 | 21 | | | χ^2 --0.020 |
| | | | d.f.--1 | p--.90 | p .80 | | |
| <u>Table 43</u> | 53 | 98 | 78.40 | 49.39 | 3.60 | 13.01 | 0.263 |
| | 10 | 27 | 21.60 | 13.60 | -3.60 | 13.01 | 0.956 |
| Totals | 63 | 125 | 100 | 63 | | | χ^2 --1.220 |
| | | | d.f.--1 | p--.30 | p .20 | | |
| <u>Table 44</u> | 20 | 23 | 19.32 | 12.17 | 7.83 | 60.84 | 4.998 |
| | 43 | 96 | 80.67 | 50.82 | -7.83 | 60.84 | 1.197 |
| Totals | 63 | 119 | 99.99 | 62.99 | | | χ^2 --6.195 |
| | | | d.f.--1 | p--.99 | p .98 | | |
| <u>Table 45</u> | 16 | 52 | 36.62 | 24.53 | -8.53 | 72.25 | 2.986 |
| | 51 | 90 | 63.38 | 42.46 | 8.53 | 72.25 | 1.700 |
| Totals | 67 | 142 | 100 | 66.96 | | | χ^2 --4.686 |
| | | | d.f.--1 | p--.97 | p .95 | | |
| <u>Table 46</u> | 71 | 86 | 31.27 | 65.35 | 5.65 | 31.36 | .479 |
| | 138 | 189 | 68.72 | 143.62 | -5.65 | 31.36 | .211 |
| Totals | 209 | 275 | 99.99 | 208.97 | | | χ^2 --0.691 |
| | | | d.f.--1 | p--.50 | p .30 | | |

| | fo | u | % | ft | fo-ft | (fo-fe) ² | $\frac{(fo-fe)^2}{ft}$ |
|-----------------|----|-----|---------|---------|--------|------------------------|------------------------|
| <u>Table 47</u> | 42 | 86 | 31.27 | 28.14 | -13.86 | 191.96 | 6.821 |
| | 48 | 189 | 68.72 | 61.84 | -13.86 | 191.96 | 3.104 |
| Totals | 90 | 275 | 99.99 | 89.98 | | x ² --9.925 | |
| | | | d.f.--1 | p--.999 | p .995 | | |

APPENDIX 1

- a) Questionnaire form 1
- b) Questionnaire form 1a
- c) Questionnaire form 1b
- d) Cover letter
- e) Follow up letter
- f) Responses by classification

Form 1 _____

E. Dice, 212 West Grand River
East Lansing, Michigan

What is your full name? _____

What year did you graduate from high school? _____

1-In which of the following places do you now live? Please check the right item with an x.

- a ☐ On a farm
- b ☐ In the country but not on a farm
- c ☐ In the suburbs of a large city
- d ☐ In a community of less than 5000 people
- e ☐ In a city of 5000 to 10,000 people
- f ☐ In a city of more than 10,000 people

2-If you have lived in more than one place since high school, please check the correct number of places below. For example, if you moved from one city to another, you should place two x's before the proper item.

- a ☐ On a farm
- b ☐ In the country but not on a farm
- c ☐ In the suburbs of a large city
- d ☐ In a community of less than 5000 people
- e ☐ In a city of 5000 to 10,000 people
- f ☐ In a city of more than 10,000 people

3-Where did you live longest while in high school? (Check only one)

- a ☐ On a farm
- b ☐ In the country but not on a farm
- c ☐ In the suburbs of a large city
- d ☐ In a community of less than 5000 people
- e ☐ In a city of 5000 to 10,000 people
- f ☐ In a city of more than 10,000 people

4-If you are married please check the item below which best tells where your (husband) (wife) was raised.

- a ☐ On a farm
- b ☐ In the country but not on a farm
- c ☐ In the suburbs of a large city
- d ☐ In a community of less than 5000 people
- e ☐ In a city of 5000 to 10,000 people
- f ☐ In a city of more than 10,000 people

5-If you were raised on a farm, please check the best answer below.

- a ☐ Lived on a part time farm enterprise.
- b ☐ Farming was our only occupation.

How many acres of farm land was owned? _____ Rented? _____

6-If you were not raised on a farm, what was your parents' occupation?

- a Father's _____
- b Mother's _____

7-Did you enroll in college?

- a ☐ Yes If so, what was your major? _____
Did you graduate? ☐ Yes ☐ No
- b ☐ No

8-How many brothers or sisters do you have? Write number of each.

