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Iowa Farm Operators' and Farm Landlords' Knowledge of, Participation in and Acceptance of the Old Age and Survivors Insurance Program

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State University, drew the sample and assisted with the organization of field interviews and coding and tabulation of the data. Roy L. Roberts, Social Security Administration, provided helpful technical assistance in the construction of the questionnaire and in the interpretation of the OASI program. Field interviews were made by members of the survey staff of the Statistical Laboratory, Iowa State University.

SUMMARY

The purposes of this study were to determine: (1) the extent to which farm operators and farm landlords are participating in OASI by paying the taxes and by receiving benefits; (2) the extent and sources of knowledge about OASI and the factors associated with differences in knowledge levels; (3) farm operators' and farm landlords' opinions of OASI and factors associated with differences in opinion; (4) changes in the OASI program recommended by farm operators and farm landlords; and (5) retirement plans of farm operators and farm landlords 50 years of age or older and the place of OASI in those plans.

Data were collected through interviews with 346 farm operators and 166 farm landlords in a statewide sample. Although the sample was a stratified area sample, the sampling rate was so low that sampling error is rather high. This should be kept in mind in generalizing the sample data to the farm population of the state.

EXTENT OF FARM OPERATOR AND FARM LANDLORD PARTICIPATION

- 1. Ninety-nine percent of the farm operators and 85 percent of the farm landlords had social security numbers.
- 2. Eighty-nine percent of the farm operators and 47 percent of the farm landlords had paid taxes on self-employment income from farming, earned in 1956. An additional 5 and 15 percent, respectively, had paid the social security tax on other income.
- 3. Only 21 operators, 6 percent of all farm operators, were without OASI coverage for 1956. Over half (13) of these could have paid the tax and had coverage by exercising the optional method of computing income.
- 4. Based on what they said about their contributions to production activities, more landlords satisfied the criteria of material participation than paid the tax (65 percent compared with 47 percent). Some may not have paid the tax because they were not aware that they could participate in the program. Only 55 were aware of this possibility.

5. Eleven percent of the farm landlords and 3 percent of the farm operators were currently receiving OASI retirement benefits. Average benefit payments were \$80 to landlords and \$88 to farm operators.

EXTENT AND SOURCE OF KNOWLEDGE

- 1. There were great variations in extent of knowledge among both farm operators and farm landlords, but, in general, knowledge of retirement benefits was more extensive than was knowledge of the other two major features survivors' benefits and disability benefits.
- 2. Many farmers and farm landlords confuse OASI with Workmen's Compensation and Unemployment Insurance.
- 3. Newspapers, tax consultants and magazines, in that order, were the three most often mentioned sources of first information about OASI.
- 4. Magazines, newspapers and tax consultants, in that order, were, in the judgment of the respondents, the three sources of most information. The most "effective" sources, however, from the standpoint of producing comprehensive knowledge were, in order of importance, newspapers, pamphlets and Social Security officials. "Tax consultants," although a frequent source of most information, ranked near the bottom as an "effective" source.
- 5. In general, extent of knowledge was associated negatively with age. Responses to 8 of the 20 knowledge questions were associated with age of the respondent, 2 in a positive direction and 6 in a negative direction.
- 6. Extent of knowledge was associated with extent of formal schooling among farm landlords but not among farm operators.
- 7. Apparently the most important factors in accounting for differences in extent of knowledge of OASI were personal experience and situational factors that may influence motivation and/or increase opportunity to seek knowledge. In general, having had occasion to get a social security number before farmers be-

came eligible, having checked with someone about the application of the law to one's work, having paid the taxes, knowing someone who is currently receiving OASI benefits and knowing of the regular visits of the OASI representative to the county were all associated with more comprehensive knowledge.

- 8. The limitations placed on the participation of women landlords in OASI by local custom and present interpretations of the law have been effective barriers to the development of knowledge.
- 9. In spite of the inadequate level of knowledge of many respondents, only about half expressed a desire for more information. Among the desired additional information, "how to figure benefits" was the most wanted type.

OPINIONS OF OASI AND SUGGESTED CHANGES

- 1. A large majority, 88 percent of the farm operators and 87 percent of the landlords, approved of the OASI program for farmers.
- 2. The feature most liked was the retirement benefits; the feature most disliked was the fact that, in contrast to older farmers, young farmers have to pay the tax for a longer time and in the end become eligible for no larger retirement benefits.
- 3. A large majority, 87 percent, of the farm operators approved of OASI coverage for hired farm workers. Only 15 percent of the operators, however, qualified as employers.
- 4. "Lower the age limit" was the most frequently suggested change.
- 5. Opinions of OASI were significantly associated with knowledge of OASI among farm landlords, but not among farm operators.
- 6. Opinions of OASI were associated with acceptance of three health related practices, but were not associated with acceptance of farm practices. On the other hand, knowledge of OASI was associated with acceptance of farm practices, but not with the acceptance of health related practices.

RETIREMENT PLANS OF FARM OPERATORS AND FARM LANDLORDS

- 1. The majority of farmers past 50 years of age expected to continue living on a farm after they reach the age of 65. The majority also expected to continue to live in a separate household.
- 2. Nearly half of the 50-to-64-year-olds expected to continue farming after they become 65, but most of them expected to continue on a reduced scale.
- 3. Among the 32 farm operators 65 or older, only 5 were relying wholly on farm operation as a source of income. The rest were at least partially retired. Half were renting out some of their land.
- 4. According to the testimony of farmers in the sample, the OASI program has not caused very many changes in the farming operations of older farmers, but it has become a major factor in plans for retirement income.
- 5. Three-fourths of the farm operators aged 50 to 64 expected to receive OASI benefits after retirement; whereas, only 30 percent of those 65 and older were currently receiving retirement benefits. The proportion of those 50 to 64 expecting income from farm operation and from farm rental after they reach 65 was approximately equal to the proportion 65 and older who were currently receiving income from these sources.
- 6. Forty-seven percent of the landlords 65 and older were retired. A like proportion (46 percent) of those 50 to 64 expected to retire when they reach 65.
- 7. One-fourth of the landlords 65 and older were currently receiving OASI retirement benefits. Three-fourths of those 50 to 64 expected to receive them at age 65.
- 8. Twenty percent of the landlords 65 and over were currently active farmers; whereas, only 11 percent of those 50 to 64 expected to continue as active farmers after 65.
- 9. Among both farm landlords and farm operators, those who expected retirement income from OASI expected it to constitute approximately half the sum they would require to live comfortably.

Iowa Farm Operators' and Farm Landlords' Knowledge of, Participation in and Acceptance of the Old Age and Survivors Insurance Program¹

BY WARD W. BAUDER²

Farmers and farm landlords are among those most recently brought under the Old Age and Survivors Insurance Program of Social Security. When the Social Security Act was passed in 1935, farmers were not included, partly because of anticipated difficulties in obtaining reports of farm income. The increases in the number of farmers eligible to pay income taxes and the resulting increase in record-keeping by farmers partially eliminated this objection by the early 1950's. Amendments to the law in 1950 extended coverage to certain farm laborers, and in 1954 the law was changed to extend coverage to self-employed farmers on the same basis as other self-employed persons. Again in 1956 coverage was extended to certain farm landlords by reclassifying "rental income as "earned income when the landlord 'participates materially' in production activities on the farm." 3

Growing interest in governmental action to provide retirement security for farmers comparable to that provided in other occupations led to a series of four studies conducted by the Farm Population and Rural Life Branch of the United States Department of Agriculture in cooperation with land grant colleges. These studies proposed to determine the adequacy of farmers' provisions for economic security in old age, their plans for retirement and their opinions about the extension of federal Old Age and Survivors Insurance

to farm families.4

PURPOSE OF THIS STUDY

After the Social Security Act was amended in 1954, another series of field studies was started by the Agricultural Marketing Service in cooperation with land grant colleges to determine answers to the following questions:

- 1. To what extent have farmers participated in the OASI program?
- 2. What do farmers know about the program, and what sources of information do they use?
- 3. What do farmers think of the program, what do they like, what don't they like, and what changes would they recommend?

This study is the fourth in a series and the first conducted since the 1956 amendments extended coverage to farm landlords. Therefore, its purpose was expanded to provide data to answer these questions as they pertained to farm landlords, as well as to farm operators. It also was designed to obtain data on the influence of OASI on the retirement plans of farmers and farm landlords and on the relationship between acceptance of OASI and other social innovations and the acceptance of improved agricultural practices.

PROCEDURE

All the information used in this study was obtained by personal interviews with farmers and farm landlords. A prepared schedule of questions was used.

Using master sampling materials, the Statistical Laboratory at Iowa State University drew a statewide sample consisting of 100 segments of size four. Outmigration of farm families was heavier than expected, particularly in the central and western portions of the state which experienced serious drouth in the summers of 1955 and 1956. This out-migration largely For reports of the three preceding studies see the following: Plock, Louis A. and Ducoff, Louis J. Old age and survivors insurance program. Maine Agr. Exp. Sta. Mimeo Report No. 69. 1957; Skrabanek, R. L., Keel, Lloyd B. and Ducoff, Louis J. Texas farmers and old age and survivors insurance. Texas Agr. Exp. Sta. Bul. 886. 1958; and Christianen, John R., Coughenour, C. Milton, Ducoff, Louis J. and Coleman, A. Lee. Social security and the farmer in Kentucky. Ky. Agr. Exp. Sta. Bul. 654. 1958; AMS-Okla. Agr. Exp. Sta. cooperative project (ms. in preparation).

¹ Project 1353 of the Iowa Agricultural and Home Economics Experiment Station.

 $^{^2}$ Farm Population and Rural Life Branch, Agr. Econ. Div., Agr. Mkt. Serv., U. S. Dept. Agr.

The principal criteria of material participation are: (1) performance of actual physical labor in connection with production; (2) periodic inspection of production activities; (3) periodic consultation with tenant regarding production activities; (4) payment of—or assumption diability for—a significant part of production cost; (5) furnishing a significant part of the farm equipment or livestock; (6) making management decisions which may be expected to affect significantly the success of the enterprise. OASI 25d official publication of U. S. Dept, Health, Education and Welfare, Social Security Administration. U. S. Govt. Print. Off., Wash. D.C. May 1957.

⁴ Adkins, William G. and Motheral, Joe R. The farmer looks at his economic security. Texas Agr. Exp. Sta. Bul. 774. 1954; Baill, I. M. The farmer and old-age security: a summary analysis of four studies, 1951-1954. Agr. Inf. Bul. 151. Wash. D.C. 1955; Galloway, Robert E. Farmers' plans for economic security in old age. Ky. Agr. Exp. Sta. Bul. 626. 1955; McKain, Walter C., Jr., Baldwin, Elmer D. and Ducoff, Louis J. Old age and retirement in rural Connecticut. Conn. (Stors) Agr. Exp. Sta. Bul. 299. 1953; and Sewell, William H., Ramsey, Charles E. and Ducoff, Louis J. Farmers' conceptions and plans for economic security in old age. Wis. Agr. Exp. Sta. Bul. 182. 1953.

accounted for the shrinkage of the sample from the estimated 400 to 346 farm families. Interviews were conducted by 10 Statistical Laboratory interviewers in April and May of 1957. Landlords selected for interview owned land in one of the farms in the sample and lived either in Iowa or in adjacent counties of the states bordering Iowa.6

CHARACTERISTICS OF THE SAMPLE

Analyses in preceding studies have assumed functional relationships between certain characteristics of farm operators and their economic security, their access to information and their attitudes toward the OASI program. These characteristics include age. net worth, educational attainment, level-of-living and major occupation.7

This study uses the same variables to facilitate comparisons of results with those of the earlier reports, as well as several other variables not previously used. The latter include marital status, sex, residential history, the adoption of certain improved farm practices, acceptance of certain social innovations and specific personal experiences with OASI.

Table 1 shows the age distribution of farm operators and farm landlords in the sample. As expected, farm landlords as a group are older than farm operators.

