BORN TO BE POOR: PLACE OF BIRTH AND NUMBER OF SIBLINGS AS FACTORS IN ADULT POVERTY

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Since 1947 the Census Bureau has published annual income distributions for U.S. families and unrelated individuals, classified by a variety of economic and demographic characteristics. These distributions relate to money income before taxes as reported in household interviews with a representative national sample of the population. The income statistics have been used--and no doubt abused--in a variety of ways to assess relative economic well-being of diverse population groups. Increasingly in recent years, focus has been on the number and characteristics of the poor with a view to identifying predisposing factors commonly associated with low income status and, if possible, to suggest bases for remedial action. In point of fact much of the ongoing work has served to quantify or corroborate facts already known rather than to discover new ones. Even at that, much of what we presumably "know" remains, like a Scotch verdict, "not proven." One reason for the moot state of some set theorems is that available data for a family (or individual) refer only to the recap for a given year. As such, the income data conceal fluctuations during the year, and reveal nothing about what went before or is likely to come after. While some longitudinal studies have begun, none have yet spanned the entire spectrum from childhood to old age. Our annual poverty analyses share in these limitations.

The poverty definition currently used in official Census Bureau Statistics is a money income criterion only. It has as its base a matrix of presumed income needs or poverty thresholds for families of different size and composition first published by the Social Security Administration in 1965. 1/ The matrix itself, however, derives from normative concepts of outlays for food relative to money income originally enunciated in July 1963 in an article "Children of the Poor." That discussion included the following assertion:

"There is a growing awareness that as the Nation grows richer the dollar gap between the average income and the income of our poorest citizens widens...when such poverty befalls families rearing children--the citizens of the future--the social consequences reach far beyond the present deprivation." 2/

Obvious enough to seem almost platitude, that assertion nevertheless remained largely a hypothesis. A subsequent article, "The Aged Negro and His Income," posited further that many aged poor do not come newly to their current destitution but merely continue on a path long evident as their manifest destiny. 3/ That was but another enunciation of conventional wisdom, and conventional wisdom, to be sure, is not always wise.

Lacking confirming evidence, the statements cited may stand as utterances from an "in love with the sound of his own words" department, for proof comes hard. Today we make a preliminary report on work in progress that seems to quantify in economic terms the thesis that what happens to the child lingers on in the man. The evidence, to be sure, remains incomplete and largely circumstantial: an undisputable verdict must come only after long longitudinal study, welldesigned and containing all the right questions, or from an ingenious well-designed retrospective probe. The data now under analysis, laboriously snipped from this survey and that, can suggest at most avenues warranting further inquiry. As an alternative form of outcome analysis, they can indicate only the orders of magnitude and direction of differences rather than exact dimensions--not only because the scope is limited, but because in an upward mobile and changing society, the intensity of relationships will perforce change over time.

Our annual poverty series, available for 1959 and subsequent years, continues to point up the young and old as more vulnerable to poverty than persons in the middle years. The numbers continue to show, despite much improvement, that children in large families are two or three times as likely to be growing up poor as children in small families; families of a head--male or female, white or black--with little formal schooling are subject to a risk of poverty much greater than families of a head who has at least a high school diploma.

In 1974, for example, one-third of families with 5 or more children under 18 had income below the poverty level, compared with one-tenth of families with one or two children. Among families headed by a man, one in five of the families with five or more children was poor compared with one in twenty of the smaller families; with a woman as head, three-fourths of the families with 5 or more children were poor, compared with one-third of those with one or two youngsters. All told, in 1974 fewer than one in ten of all families with children included as many as five or more, but youngsters from families this large accounted for three in ten of all children counted poor.

In like fashion, poverty rates for families classified by educational attainment of the head ranged from 3 percent for those completing at least one year of college to 17 percent of those who had at most gotten through elementary school. More bluntly, in our credential Society, a high school diploma is almost a prerequisite to any decent-paying job. In 1974, families with no diploma were three times as likely to be poor as families with a diploma. And finally, familiar to any student of family income statistics is

the fact of lower income prevailing among families residing in rural areas and small towns than among those in large cities or their suburbs. 4/

What connection might one make between these sets of facts? Education of the parent is known to influence that of the children. It has been noted too--or surmised--that persons with higher education seem more successful in keeping the size of their family within the limits they prefer. And, our own early analyses in SSA of poverty statistics suggested, children of the poor were likely to leave the parental home at an earlier age and with less education than children in more fortunate circumstances. 5/ It seems reasonable to postulate that the larger the family, the less likely it is that children will get to college or perhaps even to finish high school. It seems plausible, too, that children born in areas where families tend to be relatively large and income small--as in small towns or rural areas--might get less opportunity for an education than children more selective in their choice of a parental home!

To investigate such a possibility, the Social Security Administration arranged to add two questions on the April 1968 Current Population Survey: household heads (who by definition must either head a primary family or be living as a primary unrelated individual) were asked how many brothers and sisters they had when they were growing up and where they were born, as to both geography and degree of urbanization. Other items such as current residence, occupation, education and the like were already being ascertained as a matter of course.