- | | |
|---|---|
| Brothers | Sisters |
| a <input type="checkbox"/> Older than you are | a <input type="checkbox"/> Older than you are |
| b <input type="checkbox"/> Younger than you are | b <input type="checkbox"/> Younger than you are |

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9-Are you employed now?

a ☐ Yes If yes, what kind of work is it? _____

b ☐ Not now but I worked after I graduated from high school.
What kind of work was this? _____

c ☐ No

10-Please check below to indicate if you were in the armed forces.

a ☐ I was not in the armed services.

b ☐ I entered the armed services.

11-Please indicate below the church or community clubs you took part in outside of high school

☐ Church Young People

☐ Juvenile Grange

☐ Scouts

☐ None

☐ 4-H Clubs

☐ Others (list) _____

12-In which of the following church and community activities do you take part now?

☐ Church Social Club

☐ Farm Bureau

☐ Church Business Group

☐ Grange

☐ Youth Club Leader

☐ Farmer's Union

☐ Parent-Teachers' Club

☐ Business Club

☐ Local Government

☐ Professional Group

☐ Civic betterment group such as community councils, boards, etc.

Please list any other _____

13-Would you prefer to live in a location different from the one you now live in?

a ☐ Yes If yes, where would you prefer to live? _____

14-What help would you like to have had (but didn't) in preparing for your adult life?

15-What school or other experience helped you most in preparing for your adult life?

If you are married, please give your maiden name. _____

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9-Were you in the armed forces?

- a ☐ Yes If so, what branch _____? What rank
did you have when you came out? _____
- b ☐ No

10-If you were in the armed forces, what was your main job there?

11-Are you now employed?

- a ☐ Self employed. If so, what kind of work? _____
- b ☐ Work for someone else. For whom? _____
- c ☐ Not employed.

12-If you work for someone else, what duties do you perform, what
is your work? _____

13-Please list any other jobs you have had since high school.

What kind of work was it? For whom did you work?

14-Please check the church or community clubs you took part in
outside of high school.

☐ Church Young People's Club
☐ Scouts
☐ 4-H Clubs
☐ Junior Farm Bureau

☐ Juvenile Grange
☐ None
☐ Others (list) _____

15-In what church and community activities do you take part now?

☐ Church Social Group
☐ Church Business Group
☐ Youth Club Leader
☐ Parent Teachers' Group
☐ Local Government
☐ Civic Betterment Organization

☐ Farm Bureau
☐ Grange
☐ Farmers' Union
☐ Business Men's Club
☐ Professional Group

☐ such as councils and boards

Please list any others _____

16-Would you prefer a different kind of work than you are now in?

- a ☐ Yes If so, what kind of work would you prefer? _____
- b ☐ No

17-Would you prefer to live in a different location?

- a ☐ Yes If so, where? _____
- b ☐ No

18-What help would you have liked to receive (but didn't) in select-
ing and preparing for an occupation? _____

19-What school or other experience helped you most in selecting and
preparing for an occupation? _____

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212 West Grand River
East Lansing, Michigan
April 24, 1956

Dear Midland High Graduate:

Midland High School is cooperating with me in trying to find ways of improving high school and vocational opportunities for students from rural districts. To start at the right point, we are conducting a study among about 400 Midland graduates. Your name appears in this group.

We would like to ask you to help us in this study by filling out the enclosed questionnaire. You can then return it to us in the enclosed stamped envelope. It only takes a few minutes.

Neither your name nor any other names will be used in the report. We merely add up the different answers and refer to them as a group. The replies will be analyzed and summarized at the high school for future reference.

We will be very grateful to you for your help. Please fill out the questions and return them as soon as you can.

Thank you kindly.

Very truly yours,

Eugene F. Dice
Class of 1941

ED:ed

212 West Grand River
East Lansing, Michigan
May 5, 1956

Dear High School Graduate:

Most of the replies to our recent letter have been returned to us by your fellow graduates. However, we have not yet received yours. The ones we have received are of less value if we don't get yours. We feel that you will want to help the same as the rest of your classmates have done.

It is hoped that this study will be valuable in improving the opportunity for young people to prepare for their life work. The study was undertaken with the belief that rural young people do not get as good a chance to prepare for the most desirable occupations as urban students do. But we have to know what has happened up to now before we can make recommendations for improvement. It is for this reason that it is important to get replies from all of your class group.

Many of your classmates have suggested that a better high school counseling system is needed. Others suggest that rural students do not get fair treatment from teachers and urban students. We would like to hear your suggestions for improving the high school opportunities too.

Won't you please fill out the questions now and return them to us?

Thank you kindly.