Present economic situation is one determinant of ability to provide for material needs during retirement. The study by-passes current income data but analyzes net worth and level-of-living as measures of the economic situation of the families interviewed. Table 2 illustrates the superior position of landlords. The median net worth of farm landlords is more than four times that of farm operators. Net worth, however, tends to be a function of age. It takes time to accumulate assets. Landlords as a class are older than farm operators and have had longer periods to accumulate assets, but when age is controlled, they still excel in net worth (table 3).

Table 4 shows the relative levels-of-living of farm operators and farm landlords. In this case, age, though a factor, is not so important, since level-of-living reflects both net worth and current income.

Educational attainment is an important factor influencing behavior that involves the acceptance of innovations. In general, evidence from studies of the acceptance of new ideas and practices by farm people have supported the conclusion that education stimulates acceptance of innovations. In a relatively homogeneous population, such as the farm population of Iowa, however, the association of age and educational attainment tends to be negative because of the historical evolution of public educational facilities and values regarding educational attainment. Therefore, statistical evidence of association between either edu-

⁶ There are 225 different landlords for the 346 farms in the sample. Sixteen are estates and therefore did not involve persons who could qualify for social security coverage. Twenty-four of the landlords live out of the state at such a distance as to make attempts to interview them too costly. The remaining 185 landlords live in the state or within the first tier of counties in bordering states. All but 19 of these were interviewed.

TABLE 1. PERCENTAGE DISTRIBUTION OF FARM OPERATORS AND FARM LANDLORDS BY AGE GROUP, IOWA, 1957.

Age group	Farm operators N=346	Farm landlord N=166	
Under 35	22	0	
35-44	24	5	
45-54		18	
55-64		31	
65-71	7	24	
72 and over	2	22	
Median age	46	63	

TABLE 2. PERCENTAGE DISTRIBUTION OF FARM OPERATORS AND FARM LANDLORDS BY NET WORTH, IOWA, 1957.

Net worth	Farm operators N=334°	Farm landlords N=147*
Under \$1,000†	15	0
1,000- 4,999		5
5,000- 9,999		3
10,000-19,999		15
20,000-29,999		16
30,000-49,999	9	14
50,000 and over	16	46
Total		99‡
Median		\$44.285

Excludes 12 farm operators and 19 farm landlords for whom net worth was not obtained.
 Includes 30 farm operators who reported debts equal to, or greater than,

Fercentage does not total 100 because of rounding.

TABLE 3. PERCENTAGE DISTRIBUTION OF FARM OPERATORS AND FARM LANDLORDS BY AGE GROUP AND NET WORTH, IOWA, 1957.

Age group	Net worth	Farm operators N=334°	Farm landlords N=147°
Under 50	Under 5,000	25	1
	5,000-19,999	23	0
	20,000-49,999	9 10	5
	50,000 and ov	er 4	10
50 to 64	Under 5,000	5	4
	5,000-19,999		11
	20,000-49,999		9
	50,000 and o	ver 9	17
65 and over	Under 5,000	1	2
	5,000-19,999		7
	20,000-49,999	3	16
	50,000 and ov	er 2	19
Total			101†

Twelve farm operators and 19 farm landlords either did not know or would not estimate their net worth.
 † Percentages do not total 100 because of rounding.

TABLE 4. PERCENTAGE DISTRIBUTION OF FARM OPERATORS AND FARM LANDLORDS BY LEVEL-OF-LIVING, IOWA, 1957.

Level-of- index		Farm operators N=333†	Farm landlords N=165†
Under 4	5	2	2
45-49		5	4
50 - 54		8	8
			44
			42
Media	n index	59.4	59.7

Belcher and Sharp revision of Sewell scale.
† Level-of-living data not obtained from 13 farm operators and landlords.

TABLE 5. MEDIAN NUMBER OF YEARS OF SCHOOLING OF FARM OPERATORS AND FARM LANDLORDS BY AGE GROUP, IOWA, 1957.

Farm	operators	Farm landlords		
Age group	median years of schooling	N	median years of schooling	
Under 40116	12.2	6	16.5	
40-49	8.8	23	12.0	
50-64	8.7	63	8.7	
65 and over 32	8.3	74	8.5	
All ages	8.9	166	8.7	

TABLE 6. PECENTAGE DISTRIBUTION OF FARM OPERATORS AND FARM LANDLORDS BY MARITAL STATUS, IOWA, 1957.

Marital status	Farm operators N=346	Farm landlords N=164*
Married	93	66
Never married	4	10
Widowed	3	24
Divorced		0

Marital status of two farm landlords not reported.

† Only one farm operator had been divorced

⁷ See footnote 5.

cational attainment or age and any other variable is sometimes misleading. Table 5 illustrates this. The median years of schooling of all operators is slightly higher than the median years of schooling of all landlords. But operators are younger. When the age factor is partially controlled, the median number of years of schooling of operators is less than that of the landlords in all four age groups. The educational advantage of landlords is particularly marked in younger groups—"under 40" and "40-50" years of age.

Marital status becomes an important consideration where income insurance is concerned. Table 6 shows the marital status of farm operators and farm landlords. The number of widowed persons is much higher among landlords. This is a function of the age and sex distributions. As noted, landlords are older; they include also a higher proportion of women—30 percent compared with less than 1 percent for the farm operators. The sample contained only two female farm operators.

Farm landlords represent several occupational groups (table 7). Those retired or unable to work form the largest group (30 percent). Nonfarm occupations account for 25 percent, but nearly as many (24 percent) are still active farmers. All but one of the landlords reporting housekeeping as their principal occupation were women, and 70 percent of the female landlords reported housekeeping as their principal occupations.

PARTICIPATION IN OASI

OASI taxes are paid on net earnings of \$400 or more of farm self-employment (up to \$4,800). The farmer has two alternative methods for computing his net earnings. He may use his actual net (income less expenses) or he may assume that his expenses are one-third of his gross income and consider two-thirds of his gross income as net earnings for social security purposes, up to a total of \$1,200. If a farmer's net earnings are less than \$400 under both these methods of computing net earnings, his farm self-employment earnings are not covered under social security, and he does not file a return or pay social security taxes on these earnings.

Approximately 9 out of 10 (89 percent) of the farm operators in the sample paid the tax on self-employment farm income in 1956. This includes at least 12 farm operators who used the optional method of computing income. The number using the option was no doubt higher than this, but it was impossible to ascertain how much higher because 44 percent of the sample did not recall on what basis their taxes were

TABLE 7. PERCENTAGE DISTRIBUTION OF FARM OPERATORS AND FARM LANDLORDS BY MAJOR OCCUPATION, IOWA, 1957.

Major occupation	Farm operators N=346	Farm landlords N=165*
Active farm operators	95	24
Nonfarm wage or business	3	25
Retired or unable to work	1	30
Keeping house	†	22
Armed forces	†	0

^{*} Occupation of one farm landlord not obtained.

computed. The large proportion not able to recall how their taxes were computed is explained by the fact that the vast majority (92 percent) employ a lawyer or tax consultant *to fill out their income and social security tax returns.

Of the 45 farm operators who did not pay a tax on 1956 farm income, two-thirds would have had sufficient income and could have paid the tax by exercising the option. Only 15 farmers in the sample were ineligible to participate on the basis of farm income because their farm incomes were below the minimum requirements.

Not all farmers who failed to pay taxes on 1956 farm income were without OASI protection, however. Eighteen (5 percent) received wages on which taxes were paid or paid taxes on income from a nonfarm business. Why some choose to pay on the nonfarm business and not on the farm income is not known. In any case, only 21 farmers, or 6 percent of the sample, had no quarters of coverage for the calendar year of 1956. Thirteen of these could have obtained coverage by using the optional method of computing farm income and paying the tax on that basis. Three of the 13 had paid the tax on farm income earned in 1955 and may have been unaware that failure to pay on 1956 income could jeopardize their protection status for the next 5 years.

For most farm families, social security coverage is limited to the income-earning activities of the head of the farm household. In about one-fifth of the sample households, however, other family members participated on the basis of separate earnings.

In 11 (or 3 percent) of the farm-operator households, a member other than the head had worked on another farm for wages and earned at least the minimum amount (\$100) reported for social security.

Nonfarm jobs were more common. In 57 (16 percent) of the farm-operator households, someone other than the head had earned a quarter of coverage on a nonfarm job during 1956. The number obtaining quarters of coverage was nearly as great as the number (69) of household heads working at a nonfarm job. Other than heads, 78 persons had nonfarm jobs, compared with 69 heads of households.

Only 17 farm-household heads and 9 other members of households in the sample had had nonfarm businesses or professions at which they earned \$400 or more during 1956.

In contrast to farm operators, the eligibility of farm landlords in OASI is far less clear-cut. The same income provisions hold, but in addition the landlord must materially participate in the production activi-

[†] Less than 1 percent.

Percentages do not total to exactly 100 because of rounding.

s The usual procedure for determining whether or not one is protected or "covered" by the law requires computation of total numbers of quarters of coverage. If this number is equal to half of the number of quarters of time elapsed since Jan. 1, 1951, he is covered. Because farmers were not included under the OASI program prior to 1955, a special ruling was set up for them which allows them to drop 4 quarters (1 year) during the first 5 years (1955-59). However, after dropping 1 year, they are subject to the same general rule as others; i.e., half of the quarters since Jan. 1, 1951, must be covered. Thus, farm operators can only miss 1 year of coverage between 1954 and 1960 and maintain continuous protection. Ten of the 13 farm operators who chose not to use the option and pay the tax on 1956 income have already missed 2 years. Unless they go back and revise their 1955 or 1956 income tax returns and pay the tax, they cannot achieve protection until sometime after 1960. If any of the three that did pay in 1955 should lack enough income to be eligible to file a social security tax return in any year between now and 1960, they would be in a similar situation.

ties on his farm to have his farm income count for social security purposes as net earnings from farm selfemployment; without material participation his income is considered as rental income which does not count for this purpose. Although these activities are not reported on the tax return, every landlord is likely to consider the criteria of material participation as they apply to him in making his decision as to whether his income is taxable for social security purposes and should be reported and the taxes paid.

Nearly half (47 percent) of the landlords interviewed had paid social security taxes on income received from rental farms in 1956. Landlords' claimed contributions to production activities on their rental farms during 1956 indicate that 65 percent of them probably satisfied the criteria of "material participation." When interviewed, only 55 percent knew that landlords could qualify for social security and pay the tax. Apparently, some landlords may not have taken part in the program because they were unaware of the possibility of doing so.

Eighteen farm landlords, or 11 percent of the sample, were receiving retirement benefits when interviewed. This is 23 percent of all landlords in the sample old enough to receive retirement benefits if otherwise eligible. Half of the 18 had passed their seventy-second birthdays, when they may ignore the limitations on earnings, but only three were still working, one as a farm operator, one in nonfarm wage work and one keeping house. The others were retired or unable to work. In contrast, half of the 60 non-recipient landlords over the minimum age were 72 years of age, but half were also still working. Women comprised one-third of the nonrecipients compared with one-sixth of the recipients of benefits. The average retirement payment for the 18 recipient landlords was \$80, with a range of from \$30 to \$148 per month.

Only nine farm operators (3 percent) were receiving retirement benefits. They comprised 32 percent of all farm operators 65 years of age or over. Only five of the nine were 72 or older. Their average retirement payment was \$88, a little more than landlords received. Four of the nine reported that the payments they were receiving were based on earnings as a self-employed farmer, and five said that their payments were based on other covered earnings.

KNOWLEDGE OF OASI

Whenever an innovation appears on the horizon in American agriculture from any source, an educational process begins which sooner or later brings knowledge and understanding of it to all potential beneficiaries.

The compulsory nature of social security has hastened the educational process with regard to OASI tax liability and the conditions of payment, but the educational process has lagged with regard to knowledge of certain benefits and the conditions of eligibility for benefits. The tax-paying time on income earned in the second year of social security coverage for farmers had just passed when the interviews were taken. In this relatively short period of time certain features had become widely known, while others had hardly become known at all.

The OASI program as it applies to farmers and to farm landlords is complex, involving numerous regulations and conditions of eligibility. A comprehensive test of knowledge would include several hundred questions, impractical to administer. Therefore, only 20 questions on the major features of the program were asked of nearly all persons interviewed. Abilities to give the correct answers varied greatly. A few knew too little about the program to jusify asking them all questions, and a few gave correct answers to all 20 questions.¹⁰

Analysis of responses to the knowledge questions indicates that both the operators and the landlords understand the retirement benefits provisions more fully than either the survivors' or disability benefits provisions. Either dissemination of information about the latter has been less effective or there has been less interest in these provisions, or both. (See table 8 for list of questions and proportions answering each correctly.)

THE PATTERN OF KNOWLEDGE OF OASI AMONG FARM OPERATORS AND FARM LANDLORDS

A meaningful analysis of the relationship between extent of knowledge and other characteristics or behavior of farm operators and farm landlords can be made when the pattern of knowledge forms a unidimensional scale; i.e., when knowledge items have a cumulative sequential relationship to each other. When this pattern is found, the possession of a more difficult or less widely known knowledge item indicates possession of all less difficult or more widely known items. One previous study (Kentucky) found this scale-type relationship to exist among knowledge items for the farm operators interviewed.¹¹

Analysis of Iowa data shows insufficient evidence of unidimensionality to satisfy the criteria of such a scale. A plausible explanation for the difference between Kentucky and Iowa data, aside from population differences, is that the passage of an additional year of time between the interviewing dates was enough to allow for the development of specialized interests in the program. Furthermore, new features added to the program (inclusion of landlords) made it more complex.

The evidence is clear that knowledge of OASI among Iowa farm operators and farm landlords reflects differential interests of various kinds of people in different phases of the program. For example, statistical analysis indicated evidence of association between age of the respondent and responses to 8

⁹ Questions on each of the criteria of "material participation" were asked of both the tenant and the landord. The estimate reported here is based on the author's interpretation of these responses. Although some general standards have been established, the concept of "material participation" is subject to some variation in interpretation. In practice, each case is handled separately and decided on the basis of evidence produced by an investigation. Therefore, the estimate given here should be considered as only an approximation.

¹⁰ All were asked one general knowledge question and, on the basis of responses to this question, 25, or 7 percent, of the farm operators and 29, or 17 percent, of the farm landlords were judged by interviewers to possess too little knowledge of the program to justify asking them the entire series of knowledge questions.

¹¹ See footnote 5.

TABLE 8. PERCENT OF FARM OPERATORS AND FARM LAND-LORDS ANSWERING CORRECTLY AND CORRELATION BETWEEN AGE AND RESPONSES TO INDIVIDUAL KNOWLEDGE QUESTIONS.

	Percent	giving			tion between nd response	
Question	Farm perators	Farm landlords	X^2	df	P	Direction
Can landlords	Salara	4.0	24.2			
participate?	65.3	54.8	14.0	6	< 0.05 > 0.02	Negative
Are tax payments	W 100					
by farm operato	76.9	59.6	9.0	6	< 0.20 > 0.10	
voluntary? Survivor's benefits		59.0	9.0	O	<0.20>0.10	
provided	81.8	70.5	11.1	6	< 0.10 > 0.05	
Age of eligibility	01.0	10.0	11.1	U	(0.10)0.00	
for retirement						
benefits	87.9	80.7	23.2	6	< 0.001	Positive
Age of eligibility	01.0				20.001	z obitir c
for men						
and women	63.0	62.0	11.5	6	< 0.10 > 0.05	
Necessary to pay in		02.0	11.0		(0.20) 0.00	
before receiving						
benefits?	84.1	76.5	12.1	6	< 0.10 > 0.05	
Can one continue	01.1				(0.10) 0.00	
to work and						
receive benefits?	84.4	76.5	10.2	6	< 0.10 > 0.05	
How much can	0.11.1		20.2		(0.120) 0.00	
one earn?	59.0	56.0	17.4	6	< 0.01 > 0.001	Positive
Are benefits	00.0				Z0.002 0.000	
uniform?	79.2	75.3	5.8	6	<0.50>0.30	
How often must		-	-			
farm income						
be reported?	77.5	59.6	26.0	6	< 0.001	Negative
Does widow need						
OASI number t	0					
receive benefits?	43.4	40.4	24.4	6	< 0.001	Negative
Who administers						
OASI program?	79.8	65.7	9.2	6	<0.20>0.10	
Is hired farm					1	
labor covered?	85.5	74.1	5.0	6	< 0.70 > 0.50	
Who pays tax						
on hired farm						
labor?	71.1	63.8	3.2	6	< 0.80 > 0.70	
Does the program						
include unem-						
ployment com-						
pensation?	45.1	37.3	21.7	6	< 0.01 > 0.001	Negative
Does the program						
include health						
and accident						
insurance?	63.3	48.2	26.5	6	< 0.001	Negative
Is boy under 21						
working for fath						
covered?	36.1	17.4	17.7	6	< 0.01 > 0.001	Negative
When is one fully			* 0 1		.0 20. 0 10	
insured?	14.4	10.8	10.4	6	< 0.20 > 0.10	
Does widow with						
disabled child						
receive payment		40.4	0.0	0	<0.00> 0.00	
for child?	46.0	49.4	2.6	6	< 0.90 > 0.80	
What happens						
when child reaches 18?	10.1	10.0	0 -	0	<0.00> 0.00	
reaches for	19.1	19.3	8.5	6	< 0.30 > 0.20	

of the 20 questions, 2 in a positive and 6 in a negative direction (table 8).

BASIS FOR GROUPING RESPONDENTS INTO KNOWLEDGE CATEGORIES

That the knowledge pattern fails to satisfy the criteria of unidimensionality does not preclude the use of knowledge scores for relating knowledge to other characteristics or experience items. An index of items which represents two or more dimensions of variation may still have predictive value. Other studies of OASI among farmers have used the number of questions answered correctly as a simple index of knowledge, a procedure which this study follows.¹²

Respondents were divided into five groups on the basis of the number of questions answered correctly: (1) no knowledge or too little knowledge to answer the entire series of questions; (2) very poorly inform-

¹² Plock, Louis A. and Ducoff, Louis J. Old age and survivors insurance program. Maine Agr. Exp. Sta. Mimeo Report No. 69. 1957; Skrabanek, R. L., Keel, Lloyd B. and Ducoff, Louis J. Texas farmers and old age and survivors insurance. Texas Agr. Exp. Sta. Bul. 886. 1958.

ed, those asked all questions but answering correctly 10 or less; (3) poorly informed, those answering correctly from 11 to 13 questions; (4) fairly well informed, those answering correctly 14 to 16 questions and (5) best informed, those answering correctly 17 to 20 questions.

Although criteria of unidimensionality were not met, one can describe categories of respondents in terms of the kinds of knowledge possessed; i. e., in terms of the questions most likely answered correctly. The following characterization of respondents in each knowledge category helps the reader picture a progression of knowledge from the fragmental state of the least informed to the relatively comprehensive knowledge level of the most informed. For brevity, not all items known or unknown to the majority of persons in each category are discussed, but only those best illustrating the difference between categories and the progression from one category to the next.

The last knowledge group in table 9 is composed of those farm operators and farm landlords with either no knowledge or too little knowledge to respond to the questions.¹³ This group included proportionally more farm landlords (17 percent) than farm operators (7 percent).

The next-to-last knowledge category, the very poorly informed, contained those knowing such relatively simple features of the program as the minimum retirement age and that one must pay taxes for a period of time to establish eligibility for benefits. Most of this group lacked knowledge of the nature of benefits, particularly survivor and disability benefits. They lacked knowledge of regulations on reporting income for tax purposes and of limits on earnings while receiving retirement benefits.

The third category, the poorly informed, knew that a retired person may earn some income and still receive benefits, but they were not well informed on the limits on such earnings. They knew that retirement benefits vary with the amount of income on which taxes have been paid and that farm laborers are included, but most of them were not clear as to who paid the tax on the farm laborer's wage. They knew that if a person who has paid into the program dies, his survivors may receive payments, but they did not know well the conditions for receiving retirement benefits. For example, most of them did not know that a widow may receive benefits without having a social security number of her own.

The second category, the fairly well informed, knew the principal limits on earnings while receiving retirement benefits and that a widow of a covered man

TABLE 9. PERCENTAGE DISTRIBUTION OF FARM OPERATORS AND FARM LANDLORDS BY KNOWLEDGE CATEGORY, IOWA, 1957.

Knowledge category Farm operate N=346		Farm landlords N=166
Best informed		13
Fairly well informed		30
Poorly informed		25
Very poorly informed	16	15
No knowledge*		17
Total		100

^{*} Or too little knowledge to answer the questions.

¹³ The decision to ask the questions or not was made by the interviewers on the basis of an introductory question.

may receive benefits without having a social security number. They also knew that a farm operator reports his earnings once a year for social security tax purposes, that he is required to pay the taxes if his net earnings are over the minimum of \$400 and that the federal government runs the program. Landlords and farm operators in this group differed in two respects. Landlords were more likely than farm operators to know that the age limit of retirement for women is different than for men. On the other hand, farm operators were more likely to know who pays the tax on farm laborers' wages than were landlords.

The first group, the best informed, generally knew everything known to the other groups, plus the fact that the OASI coverage does not entitle one to unemployment benefits or hospital and medical benefits but that the program does provide benefits for disabled children. They knew also that landlords may participate under certain conditions.

Farm operators as a group were somewhat better informed than landlords. The "best informed" farm operators comprised 20 percent of the total; whereas, the "best informed" landlords comprised only 13 percent of the total. Twenty-three percent of the farm operators were classed as having "no knowledge" or as being "very poorly informed" while 32 percent of the landlords were placed into those categories. Proportions in the other two groups were almost identical.

KNOWLEDGE OF OASI AND EDUCATION

Other studies of knowledge of OASI and many studies of related behavior have found an association between knowledge and years of formal schooling that persons with more formal schooling have more comprehensive knowledge of OASI.14 This is a logical relationship. In this study, however, cross tabulation of educational attainment and knowledge of OASI indicates a significant association in the expected direction for farm landlords, but not for farm operators. For the latter the association is in the right direction, but not greater than might occur by chance 1 out of 10 times (tables 10 and 11).

KNOWLEDGE OF OASI AND AGE

As indicated earlier, responses to 9 of the 20 questions were associated with the age of the respondent. Cross tabulation of knowledge scores and age shows a negative association for both farm operators and farm landlords (tables 12 and 13), which agrees with former studies. Because opportunity for formal schoo!ing has increased so rapidly during the lifetime of our older farmers, however, younger farmers in general have had more schooling than older farmers. Thus, any association between age or education and any other variable is subject to misinterpretation. With education controlled, association between age and knowledge disappears in all education On the other hand, when age is controlled, association between education and knowledge of OASI disappears in all age groups for farm oper-

TABLE 10. PERCENTAGE DISTRIBUTION OF FARM OPERATORS BY KNOWLEDGE OF OASI AND YEARS OF FORMAL SCHOOLING,

Years of schooling	Best informed N=66	Fairly well informed N=114	Poorly informed N=81	Very poorly informed N=57	No knowledge® N=25
Less than 8	9.1	13.2	8.6	17.5	4.0
8	30.3	36.8	48.1	50.9	60.0
9 to 12	56.1	46.5	38.3	28.1	36.0
13 or more .	4.5	3.5	4.9	3.5	0.0

 $^{\circ}$ Or too little knowledge to answer the questions. $X^2=17.98$ df = 12 0.20>P>0.10 NOTE: Although the data is presented in percentage form in this and subsequent tables of this type, chi-square was computed on actual numbers.

TABLE 11. PERCENTAGE DISTRIBUTION OF FARM LANDLORDS BY KNOWLEDGE OF OASI AND YEARS OF FORMAL SCHOOLING, IOWA, 1957.

Years of schooling	Best informed N=21	Fairly well informed N=50	Poorly informed N=40	Very poorly informed N=25	No knowledge* N=28
Less than 8	14.3	20.0	32.5	32.0	57.1
8	23.8	24.0	37.5	36.0	28.6
9 to 12	33.3	36.0	22.5	24.0	7.1
13 or more .	28.6	20.0	7.5	8.0	7.1

Or too little knowledge to answer the questions. $^2 = 26.01$ df = 12 0.02>P>0.01

TABLE 12. PERCENTAGE DISTRIBUTION OF FARM OPERATORS BY KNOWLEDGE OF OASI AND AGE, IOWA, 1957.