Very truly yours,

Eugene F. Dice

ED:ed

Appendix 1 (f)

Respondents by Classification

| | Midland | Saline |
|------------------------|---------|--------|
| Male Farm Reared | 61 | 23 |
| Male Rural Non-farm | 28 | 3 |
| Male Rural Community | 7 | 18 |
| Male Other* | 4 | 2 |
| Female, Farm Reared | 47 | 24 |
| Female Rural Non-farm | 35 | 2 |
| Female Rural Community | 1 | 17 |
| Female Other* | 3 | 1 |

*Other refers to those who received questionnaire as rural students but whose present designation (because of city limits change) may be suburban or urban.

BIBLIOGRAPHY

Books

- Goode, Wm. J., and Hatt, Paul K., Methods in Social Research, New York: The McGraw Hill Book Company, Inc., 1952.
- Kelsey, Lincoln D., and Hearne, Cannon G., Cooperative Extension Work, Ithaca, New York: Comstock Publishing Co., Inc., 1949.
- Reisman, David, Glazer, N. and Denny, R., The Lonely Crowd, Garden City, New York: Doubleday & Co., 1955.
- Smith, T. L., and McMahan, C.A., The Sociology of Urban Life, New York: Dryden Press, 1951.
- Thornthwaite, Warren C., Internal Migration In the United States, Philadelphia, Penn.: The Univ. of Penn. Press, 1955.

Public Documents

- Lively, C. E., and Taeuber, Conrad, "Rural Migration in the United States", W.P.A. Research Monogram, XIX, U.S. Gov't. Printing Office, 1939.
- U.S. Bureau of the Census, Seventeenth Census of the United States: 1950.

Bulletins

- Beegle, J. A. and Thaden, J. F., "Population Change In Michigan With Special Reference to Rural Urban Migration 1940-1950", East Lansing, Michigan: Dept. of Soc. & Anth., M.S.C. Ag. Exp. Sta., 1953.

Youth and the World of Work, East Lansing, Michigan:
Social Research Service, 1949.

Articles

Barber, Leroy E., "Why Some Able Graduates Do Not Go To College", The Education Digest, XVI No. 8, April, 1951.

Education Policies Commission, "Education of the Gifted", The Education Digest, XVI No. 4, Dec., 1950.

Featherstone, W. B., "What Can We Do About Slow Learners?", The Education Digest, XVI No. 8, April, 1951.

Lipset, Seymore M., "Social Mobility and Urbanization", Rural Sociology, XX, Sept., 1955.

Lively, C. E., "Spatial Mobility of the Rural Population With Respect to Local Areas", American Journal of Sociology, XLIII, July, 1937.

Martinson, Floyd M., "Personal Adjustment and Rural-Urban Migration", Rural Sociology, XX, June, 1955.

Mauldin, W. Parker, "selective Migration From Small Towns", American Sociology Review, V No. 5, 1940.

McMahan, C. A., "Bulletin Reviews", Rural Sociology, XX March, 1955.

Scudder, R. and Anderson, C. A., "Migration and Vertical Occupational Mobility", American Sociological Review, XIX, 1954.

Smith, T. L., "Levels and Trends in Rural Migration", Rural Sociology, XIX, 1954.

Unpublished Materials

Bartley, H. J., "A Follow Up Study of Pupils Enrolled in Vocational Agriculture in the High School at Mason", Unpublished M.A. Thesis, Dept. of Education, Michigan State College, 1942.

- Bogue, Grant, "Development of Occupational and Community Preferences Among Youth of a Rural Community", Unpublished M.A. Thesis, Michigan State College, 1954.
- Boles, R. C., "Some Relationships Between Size of School and Academic Achievement of High School Seniors in Florida", Unpublished Ph.D. Thesis, Univ. of Fla., Gainesville, 1952.
- Smith, Eldon D., "Migration and Adjustment Experience of Rural Migrant Workers in Indianapolis", Unpublished Ph.D. Thesis, Univ. of Wis., 1953.
- Smith, S. S., "A Thesis Based Upon An Occupational Study of the Graduates of the Fordson High School, Dearborn, Michigan", Unpublished M.A. Thesis, Dept. of Education, Michigan State College, 1932.
- Woodbury, Jr., Charles A., "The Effect of Community Status Upon the Differential Achievement of School Children", Unpublished Ph.D. Thesis, Boston Univ., 1950.

Reports

- Joint Committee Report on Extension Programs, Policies, and Goals, Washington, D.C., August, 1948, U.S. Dept. of Agriculture and Association of Land Grant Colleges and Universities.

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