Age	Best informed N=67	Fairly well informed N=115	Poorly informed N=80	Very poorly informed N=57	No knowledge° N=25
Under 40 .	46.3	41.7	25.0	15.8	32.0
40 to 59	44.8	43.5	56.2	61.4	40.0
60 and ove	er 8.9	14.8	18.8	22.8	28.0

Or too little knowledge to answer the questions. 2 =22.63 df = 8 0.01>P>0.001 $X^2 = 22.63$

TABLE 13. PERCENTAGE DISTRIBUTION OF FARM LANDLORDS BY KNOWLEDGE OF OASI AND AGE, IOWA, 1957.

Age group	Best informed N=21	Fairly well informed N=50	Poorly informed N=40	Very poorly informed N=25	No knowledge* N=29
Under 50	33.3	18.0	12.5	12.0	3.4
50 to 59	47.6	24.0	22.5	20.0	10.3
60 to 64	4.8	14.0	17.5	24.0	17.2
65 and over		44.0	47.5	44.0	69.0

 $^{\circ}$ Or too little knowledge to answer the questions. $X^2=33.55$ df = 12 $P{<}0.001$

TABLE 14. ASSOCIATION OF YEARS OF SCHOOLING AND KNOWLEDGE OF OASI WHEN AGE IS CONTROLLED, AND ASSOCIATION OF AGE AND KNOWLEDGE OF OASI WHEN YEARS OF SCHOOLING ARE CONTROLLED, FARM OPERATORS AND FARM LANDLORDS, IOWA, 1957.

Age controlled	Knowledge score and years of schooling	Years of Knowledge score schooling controlled and age
	Farm ope	erators
Under 40 .	X ² =0.852 0.50>P>0.30	Less than 8 X ² =3.55 0.10>P>0.05
40-65	$X^2=0.0009$ P>0.99	8 years $X^2 = 0.011$ 0.95>P>0.80
65 and over	$X^2=0.645$ 0.50>P>0.30	$9-12$ $X^2=0.644$ 0.50>P>0.30
		13 or more $X^2=0.232$ 0.70>P>0.50
E IN THE	Farm lan	dlords
Under 50 .	$X^2=3.18$ 0.10>P>0.05	Less than 8X ² =0.216 0.70>P>0.50
TO 04	370 0 00	0 700 0 700

 $X^2=8.33$ 0.01>P>0.001 $X^2=2.149$ 50-64 X²=0.133 0.80>P>0.70 X²=0.06 0.80>P>0.70 X²=3.06 9-12 65 and over ... 0.20 > P > 0.1013 or more 0.10>P>0.05

ators and all but one age group (50-64) for landlords (table 14). Seemingly, differences between younger and older farmers in attitudes and experiences other than those associated with formal schooling explain the differences in knowledge.

Differences in education of landlords appear to be more important than age distribution in explaining differences in knowledge. Occupational experience

¹⁴ See footnote 5.

may be a related source of differences. Younger farm operators and farm landlords were less likely to confuse OASI with Workmen's Compensation or Unemployment Insurance than were older farmers and farm landlords. This confusion is understandable because Unemployment Insurance is also a part of the social security program, and all three programs involve supervision by government agencies, contributions of employers and payment of benefits to employees. Work histories indicate that both the younger farm operators and the younger farm landlords were more likely to have had experience with nonfarm work, which could explain why they were less likely to confuse the three programs than were the older operators and landlords.

The stage of the family life cycle is another possible source of difference in experience that could account for age differences in knowledge. As might be expected, the younger farmers were more correctly informed about survivors' benefits than were older farmers. Younger farmers were more likely to have families with children at home. On the other hand, responses to only two questions were positively associated with age-minimum age for retirement and how much one can earn and still receive retirement benefits (table 8).

SOURCES OF INFORMATION ABOUT OASI

A new practice or a new program applicable to large numbers of people poses the task of disseminating pertinent information to those who will use it. Rapid dissemination of essential information is especially important when the program is compulsory.

Information sources used by farmers are mainly of two kinds: mass media ("one-way" communication) and personal ("two-way" communication).

Each person interviewed was asked three questions regarding sources of information: First, "Where (or how) did you first hear about social security for farmers?" Second, "Have you gotten any information from any other sources?" (To assist the informant in recall, a list of possible sources was recited; those recognized as sources were recorded and the informant was asked to indicate any other sources that may have been used.) Finally, they were asked "From which source have you gotten the most information?"

MAGAZINES AND NEWSPAPERS - THE MOST IMPORTANT SOURCES OF FIRST KNOWLEDGE

Magazines, newspapers and other "mass media" have been identified as important sources of first information in the process of adoption of a variety of new ideas or new practices. This pattern holds for social security information among farmers and farm landlords in Iowa. Both operators and landlords ranked newspapers, magazines and radio first, third and fourth, respectively, as sources of first knowledge (table 15).

Typically, personal contacts have not been important as sources of first knowledge about new ideas or new practices. OASI information for farmers appears to

TABLE 15. PERCENTAGE DISTRIBUTION OF FARM OPERATORS AND FARM LANDLORDS BY SOURCE OF FIRST INFORMATION ABOUT OASI FOR FARMERS, IOWA, 1957.

Source of first information #	Farm opera N=338	
Newspapers	36	32
Tax consultants†	30	30
Magazines		17
Radio		14
Friends, neighbors and relative	es 7	9
Meetings or night school	4	1
TV		3
Social Security official	2	1
Other		6

* First source of information not obtained from 8 farm operators and

I farm landlords.

I farm landlords.

Includes lawyers, bankers, public accountants and others who offer their services in preparing income tax returns.

Less than 1 percent.

Total is more than 100 since some persons were unable to choose between two sources as first source and therefore gave both.

be an exception to this rule. Persons who assist farm operators and farm landlords with income tax returns, such as lawvers and bankers, were the second most frequently mentioned source of first information about OASI. The compulsory payment of social security taxes and the large proportion of farm operators and farm landlords who have someone compute their social security taxes as part of the process of preparing income tax returns no doubt account in part for the high rank of "tax consultants" as sources of first information.

MOST FREQUENTLY MENTIONED SOURCES OF INFORMATION

As with most new ideas, a wide variety of "sources" was used, and no one source of information dominated the choices. The source most often mentioned was mentioned by only 28 percent of the informants.

The term "source" applies here in a very general sense. In a more restricted sense one may argue that the only source of information about OASI is the United States Department of Health, Education and Welfare, which administers the program, and perhaps Congress, which created the law. "Source of information" as a concept becomes partially wedded to the concept of medium of communication. Thus, newspapers are often referred to as sources of information; whereas, from a more restricted point of view, the newspaper is a medium of communication, and the author of the article is the source. This confusion does not concern any one primarily interested in listing ways in which people receive information, but it does become crucial when imputing relative importance to different sources.

A simple example will illustrate. A county extension director has a regular column in the local paper or a regular spot on the local radio. Those who know the county extension director personally are inclined to think of him as the source of ideas expressed in the column or on the radio program; whereas, those who do not know him are more likely to remember the newspaper or the radio as the source. Interpretations of data on the most frequently mentioned source of OASI information should be made with this in mind. Any inference regarding relative importance or effectiveness will include sizable errors because of it.

The frequency count of the sources mentioned by farm operators and farm landlords indicates more the range of sources used than their ranking in order of importance (table 16).

SOURCES OF MOST INFORMATION

Although subject to the limitation just described, data on sources identified by respondents as having provided the most information about the program are a rough measure of the relative importance of different sources. Magazines and newspapers, in that order, are the sources of most information for both operators and landlords. Tax consultants, neighbors, friends and relatives and Social Security representatives follow in that order (table 17). The Extension Service or the county extension director was mentioned as a source of most information by only five farm operators and by no landlords. This, of course, does not take into account the newspaper and magazine articles and the radio programs that may have originated within the Extension Service.

DIFFERENTIAL EFFECTS OF INFORMATION SOURCES ON KNOWLEDGE OF OASI

The relative "effectiveness" of a source of information in supplying needed knowledge is of concern to Extension Service and other agencies with educational and informational programs. A gross measure of "effectiveness" is the level of knowledge of those persons reporting a given source as their source of most information. Respondents were placed in two categories according to the number of knowledge questions answered correctly. Those who had answered 14 or more of the 20 correctly were placed in one category and those who had answered less than 14 in the other. Distributions in the two categories for different sources of most information then were compared.

Farm operators and farm landlords who received most of their information about OASI from newspapers were most likely to score high on the knowledge questions (67 percent in the high-knowledge category). Those who received most of their information from friends, neighbors and relatives were least likely to score high on knowledge (32 percent). Other sources ranked in between these two extremes in "effectiveness" in the following order: pamphlets, Social Security officials, radio, magazines and "tax consultants" (table 18).

The importance, to administrators of the OASI program and others interested in extending OASI knowledge, of the low "effectiveness" of "tax consultants" as a source of information becomes apparent if it is noted that 30 percent of the respondents reported this as their source of most information. Apparently "tax consultants" either do not have a comprehensive knowledge of the program or they impart only certain highly specialized items of information to their farmer clients. The rather limited and specialized use farmers make of tax consultants in the preparation of in-

TABLE 16. SOURCES OF OASI INFORMATION BY FREQUENCY OF MENTION BY FARM OPERATORS AND FARM LANDLORDS, IOWA, 1957.

		Number m	Number mentioning the source				
Source	•	Farm opera	tors Farm land	lords			
Newspapers		272	117				
Magazines		233	100				
Tax consultants	•	170	77				
Television		120	45				
Friends and nei	ighbors	113	48				
Radio		81	65				
Pamphlets		73	33				
Relatives		61	32				
OASI officials		46	38				
Organization m	eetings	33	8				
	n director or othe						
	rsonnel		7				
Employer		12	5				
Others (landlore	d. real estate						
agent, etc.)	o, rem estate	22	7				

One Lawyers, bankers and others who prepare or assist farmers with the preparation of income tax returns.

TABLE 17. PERCENTAGE DISTRIBUTION OF FARM OPERATORS AND FARM LANDLORDS BY SOURCE OF MOST INFORMATION ABOUT OASI.

Source of most information	Farm oper N=33	
Magazines	29	26
Newspapers	19	18
Tax consultants	16	17
Neighbors, friends and relatives	8	11
Social Security representatives		6
Radio		4
Pamphlets	5	5
Meetings (including night school)	3	1
Television		4
Employer	2	4
Other		4
Total		100

Source of most information not obtained from 14 operators and 9 landlords.

TABLE 18. NUMBER AND PERCENTAGE DISTRIBUTION OF FARM OPERATORS AND FARM LANDLORDS BY KNOWLEDGE CATEGORY AND SOURCE OF MOST INFORMATION ABOUT OASI, IOWA, 1957.

Source of most	Knov	vledge c	ategory	Percent of
information	High	Low	Total	respondents in high
Newspapers	60	29	89	67.4
Pamphlets	21	13	34	61.7
OASI representatives	21	14	35	60.0
Radio	15	11	26	57.7
Magazines		67	137	51.1
Tax consultants	30	63	93	32.2
Neighbors, relatives				
and friends	13	28	41	31.7
Employers		4	12	0
Extension director	3	2	5	0
Television	6	8	14	0

Percentages not included because of small N's.

come tax forms and computation of tax payments supports the latter view. In contrast to "tax consultants," Social Security representatives and pamphlets (consisting mainly of those issued by the Social Security Administration) apparently are very effective in imparting comprehensive information. County extension directors and employers may also be relatively "effective" in this respect. They are included in table 18, but the numbers of respondents using them are too small to justify a definite conclusion.

EFFECT OF MOTIVATIONAL FACTORS ON KNOWLEDGE

As important as the source of information are the personal experience and situational factors that motivate one to seek information. For both farm operators and landlords, several such factors are associated with knowledge scores.

¹⁵ An important factor in this kind of measure is the nature of the instrument used in establishing knowledge levels. The 20 questions used in this study are not intended to be a comprehensive test of all knowledge of OASI but rather a sample of items pertinent to participation of the farmer or landlord in the program. No attempt was made to weigh the items.

KNOWLEDGE OF OASI AND INTEREST IN COVERAGE

Ninety-nine percent of the farm operators and 80 percent of the farm landlords in the sample had social security numbers. The period when the social security number was obtained apparently is associated with knowledge. Sixty-five percent and 60 percent, respectively, had had their numbers 2 years or more at the time of the interview, indicating that a considerable proportion may have gotten social security numbers for other employment before 1954 when selfemployment in farming became a criterion for eligibility. Farm operators and farm landlords who scored high on the knowledge questions generally had had their social security numbers longer than those who scored low. Higher knowledge scores were directly associated with extent of time farm operators had had social security numbers, but the association was significant at only the 10-percent level of confidence (tables 19 and 20).

Only 45 percent of the farm operators, compared with 55 percent of the landlords, had checked with someone concerning OASI coverage on their own work (tables 21 and 22). No doubt, some respondents had not gone to the trouble of checking with anyone because they considered their present knowledge sufficient. For those in the best informed category this may have been a correct assumption, but in general those sufficiently motivated to seek information from some other person had more comprehensive knowledge.

KNOWLEDGE OF OASI AND PAYMENT OF OASI TAXES

Although those who had paid the social security taxes were somewhat more likely to be among the high scorers on knowledge, the number of farm operators who had not paid was too small to make a statistical test of significance feasible. Among farm landlords, the number who had not paid the taxes was larger, and correlation analysis indicates that those who had paid the tax were more likely to have high knowledge scores (table 23).

KNOWLEDGE OF OASI AND ACQUAINTANCE WITH A BENEFICIARY

Apparently knowing a person who is currently receiving benefits provides another effective learning experience. Sixty percent of the farm operators and 78 percent of the farm landlords knew a current beneficiary. Both operators and landlords with the higher knowledge scores were more likely to have known a beneficiary (tables 24 and 25).

In both cases there is statistical evidence of a highly significant relationship.

KNOWLEDGE OF OASI AND AWARENESS OF REGULAR VISITS OF OASI REPRESENTATIVES

Some indication of the importance of a personal motivation to seek information and perhaps the importance of the kind of source is found in the associaTABLE 19. PERCENTAGE DISTRIBUTION OF FARM OPERATORS BY KNOWLEDGE OF OASI AND LENGTH OF TIME THEY HAD HAD A SOCIAL SECURITY NUMBER, IOWA, 1957.

Length of time had number	informed			Very poorly informed N=56	
2 years or less	. 22	35	39	43	44
Over 2 years	. 78	65	61	57	56

 $^{\circ}$ Or too little knowledge to answer the questions. $X^2 = 7.226$ df = 4 P<0.10>0.05

TABLE 20. PERCENTAGE DISTRIBUTION OF FARM LANDLORDS BY KNOWLEDGE OF OASI AND LENGTH OF TIME THEY HAD HAD A SOCIAL SECURITY NUMBER, IOWA, 1957.

Length of time had number	informed			Very poorly informed N=19	No No knowledge* N=10
2 years or less	16	37	41	47	80
Over 2 years		63	59	53	20

TABLE 21. PERCENTAGE DISTRIBUTION OF FARM OPERATORS BY KNOWLEDGE OF OASI AND WHETHER OR NOT THEY HAD CHECKED WITH SOMEONE REGARDING OASI COVERAGE ON THEIR OWN WORK, IOWA, 1957.

Have you checked with someone?				Very poorly informed N=57	
Yes	. 50	56	40	35	31
No	50	44	60	65	69

 $^{\circ}$ Or too little knowledge to answer the questions. $X^2 = 10.11$ df = 4 P<0.05>0.02

TABLE 22. PERCENTAGE DISTRIBUTION OF FARM LANDLORDS BY KNOWLEDGE OF OASI AND WHETHER OR NOT THEY HAD CHECKED WITH SOMEONE REARDING OASI COVERAGE ON THEIR OWN WORK, IOWA, 1957.

Have you checked with someone?				Very poorly informed N=23	
Yes	. 52	65	64	39	35
No	. 48	35	36	61	65

 $^{\circ}$ Or too little knowledge to answer the questions. $X^2 = 11.218$ df = 4 P<0.05>0.02

TABLE 23. PERCENTAGE DISTRIBUTION OF FARM LANDLORDS BY KNOWLEDGE OF OASI AND BY WHETHER OR NOT THEY HAD PAID OR PLANNED TO PAY OASI TAXES ON FARM INCOME, IOWA, 1957.

Have you paid or do you plan to pay the tax?	Best informed N=21	Fairly well d informed N=48		Very poorly informed N=25	
Yes	. 29	63	65	40	24
No or don't kno	w 71	37	35	60	76

TABLE 24. PERCENTAGE DISTRIBUTION OF FARM OPERATORS BY KNOWLEDGE OF OASI AND ACQUAINTANCE WITH SOMEONE WHO WAS CURRENTLY RECEIVING BENEFITS.

Do you know anyone who is currently receiving benefits?		Fairly well informed N=112		ery poorly informed N=56	No knowledge* N=14
Yes	71	71	62	45	50
No	29	29	38	55	50

 $X^2 = 22.01$ df = 4 P<0.001

TABLE 25. PERCENTAGE DISTRIBUTION OF FARM LANDLORDS BY KNOWLEDGE OF OASI AND ACQUAINTANCE WITH SOMEONE WHO WAS CURRENTLY RECEIVING BENEFITS.

Do you know anyone who is currently receiving benefits?	Best informed N=20	Fairly well informed N=49		Very poorly informed N=24	No knowledge* N=25
Yes	95	88	82	54	64
No	5	12	18	46	36

tion of knowledge scores with awareness of the regular visit of an OASI representative to the county. Respondents were not asked if they had talked with the OASI representative, only if they were aware of his

Among both farm operators and farm landlords, the higher the knowledge score the more likely was the respondent to be aware of the OASI representative's regular visits (tables 26 and 27). This does not necessarily mean that those who knew of the itinerant service had availed themselves of it. No doubt some had, and, as was noted in a previous section, the OASI representative is one of the most effective sources of comprehensive information. For others, however, this may merely mean that they learned of the itinerant service while acquiring knowledge of the OASI program through other sources.

KNOWLEDGE OF OASI AND OTHER SITUATIONAL **FACTORS**

Three other situational factors are associated with level of farm landlords' knowledge - marital status, occupation and level-of-living.

Table 28 indicates that landlords with high knowledge scores are more likely to be married and living with their spouses than are landlords with low knowledge scores. This suggests a probable chain of causal relationships. Persons who are married and living with their spouses apparently are more interested in an income insurance program such as OASI, and this interest, in turn, leads to more comprehensive knowledge. There are confounding factors, however. Level of knowledge appears also to be responsive to variations in the opportunity to participate in the program. This becomes evident when major occupation and sex are included in the analysis.

Table 29 relates knowledge level to major occupation. The best informed are most likely to have nonfarm occupations, and the least informed are most likely to be housekeepers. Farm landlords with nonfarm occupations, no doubt have had longer experience with OASI and more time to acquire knowledge of it than have landlords who are active farmers. Retired persons, unless their former occupations were nonfarm, plus those whose major occupation is housekeeping, have had limited opportunity to participate in the program. The housekeepers, especially, have had very limited opportunity. All but one of the latter group were women, and most of them were widows. Information on the occupation of their deceased spouses was not obtained, but presumably the majority were farmers or retired farmers.

The extension of OASI coverage to farm landlords has not provided women landlords with an opportunity to participate comparable to that of men landlords. This is not necessarily because women landlords are less willing to meet the criteria of material participation but because custom makes it much more difficult for them to do so. Many farm women, as wives, no doubt have contributed materially to the management of the farm enterprise, but, as landlords, neither their tenants nor the general public expect them to take an active part in the management of production activities. In the area of physical work, the restrictions placed on women by custom and tradition are even more severe.

Table 30 relates knowledge level to level-of-living index. The best informed landlords are the most likely to have relatively high levels-of-living. Here again the effects of sex and occupation confound the relationship. Male landlords have higher levels-of-living, suggesting that the association between sex and level-of-

TABLE 26. PERCENTAGE DISTRIBUTION OF FARM OPERATORS BY KNOWLEDGE OF OASI AND AWARENESS OF THE REGULAR VISITS OF AN OASI REPRESENTATIVE TO THE COUNTY, IOWA,

Does a representa- tive of OASI visit your county regularly?	informed	airly well informed N=115		Very poorly informed N=57	No knowledge* N=16
Yes	. 79	59	53	32	19
No or don't know	. 21	41	47	68	81

TABLE 27. PERCENTAGE DISTRIBUTION OF FARM LANDLORDS BY KNOWLEDGE OF OASI AND AWARENESS OF THE REGULAR VISITS OF AN OASI REPRESENTATIVE TO THE COUNTY, IOWA,

Does a representa- tive of OASI visit your county regularly?	informed	airly well informed N=49	informed	Very poorly informed N=25	
Yes No or don't	. 95	71	73	60	15
know	. 5	29	27	40	85

TABLE 28. PERCENTAGE DISTRIBUTION OF FARM LANDLORDS BY KNOWLEDGE OF OASI AND MARITAL STATUS, IOWA, 1957.

Marital status	Best informed N=21	Fairly well informed N=50		Very poorly informed N=25	No knowledge* N=28
Married	86	82	68	56	29
Never married	9	12	7	4	14
Widowed	5	6	25	40	57

TABLE 29. PERCENTAGE DISTRIBUTION OF FARM LANDLORDS

Major occupation	Best informed N=21	Fairly well informed N=50	Poorly informed N=40	Very poorly informed N=25	No knowledge* N=29
Nonfarm	52	32	27	8	4
Farm	29	26	25	12	24
Retired	14	32	30	36	31
Housekeeping	5	10	18	44	41

TABLE 30. PERCENTAGE DISTRIBUTION OF FARM LANDLORDS BY KNOWLEDGE OF OASI AND LEVEL-OF-LIVING, IOWA, 1957.

Level-of- living index	Best I informed N=20			Very poorly informed $N=25$	No knowledge* N=25
Under 56	5	12	33	24	56
57-59	30	29	32	48	24
60-62		59	35	28	20

TABLE 31. PERCENTAGE DISTRIBUTION OF FARM LANDLORDS BY SEX AND BY LEVEL-OF-LIVING, IOWA, 1957.

		Level-of-	living index	
Sex	Low N=19	Medium N=20	High N=51	Very high N=68
Male	63	55	61	82
Female	37	45	39	18

living explains at least part of the interdependence of knowledge and level-of-living (table 31).

CHARACTERISTICS NOT ASSOCIATED WITH KNOWLEDGE OF OASI

With but one exception, relationships between knowledge of OASI and other factors have been discussed only if statistical analysis indicated evidence of association at the 0.05 level of confidence. Tests were also run on other factors, some of which have been found to be associated with knowledge of OASI in previous studies. Table 32 presents these factors; the X^2 values and the probability of association for farm operators and farm landlords are shown separately.

Knowledge of OASI was associated significantly with the net worth of farm operators in Kentucky, ¹⁶ with land tenure of operators in Texas ¹⁷ and with both level-of-living and percentage of farm operators' family income from farms in Maine. ¹⁸

The association between net worth and knowledge for the Iowa sample is in the same direction as for the Kentucky sample; i. e., farm operators and farm landlords with high net worth were more likely to have a high level of knowledge, but the association lacks statistical significance.

Maine farm operators deriving the largest proportion of their family income from the farm scored higher on the knowledge questions; whereas, in Iowa the opposite was true for both farm operators and farm landlords. In the case of farm operators, however, the association was not strong enough to reject the null hypothesis.

Texas owner-operators had higher knowledge than tenants or share cropers; whereas, Iowa data show no relationship between land tenure status and knowledge of OASI. The differences between the areas in the social status significance of tenure may explain this.

Levels-of-living, although associated with farm landlords' knowledge of OASI, were not associated with the farm operators' knowledge in Iowa. For the latter, the association was in the same direction (i.e., operators with high level-of-living index tended to have higher knowledge scores) but did not meet the test of significance. A probable explanation is the inadequacy of the index used for measuring level- ofliving of Iowa farm operators. Farm people in Iowa have a relatively high level-of-living, so high that the scale used, the modified Sewell short form, does not distribute households very widely along a continuum from high to low. To illustrate, 43 percent had the highest score possible. Among farm landlords in Iowa and farm operators in Maine there is less homogeneity in levels-of-living, and the distribution is not so highly skewed.

ONLY ABOUT HALF WANT MORE INFORMATION

When asked what features of the OASI program they would like to know more about, half of the farm operators and 45 percent of the farm landlords replied that they could think of nothing (table 33). A few of these explained that they did not even know what information about OASI they should seek. One-fourth of the farm operators and 6 percent of the landlords said they wanted to know more about everything concerning the program. The remainder named specific features of the program.

HOW TO FIGURE BENEFITS IS MOST WANTED INFORMATION

Among those desiring specific information, onefifth of the farm operators and one-fourth of the landlords wanted to know more about OASI benefits. Only 11 percent of the landlords stating a specific want (6 percent of all landlords) wished to know more about the conditions under which a landlord may participate. No other item was mentioned by as many as 10 percent. Questions raised by five or more persons were: How long is it necessary to pay the tax before being eligible for benefits? Does it have a health insurance provision? Is it permanent? Is it compulsory? How can I get the benefits high enough to live on? How much can I earn and still receive benefits? What happens if the program's obligations exceed its income? Several people did not want more information but expressed a wish that the program be written up or presented in a simpler and more understandable manner so that they might better understand the information already available.

OPINIONS OF OASI

One reason for the delay in extending OASI coverage was the prevalence of opinion that farmers would

TABLE 32. ASSOCIATION BETWEEN KNOWLEDGE OF OASI AND SELECTED CHARACTERISTICS OF FARM OPERATORS AND FARM LANDLORDS, IOWA, 1957.

	Fa	rm operators	Fa	rm landlords
Characteristic	X^2	Probability	X^2	Probability
Net worth	16.36	0.20>P>0.10	12.14	0.20>P>0.10
Percent of family income from farm	20.52	0.10>P>0.05	15.77	0.05>P>0.02
Tenure	1.53	0.90 > P > 0.80		The second
Mobility*	5.90	0.70 > P > 0.50	0.39	0.99>P>0.98
Level-of-living	18.44	0.20 > P > 0.10	See ta	ble 30

TABLE 33. PERCENTAGE DISTRIBUTION OF FARM OPERATORS AND FARM LANDLORDS BY KIND OF OASI INFORMATION DESIRED, IOWA, 1957.

Kind of information	Farm operators N=345*	Farm landlords N=163*
Nothing	48	45
Everything	26	26
Everything	20	10
Conditions for payment of taxes	6	6
How a landlord can participate	2	6
How to get benefits high enough to live on	0	5
Limits on earnings while receiving benefits	1	1
How permanent is it?	1	1
Is it compulsory?	1	0
Other		0

[•] Information not obtained from 1 farm operator and 3 landlords. Percentages do not equal 100 because some respondents reported more than one item.

¹⁶ Christiansen, John R., Coughenour, C. Milton, Ducoff, Louis J. and Coleman, A. Lee. Social security and the farmer in Kentucky. Ky. Agr. Exp. Sta. Bul. 654, 1958.

 $^{^{17}}$ Skrabanek, R. L., Keel, Lloyd B. and Ducoff, Louis J. Texas farmers and old age and survivors insurance. Texas Agr. Exp. Sta. Bul. 886. 1956.

 $^{^{18}}$ Plock, Louis A. and Ducoff, Louis J. Old age and survivors insurance program. Maine Agr. Exp. Sta. Mimeo Report No. 69. 1957.

not approve of such a program. The studies conducted during the early 1950's indicated that a majority of farmers in the areas studied did approve of such a program. 19

Corn Belt farmers, however, were not polled in these studies.

Since 1954, most Iowa farm operators have been required to pay the OASI taxes, and since 1956 many farm landlords have had the opportunity to obtain coverage on income from rental farms. What they like or dislike about the program, their suggestions regarding desired change and their general opinion of it reflect their experiences with the program. Thus, all persons interviewed were asked a series of questions on these points. The questions were asked at the end of the interview, and those who, earlier in the interview, had indicated a faulty or inadequate knowledge of the program were given a brief explanation of its objectives and operation before they were asked their opinions.

THE MAJORITY APPROVE OF OASI

In response to the question, "What is your over-all opinion of the social security program as it applies to farm people?" 73 percent of the farm operators and 80 percent of the farm landlords expressed general approval (table 34). Only 7 and 4 percent, respectively, disapproved; 5 and 9 percent, respectively, said either that they did not know what opinion to express or that the program was so new that they had not had time to develop an opinion. The remaining 15 percent of the farm operators and 7 percent of the landlords gave an "o. k., but" type of answer. They approved in part but had some definite reservations about the desirability of certain features of the program.

MOST LIKED FEATURE IS RETIREMENT BENEFITS

When asked what they liked about OASI, the most frequent answer was "retirement benefits," with 28 percent of the farm operators and 32 percent of the farm landlords naming that feature (table 35). (An additional 14 percent of the farm operators and 15 percent of the landlords said that they liked the clause enabling older persons to qualify even though they had not paid into the program very long.) In contrast, only 16 percent of the farm operators and 4 percent of the landlords specified survivors' benefits. Only 2 percent of the farm operators and no landlords mentioned disability benefits. Some (12 percent of the operators and 14 percent of the landlords) said that they liked all the benefits of the program.

As to the general income insurance feature of OASI, 16 percent of the farm operators and 9 percent of the landlords liked it, but did not mention specific benefits. An additional 6 percent of the farm operators and 7 percent of the landlords may have had about the same thing in mind when they said that they like the

forced savings feature.

Nearly one-fifth (18 percent of farm operators and 19 percent of the landlords) either didn't know what they liked or liked nothing about the program. Note

TABLE 34. PERCENTAGE DISTRIBUTION OF FARM OPERATORS AND FARM LANDLORDS BY OVER-ALL OPINION OF OASI, IOWA, 1957.

Opinion	Farm operate N=346	ors	Farm landlords N=166
Approve	73	- 15 4	80
"O.K., but" qualified appro	val 15		7
Don't know or no opinion .	5		9
Disapprove	~		4

TABLE 35. PERCENTAGE DISTRIBUTION OF FARM OPERATORS AND FARM LANDLORDS BY FEATURE OF OASI MOST LIKED, IOWA 1957

Feature most liked	Farm operators N=342*	Farm landlords N=154*
Retirement benefits	28	32
Income insurance		9
Survivors' benefits		4
Older persons can qualify even though they have not paid	in	
very long	14	15
Whole program-all the benef	fits 12	15
Forced savings	6	7
Other	3	3
Don't know	8	15
Don't like any of it	8	7

Information not obtained from 4 farm operators and 12 landlords.

that these proportions are larger than those expressing disapproval of the program.

MOST DISLIKED FEATURE IS "WINDFALL FEATURE"

When asked, "What don't you like about the social security program?," 31 percent of the farm operators and 32 percent of the farm landlords replied that there was nothing that they disliked (table 36). Another 16 and 20 percent, respectively, were undecided, hadn't thought about it enough or said they didn't know enough about it to say what they did not like.

Among those who did report a dislike, the largest proportions (23 percent of all farm operators and 14 percent of all landlords) said that as the program now operates, young farmers must pay the tax for a long time to be eligible for the same benefits as persons presently near or at retirement age who are becoming or have become eligible after paying very nominal sums in taxes. This is the reciprocal of one of the most frequently mentioned liked features.

The relative few responding with dislikes named a wide variety of specific "disliked" features. The compulsory feature, the red tape and the uncertainties of the future of the program caused by frequent changes in the law were high on the list. Others thought the age limit for retirement too high, benefit payments too low or the taxes too high. A few expressed dislikes

TABLE 36. PERCENTAGE DISTRIBUTION OF FARM OPERATORS AND FARM LANDLORDS BY FEATURE OF OASI MOST DISLIKED, IOWA, 1957.

Feature most disliked	Farm operators N=332*	Farm landlords N=161*
Nothing	31	32
Don't know or undecided	16	20
Windfall or relief feature		
for older persons †	23	14
Too much red tape		13
Changes too frequently	5	4
Changes too frequently	5	1
Tax too high	4	4
Compulsory	3	5
Variable benefits	2	1
Other		3

¹⁹ See footnote 4.

which were more in the nature of suggestions for expanded coverage and additional benefits. One such feature, disability benefits, had already been added to the program.

FARM OPERATORS APPROVE COVERAGE FOR FARM LABORERS

Of the farm operators interviewed, 87 percent expressed approval of the inclusion of farm laborers in the OASI program. Only 15 operators, less than 5 percent, disapproved; the other 8 percent did not express a definite opinion because, as they said, they knew to little about it or had not had occasion to think about it enough to form an opinion. Significantly, only 18 percent of the operators interviewed had employed any hired labor during 1956, and only 15 percent had paid 1 or more hired men as much as \$100 in cash wages in 1956 and therefore qualified as employers.20

Although a large majority of farm operators favored social security for hired farm workers, farm operators qualifying as employers were less favorable to the inclusion of hired farm laborers than those not qualifying. Only 78 percent of the former approved, compared with 90 percent of the latter.

"LOWER THE AGE LIMIT" IS THE MOST FREQUENTLY SUGGESTED CHANGE

Sixty percent of the farm operators and 70 percent of the farm landlords interviewed suggested no changes in the OASI program (table 37). Among those with suggestions, the largest group (29 percent of all farm operators and 7 percent of all farm landlords) favored lowering the age limit for receiving retirement benefits.

Various suggestions, all of which came from as many as five persons but none of which came from as

²⁰ The 1956 amendments provide new criteria of coverage for farm workers. In 1956 and previously, the cash wages of farm workers were to be reported for social security purposes if they were \$100 or more and were paid the workers by a single employer. After 1956 cash wages paid to a farm worker are covered if (1) the amount of such wages, including both price-rate and time-rate cash pay in a calendar year, was \$150 or more, or (2) the employee worked for the employer on 20 or more days during the year for cash wages figured on a time hasis.

TABLE 37. PERCENTAGE DISTRIBUTION OF FARM OPERATORS AND FARM LANDLORDS BY SUGGESTED CHANGES IN OASI, IOWA, 1957.

20 11.25 2771		
Suggested change	Farm operators N=346	Farm landlords N=157*
None	60	70
Lower minimum retirement age	29	7
Age-graduated scale for payment		
of taxes	3	3
Raise the \$1,200 limit on		
income after retirement	3	2
Freeze tax at present rate	2	3
Make benefits uniform		+
Make participation voluntary	3	0
Increased benefits	2	2
Improve administration	2	2
Add health benefits	2	+
Simplify the program		2
Decrease time period for establishi	ng	
eligibility for benefits	1	0
Let the farmer out	1	0
Hired workers keep own records	+	+
Lower the benefits	#	+
Lower the income base for taxes	. +	Ó

Responses not obtained from nine farm landlords.
 Less than 1 percent.

many as 15 persons, include the following in order of frequency: (1) set payments up on an age-graduated scale so that young persons will pay proportionally less tax and older persons will pay more; (2) raise the \$1,200 limit on earnings while receiving payments; (3) freeze the tax at present rates; (4) make benefits uniform; (5) make it voluntary; (6) increase benefits; (7) improve administration of the program; and (8) add health benefits. Several other suggestions made by fewer than five persons include: (1) lower the \$4,200 income base; (2) decrease the time necessary for making tax payments to establish eligibility; (3) lower benefits; (4) make hired workers keep own records; and (5) let the farmer out of the program.

FACTORS ASSOCIATED WITH OPINIONS OF OASI

To explain differences in opinions of the OASI program, opinion scores were correlated with various other characteristics of the farm operators and farm landlords interviewed.

OPINIONS AND KNOWLEDGE OF OASI

Insofar as distrust of the unfamiliar disappears as knowledge increases, a positive association tends to arise between favorable opinions and level of knowledge of a new idea, the acceptance of which is spreading. This appears to be the general situation with OASI; however, the relationship is statistically significant only for farm landlords. The relationship, although in the right direction, was not significant at the 0.05 level for farm operators (tables 38 and 39).

A possible explanation of the difference between farm operators and farm landlords in the knowledgeopinion relationship is that participation is compulsory for most farm operators, whereas, a major element of choice in farm landlords' participation exists under present law. Thus, some farmers who do not approve of the program may still have gained extensive knowledge for business reasons only.

Tests were also made for evidence of association between opinion of OASI and a number of personal and socio-economic factors. Table 40 shows the results

TABLE 38. PERCENTAGE DISTRIBUTION OF FARM OPERATORS BY KNOWLEDGE OF OASI AND OPINION OF OASI, IOWA, 1957.

Opinion	Best informed N=65	Fairly well informed N=114	Poorly informed N=80	Very poorly informed N=57	No knowledge N=24
Approve	. 83	81	76	72	58
No opinion or disapprove	. 17	19	24	28	42

Or too little knowledge to answer the questions $X^2 = 8$ df = 4 P < 0.10 > 0.05

TABLE 39. PERCENTAGE DISTRIBUTION OF FARM LANDLORDS BY KNOWLEDGE OF OASI AND OPINION OF OASI, IOWA, 1957.

Opinion	Best informed N=20	Fairly well informed N=50	Poorly informed N=39	Very poorly informed N=24	No knowledge* N=25
Approve	. 95	86	97	71	48
No opinion or disapprove	. 5	14	3	29	52

^o Or too little knowledge to answer the questions. $X^2 = 30.09$ df = 4 P < 0.001

TABLE 40. ASSOCIATION OF OPINION OF OASI AND SELECTED CHARACTERISTICS OF FARM OPERATORS AND FARM LANDLORDS, IOWA, 1957.

	F	arm	operators	F	arm	landlords
Characteristic X	2	df	Probability	X^2	df	Probability
Age	1.24	12	0.30>P>0.20	6.70	6	0.50>P>0.30
Years of school 7	.30	4	0.30 > P > 0.20	11.03	8	0.20>P>0.10
Net worth 4	1.30	6	0.70 > P > 0.50	4.44	4	0.50 > P > 0.30
Payment of OASI						
	2.57	2	0.30 > P > 0.20	3.98	2	0.20>P>0.10
Percent of family income from						
	1.76	4	0.50 > P > 0.30	6.00	6	0.50>P>0.30
Level-of-living 5	5.65	6	0.50 > P > 0.30	5.65	6	0.50 > P > 0.30
Mobility 1	.82	2	0.50 > P > 0.30	1.46	2	0.30 > P > 0.20
	9.17	4	0.10 > P > 0.05		0	
Farm practices						
index 18	3.13	12	0.20>P>0.10		0	
Nonfarm practices						
index24	1.34	12	0.02>P>0.01		0	
Marital status		0		5.92	4	0.30>P>0.20
Sex		0		7.77	2	0.02 > P > 0.01
Major occupation .		0		8.73	6	0.20 > P > 0.10
Aware that landlords can participate in				0.70	5	0.20/1/0.10
OASI		•		4.66	2	0.10>P>0.05

Not applicable.

of this analysis. Several of these factors associate significantly with knowledge levels, but only two, the nonfarm practice index of farm operators and sex of farm landlords, are associated with opinion.

The association between sex of landlords and opinions of OASI appears logical against the background of the previously discussed limitations on participation of women, particularly widows who are landlords. Apparently, these limitations are a source of unfavorable opinion as well as an effective block to knowledge of the program. The differences in patterns of association between knowledge and opinion and other factors suggest the hypothesis that certain cognitive elements reflected by the knowledge score and certain affective elements in the opinion score are independent variables. The next section on the relationship between knowledge and opinion of OASI and the acceptance of farm and nonfarm practices explores this more fully.

KNOWLEDGE AND OPINION OF OASI AND THE ACCEPTANCE OF FARM AND NONFARM PRACTICES

The process by which persons learn of new ideas or new ways of doing things, evaluate them and decide to accept and use them or not to accept and use them, long has occupied the attention of educators. In recent years, sociologists have applied the theories and research methods of sociology to this process as it occurs among adult farm people and have discovered some of the apparent regularities in the process of acceptance of agricultural technology.

Insofar as these regularities reflect general patterns in the educational process, they should apply to other learning opportunities confronting farm people. This general hypothesis prompted the inclusion in this study of a series of questions about the acceptance of selected farm practices and questions regarding the acceptance of three nonfarm practices. The objective was to test the hypothesis that the same factors which affect the acceptance of new farm practices in general explain the acceptance of new nonfarm practices, including OASI.

An index of acceptance of recommended farm practices was constructed from data on use of seven rather widely applicable practices. A similar index was constructed for three nonagricultural practices. Table 41 indicates the practices and the level of acceptance of each.

The farm practice index is associated in the usual way with education and levels-of-living (tables 42 and 43). The index of nonfarm practices is also associated with the same two items (tables 44 and 45). In addition, the index of nonfarm practices is strongly associated in a negative direction with age (table 46); whereas, the farm practices are not so associated for this sample.

Because participation in the social security program is compulsory for most farm operators, construction of an index of acceptance comparable to those developed for farm practices and for the other three nonfarm practices is impossible. Knowledge of the program and opinions of it, however, may serve as two different kinds of evidence of acceptance. The former is a measure of the cognitive factors, and the latter is a measure of the affective factors in acceptance.

Knowledge of the OASI program is associated with acceptance of farm practices but not with acceptance of nonfarm practices (tables 47 and 48). The reverse is true of opinions of OASI. Opinions are associated with acceptance of nonfarm practices but not with the acceptance of farm practices (tables 49 and 50). This suggests that acceptance of farm technology is influenced more by cognitive than affective factors and, in turn, that acceptance of social innovations is influenced relatively more by affective than by cognitive fact-

RETIREMENT PLANS OF FARM OPERATORS 50 TO 64 YEARS OF AGE

With continued expansion of life expectancy, more and more employed persons face the eventual prospect of retiring. Some make plans for it; others do not.

An underlying assumption of this study was that farm operators who had reached the age of 50 and had not yet retired would be making some plans for retirement and for their financial security after retirement. A compulsory public program for providing some income security after retirement is certain to have influenced these plans. Unfortunately, since no data exist on what the retirement plans of these farm operators would have been had they not been included under the social security program in 1954, definite conclusions about the impact of OASI on farmers' retirement plans are not possible. Some idea of the current place of OASI in their retirement plans comes from their responses to a series of questions asked this age group.

RESIDENCE PLANS

All but 15 of the 103 farm operators in the 50 to 64 age group had definite plans on where they would live when they retired or reached the age of 65. Of those who had definite plans, 64 (73 percent) planned to continue living on a farm (56 of them on their present farm) and only 24 (27 percent) had plans to move

TABLE 41. LEVEL OF ACCEPTANCE OF SELECTED FARM PRACTICES AND SELECTED NONFARM PRACTICES AMONG FARM OPERATORS' HOUSEHOLDS, IOWA, 1957.

Farm practices	Proportion of those to whom practice is applicable who have used it			
Use 2,4-D in weed control			87	
Feed antibiotics to hogs			73	
Soil test			64	
Commercial nitrogen on corn			61	
Chemical control of soil insects			53	
Vaccinate hogs for erysipelas			48	
Increase planting rate on corn as				
fertilizer rate is increased			38	
Use ladino clover in pasture mixture			27	
Nonfarm practices				
Chest X-ray for TB			90	
Have any of your children (living			00	
at home) had polio shots?			70	
Health or hospital insurance			40	
Wives under 50 who had had polio shots			25	
Husbands under 50 who had had polio	shots		18	

TABLE 42. PERCENTAGE DISTRIBUTION OF FARM OPERATORS BY FARM PRACTICE INDEX AND BY YEARS OF SCHOOLING, IOWA, 1957.

Farm		Years of scho	oling
practice index	Less than 8 N=39	8 N=144	9 or more N=161
High	31	22	36
Medium		46	46
Low		32	18

 $X^2 = 14.69$ df = 4 P<0.01>0.001

TABLE 43. PERCENTAGE DISTRIBUTION OF FARM OPERATORS BY FARM PRACTICE INDEX AND LEVEL-OF-LIVING, IOWA, 1957.

Farm		Leve	el-of-living	
practice index	Low N=40	Medium N=42	High N=106	Very high N=144
High	15	19	34	35
Medium	37	48	43	45
Low	. 48	33	23	20

 $X^2 = 17.52$ df = 6 P<0.01>0.001

TABLE 44. PERCENTAGE DISTRIBUTION OF FARM OPERATORS BY NONFARM PRACTICE INDEX AND BY YEARS OF SCHOOLING, IOWA, 1957.

		Years of school	oling	
Nonfarm practice index	Less than 8 N=39	8 N=144	9 or more N=161	
High	23	19	29	
Medium high	18	15	22	
Medium		26	22	
Medium low	23	29	16	
Low		11	11	

 $X^2 = 36.6$ df = 6 P<0.001

TABLE 45. PERCENTAGE DISTRIBUTION OF FARM OPERATORS BY NONFARM PRACTICE INDEX AND BY LEVEL-OF-LIVING, IOWA, 1957.

Nonfarm	Level-of-living				
practice index	Low N=40	Medium N=42	High N=106	Very high N=144	
High	. 7	24	24	26	
Medium high	. 7	19	22	19	
Medium	. 28	12	20	27	
Medium low	. 30	33	22	20	
Low	. 28	12	12	8	

 $X^2 = 25.0$ df = 12 P<0.02>0.01

TABLE 46. PERCENTAGE DISTRIBUTION OF FARM OPERATORS BY NONFARM PRACTICE INDEX AND BY AGE, IOWA, 1957.

		Age					
Nonfarm practice index	Under 40 N=117	40-49 N=95	50-59 N=76	60 or over N=58			
High	45	17	8	2			
Medium high		17	18	22			
Medium	24	24	25	12			
Medium low		19	40	50			
Low		23	9	14			

 $X^2 = 106.5$ df = 12 P<0.001

TABLE 47. PERCENTAGE DISTRIBUTION OF FARM OPERATORS BY KNOWLEDGE OF OASI AND FARM PRACTICE INDEX, IOWA, 1957.

Farm practice index	Best informed N=67	Fairly well informed N=115		Very poorly informed N=57	No knowledge* N=25
High	34	36	20	32	12
Medium	55	50	40	28	48
Low	11	14	40	40	40

 $^{\circ}$ Or too little knowledge to answer the questions. $X^{2}=36.99 \quad df=8 \quad P{<}0.001$

TABLE 48. PERCENTAGE DISTRIBUTION OF FARM OPERATORS BY KNOWLEDGE OF OASI AND NONFARM PRACTICE INDEX, IOWA, 1957.

Nonfarm practice index	Best informed N=67	Fairly well informed N=115	Poorly informed N=80	Very poorly informed N=57	No knowledge* N=25
High	36	21	20	14	16
Medium high .	14	21	11	25	28
Medium	25	20	28	19	16
Medium low .	19	23	26	25	32
Low	6	15	15	17	8

 $^{\rm o}$ Or too little knowledge to answer the questions. $X^2=22.75~{\rm df}=16~{\rm P}{<}0.20{>}0.10$

TABLE 49. PERCENTAGE DISTRIBUTION OF FARM OPERATORS BY OPINION OF OASI AND FARM PRACTICE INDEX, IOWA, 1957.

Farm practice index	Approve N=134	Qualified approval N=129	No opinion or disapprove N=79
High	22	38	27
Medium	51	42	39
Low	27	20	34

TABLE 50. PERCENTAGE DISTRIBUTION OF FARM OPERATORS BY OPINION OF OASI AND NONFARM PRACTICE INDEX, IOWA, 1957.

Nonfarm practice index	Approve N=134	Qualified approval N=129	No opinion or disapprove N=79
High	21	21	25
Medium high		25	11
Medium		20	15
Medium low	22	24	25
Low		10	24

 $X^2 = 21.17$ df = 8 P<0.01>0.001

to town. Of those who planned to move to town, the majority (63 percent) were thinking of moving to a small town (under 2,500 population).

Eighty-nine percent planned to continue to live in a separate household. Only 6 percent admitted the possibility of living with children or other relatives or having children live with them. The other 5 percent were unable to say with whom they expected to live.

PLANS TO CONTINUE FARMING

With so many operators planning to continue living on their present farms after retirement or reaching the age of 65, it is not surprising that 46 operators (45 percent) expected to continue doing some farming after 65. Their farming will be on a reduced scale, however. Of the 46 who expected to continue farming, only 11 expected to continue doing as much as now. Among the 35 operators planning to continue farming on a reduced scale, the most popular (15 operators) method of cutting their operations was to change management arrangements; 14 expected to cut their operations by reducing the number of acres operated, 11 by keeping fewer livestock and 4 by hiring more labor.

CHANGES IN FARMING OPERATIONS TO QUALIFY FOR SOCIAL SECURITY

One direct measure of the impact of social security on farm operators' plans is the degree to which they have altered, or plan to alter, their operations, in order to qualify. Only one farm operator had changed his operations, and eight intended to change for this reason. The most frequently proposed changes would increase their taxable incomes and thus enhance their positions when they become eligible for benefits. Apparently the OASI program is having little direct effect on current farming operations. This is not true, however, of plans for anticipated retirement income.

ANTICIPATED INCOME AND SOURCES OF INCOME AFTER RETIREMENT

Of the operators 50 to 64 years of age, 77 percent anticipated income from OASI after retirement, 45 percent from farm rental and 50 percent from farm operation. Age is associated with anticipated source of income. More of the younger operators (aged 50 to 59) than the older (60 to 64) operators in this group expected to receive OASI income after retirement.

Only 44 farm operators in the 50-to-64 age group could estimate their probable incomes after retirement, or age 65. The average estimate was \$222 per month, while 38 could estimate the amounts they expected to receive from social security (although 77 reported OASI as an anticipated source of income). Their average estimate was \$113 per month, or almost exactly half of the anticipated retirement income. Interestingly enough, the 34 operators who responded to the question said that they expected to earn an equal amount in salary, wages or in self-employment. Although all but 8 of the 346 farm operators in the sample had investment programs, only 27 percent of

the 103 in the 50 to 64 age group reported investments as an anticipated source of current living expenses after retirement. This supports the author's opinion that farm people tend to regard investments primarily as estate-building rather than as primary sources of income after retirement. It also may reflect a tendency to define return from the number one investment of farm people (farm real estate) as earned income rather than investment income.

RETIREMENT PLANS OF FARM OPERATORS 65 YEARS OF AGE AND OVER

Of the 32 sample farm operators 65 years of age and older, only 9 currently received OASI retirement payments. Nearly half (15) had rental income from land rented out, 8 from savings and investments and only 1 from nonfarm work. Only 5 relied wholly on farm operation as a source of income.

The addition of supplemental income from farm rents, savings, investments and OASI to the income from farming at a reduced level of operation fits well with the custom of gradual retirement of farmers. ²¹ Owner-operators have an advantage over tenant- operators in that they can look forward to more sources of income during retirement. It is not surprising, therefore, that more tenants than owner-operators look forward to OASI retirement benefits.

RESIDENCE PLANS

Since some farm operators 65 and older are already partially retired, they have already made changes in residence. One-fourth had changed residence at some time during the past 7 years. Some adjustment in residence was still anticipated. About 15 percent expected to move from their present farms within the next few years. Two-thirds, however, planned to continue living right where they were, and the balance were undecided. Like the younger group, most of them did not anticipate having to double up with their children or someone else in a two-family household or having to seek housing in a home for the aged. Nine out of 10 of those responding to the question expected to continue to live in separate households.

PLANS TO CONTINUE FARMING

Approximately one-fifth of the 65-and-over age group already either have reduced the acreage operated or changed their management arrangements so as to reduce their responsibilities. One-third expected to retire within the next few years, and another third expected to cut operations without retiring. The remaining one-third anticipated no change or could not say what they expected to do.

Although some changes had been made already in farming operations and others were planned, respondents in this age group did not identify social security as a factor motivating the changes.

²¹ For a discussion of retirement roles, see Taylor, John S. Farmer's view of retirement in relation to post-retirement work activity. N. W. Mo. State College Bul. Vol. LII, No. 4. May 1958.

Farm operators 65 years of age and older were asked whether their current incomes were adequate for a comfortable living for themselves and their spouses. Two-thirds said that they were. Operators were not asked to give the amount of their current incomes, but they were asked to estimate their monthly income over the next few years. Estimates ranged from \$100 to \$500 for the 14 who responded to the question. Their average estimated monthly income was \$257. They expected to earn \$141 of this and receive \$94 from OASI payments. Payments to the nine operators already receiving OASI payments, or \$88 per month.

RETIREMENT ROLES FOR FARM OPERATORS

Historically, retirement as a status to be anticipated by practically all people belongs to relatively recent times. Even 50 years ago the relative number of people who could expect to live to age 65 was considerably smaller than today. Fifty years ago only 60 percent of the white males 40 years old could expect to live to be 65, compared with 70 percent in 1950.²² The retirement role and, consequently, retirement plans are then in part a function of expanded life expectancy.

In contrast to other occupations, retirement for a farmer is often a very gradual process. For farm owners, particularly, continued participation in an active occupational role on a reduced scale is common. For example, in Iowa in 1950, 40 percent of the rural farm males 75 and over, in contrast to 16 percent of the urban males of this age group, were counted in the labor force. Labor participation proportions for the other two age groups beyond retirement age (65 to 69 and 70 to 74) were 22 and 31 percentage points higher, respectively, among rural farm males than among urban males. 23 To the extent that the ideal of farm ownership, particularly of a farm of adequate size to meet the criteria of an economic unit or larger can be achieved, farmers may continue to look forward to a gradual retirement process. In areas of highly commercialized agriculture, however, as capital requirements increase, the opportunity to acquire ownership is declining. Tenant farmers particularly must face a retirement experience more comparable to the nonfarm wage or salary worker.

Taylor found that in the cash-grain area of Illinois, farmers saw little opportunity for the full tenant to achieve gradual retirement. ²⁴ The possibilities other than full retirement for the full tenant include a reduced acreage, which a benevolent landlord might allow, and farm work for wages or nonfarm work for wages. Normally, these would be occupational roles

RETIREMENT PLANS OF FARM LANDLORDS

The landlords in this sample were an older group than the farm operators. Nearly one-third (30 percent) of the landlords were retired at that time of the interview. Another one-fifth (22 percent), mainly women, were not in the labor force but gave their occupation as housekeeping. This leaves slightly less than half (48 percent) gainfully employed. These were nearly equally divided between farming and non-farm work (see table 8).

As expected, more of the 65 and older group were retired — 47 percent compared with 12 percent of those 50 to 64 years of age. On the other hand, only 46 percent of the latter group expected to continue working after the age of 65. This is not substantially different from the proportion of those 65 and over in the labor force. This suggests that extension of OASI coverage to farm landlords has not affected intentions to retire. It has, however, influenced expectation regarding income and sources of income.

Farm rental, OASI payments, savings and investments, farm work and nonfarm work are the principal current or anticipated sources of income for farm landlords.

Only about one-fourth (24 percent) of those 65 and older were receiving OASI retirement payments when interviewed, but three-fourths of those 50 to 64 expected to receive OASI retirement payments after 65. The difference between the experience of the older group and the expectations of the younger is partially explained by the greater difficulties the older group has had in qualifying for participation in the OASI program. In the 65-or-older group, 47 percent had retired, and 17 percent were housewives during 1956. Thus, nearly two-thirds (64 percent) of the older group had to qualify for OASI coverage on the basis of income earned prior to 1956. It would have been impossible for any of these to have qualified as self-employed farmers, because 1955 was the first year of coverage for farm operators.

Comparison of the intentions of the 50-to-64 year group and the experience of the 65-and-older group of landlords indicates that the OASI program, in effect, may reduce the number of operator landlords who will continue as active farmers after 65. To illustrate, in both the younger and the older groups 20 percent were active farmers, but only 11 percent of those 50 to 64 years of age expected to continue as farm operators after reaching 65.

Landlords 50 to 64 years of age estimated that they would require an average of \$227 per month to maintain themselves and their spouses comfortably during

involving some labor but little or no "management" function. In contrast, the farm owner may gradually achieve retirement status by reducing labor almost to zero while retaining major management functions. The extension of OASI coverage to farm landlords is a recognition of this role pattern. It becomes very difficult, in view of these circumstances, to determine when a person passes from the partially retired (little or no labor plus partial management) stage to full retirement. OASI uses the criterion of material participation in making this decision.

²² U. S. Department of Health, Education and Welfare. Abridged life tables United States, 1950. Vital Statistics—Spec. Reports Nat. Summaries. Vol. 37, No. 12. November 1953.

 $^{^{23}}$ Source: U. S. Census: 1950. Population, part 15: Iowa, table 66, pp. 15-167.

²⁴ Taylor, John S. Farmer's view of retirement in relation to post-retirement work activity. N. W. Mo. State College Bul. Vol. LII, No. 4. May 1958.

retirement. This is comparable to the estimate made by farm operators in the same age group. Landlords, however, expected to receive higher incomes during retirement than did farm operators of the same age-\$350 per month compared with \$222. The landlords also anticipated slightly higher retirement payments from OASI - \$118 per month compared with \$113.

Landlords 65 and older anticipated an average income of \$213 per month during the next few years. They expected OASI retirement payments averaging \$96, or \$15 more per month than the average for landlords receiving payments at the time of the interview. They expected also to earn an average of \$187 per month.

IMPLICATIONS

Relatively high farm income levels and the compulsory features of the law have combined to produce a high rate of participation in the OASI program among Iowa farm operators - higher than in Kentucky, Texas and Maine, where previous studies were made.

Knowledge levels indicate that the retirement features of the program have attracted the most attention and that understanding of survivors' and disability benefits especially needs to be increased. Increasing knowledge of the latter will not necessarily guarantee full acceptance of the program, because the greater interest in the retirement features appears to reflect a value pattern which does not emphasize monetary provisions for the protection of survivors. No doubt, as experience with the program increases with time, one may expect more interest in survivors' and disability benefits. A major factor accounting for high interest in retirement benefits relative to survivors' and disability benefits has been the sudden inclusion of large numbers of older farmers in a retirement program and the public attention drawn to those who paid in small sums in the form of taxes and began almost immediately to draw out substantial benefits.

Acceptance of OASI among farm landlords has been remarkably rapid. There is need for more information, however, about the relatively complicated criteria of "material participation." Unless custom or the present interpretation of the law, or both, are changed, many farm landlords, particularly widows,

will remain unable to participate.

The most effective program for further extending knowledge of OASI to farm people will combine mass media, especially newspapers and OASI pamphlets, with oral presentations. "Tax consultants" have wide opportunity for oral communication but to date have not been a very good source of comprehensive knowledge. A program to encourage "tax consultants" to provide more comprehensive information in either oral or printed form appears advisable in view of their numerous contacts with farm people at income tax

In terms of acceptance by farm people, OASI appears to have more in common with other social innovations such as health insurance, polio shots and TB X-rays than with improved farm technology. There is some evidence in this study that effective programs designed to gain acceptance of social innovations need to use a different approach than programs designed to increase acceptance of improvements in farm tech-

nology.

As agriculture becomes more commercialized and the opportunities for farm ownership decrease, income insurance programs such as OASI will become increasingly important in farmers' plans for retirement. Evidence indicates that OASI has already increased the rate of retirement. It is not possible to say whether or not further lowering the age of eligibility for retirement benefits would accelerate the rate. In any case, the majority of farmers and farm landlords past 50 have given OASI an important place in their plans for retirement income. There seems to be little question that, as opportunity for the gradual retirement via the transition from owner-operator to operator-landlord to landlord decreases, the importance of income insurance programs such as OASI will increase.