Although it is admittedly bad form to begin with apologies, let's get them out of the way first. It has taken a long time--too long--for the information to be coded, and the analysis is still not completed. Moreover, in order to associate 1967 family income with the new questions, only heads also interviewed in March 1968 could be studied--thus reducing sample households to three-fourths the number in a normal CPS and creating problems of appropriate weights for the household matched. 6/ Then there are the exclusions: most men normally become the head of a household or a family--using the Census Bureau's rather old-fashioned mechanical definition--and remain so throughout most of their adult lives. On the other hand, many women are listed as wives rather than heads, so that data for women in this study are incomplete. In March 1974, for example, the designation household head would so identify five out of six of all males 18 or older--two-thirds of those under 35, and 95 percent of those age 35 or older. By contrast, the same designation includes only about one in four of all women aged 18 or older, ranging from only one in six for those 18-34 to about four in five of those 55 or older.

From hindsight (even more perfect after seeing the results), it is clear, too, that the classification of urbanization used was inept. (See next column)

One need not be bothered by the fact that few persons will know the "true" population at the

Was...born in

a suburb near a large city

a large city (250,000 or more)

a middle or small-size city (50,000-250,000)

a small city (under 50,000)

the open country but not on a farm

on a farm

time of their birth--the answers serve only as a crude sorting device. However, there are other difficulties with the answers to the questions. Our metropolitan area (SMSA) concept of inner city and suburb is quite new. Many adults--in particular, the older ones--reporting birthplace as "in a suburb near a large city," obviously were relating the nearest city they could think of to identify what may well have been the outskirts of a small town. Others really do mean the suburb surrounding a large city. Moreover, the resources and opportunities in our largest cities today may not bear the same relationship to smaller places that they once had.

Despite such limitations, the study results still shine through. Data from other special surveys and the Decennial Census of 1970 are also being studied to test some of the findings, but cannot all be detailed here. This is a report of work still in progress. We start first with the men: Ten percent of all male primary individuals and family heads were poor in 1967, using the official income criteria to take account of family size and composition. 7/ Classified by place of birth and number of brothers and sisters in the childhood home, the proportion of male household heads in poverty ranged from 4 percent for those born in a large city, and with no brothers or sisters or only one in the childhood family, to 20 percent of men born on a farm and growing up with at least six brothers and sisters, as the illustrative figures below indicate:

Birthplace	Male household heads by number of siblings			
	0-1	2-3	4-5	6 or more
	(Percent poor 1967)			
All ages.....	7	8	11	14
Large city.....	4	5	7	7
Middle-size city.	5	5	6	9
Small city.....	6	6	8	10
Suburb.....	8	5	5	9
Open country.....	10	10	16	15
Farm.....	16	5	18	20

Some of these differences obviously are not in themselves statistically significant, but the fact that the pattern holds more or less for family heads and unrelated individuals separately, and for the three broad age groups used for

summarization--namely under 35, 35-54, 55 and older--is significant. Even more revealing is the fact that the incidence of poverty in each subgroup tended to rise as the reported number of brothers and sisters increased (table 3).

A similar pattern holds, too, with just enough exceptions to make it look good, for women as well as men, young as well as old, even though the data for women are incomplete, excluding as they do all married women with the husband present.

Presumably, young women who are family heads--and in Census terms this means women with no husband present in a family of two or more persons--by that fact alone already form an adversely selected group. It is likely that young women left to bring up children without a father--and these days we are not usually referring to young widowed mothers--may have been unfortunate or unwise in their choice of a life partner. As a result, perhaps statistics for the young women must be overlooked or at least looked over with skepticism. However, the findings for older female heads cannot be so readily dismissed. For women in later life to be minus a husband finally through death, if not already for other reasons , must be taken almost as an anticipated stage in the life cycle. The large number of elderly women living alone in poverty--and they constitute today more than half of the elderly poor--have long been one of our major policy concerns. To them must now be added the growing problem of the young family with children but with no father in the home. Increasingly, women of all ages, whether by choice or necessity, now assume major responsibility for themselves and their families. Whatever the resultant satisfactions or disappointments to the women themselves or their children, there is no doubt that the generally inferior income status of a woman's household poses a challenge for public policy, the more so because their number is increasing.

Between March 1960 and March 1975, households consisting of families headed by a woman, or a woman living as an individual, increased in number from one in every five American households to one in every four. As one consequence, both the number and characteristics of the poverty population underwent change in this period. On the basis of 1974 income, a total of nearly 10 million families and unrelated individuals were counted poor. Had all household types increased in number at the same rate since 1960, however,-- with nothing else changing-- we might have had a million fewer poor households in 1974. More important is the fact that the "extra" poor households were all headed by a woman. Accordingly, of the households actually poor in 1974, 56 percent were headed by a woman, compared with the 48 percent that might have been. The total persons counted poor in 1974 included half a million more aged poor women than there might have been, except for the growing tendency among women of all ages to move out on their own.

The figures below illustrate in summary fashion the actual number of households poor in 1974 as opposed to the number that might be expected could the distribution of families and individuals by sex, age of head and number of children under 18 be standardized to conform to, (i.e., remain unchanged from) that prevailing 15 years earlier, but subject to the poverty rates by family type that actually prevailed in 1974.

Family type	Poor in 1974			
	Actual	Theoretical	Actual	Theoretical
	(Millions)		(Percent)	
Total families and individuals..	9.9	8.7	100	100
Male head.....	4.4	4.5	44	52
Under 65.....	3.3	3.5	34	40
Individual.....	1.2	.8	12	9
Family head.....	2.1	2.7	22	31
no children...	.6	.6	6	7
any children..	1.6	2.1	16	24
Age 65 or older...	1.0	1.0	10	12
Individual.....	.4	.4	4	4
Family head.....	.6	.6	6	7
Female head.....	5.6	4.2	56	48
Under 65.....	3.7	2.9	38	33
Individual.....	1.5	1.4	16	16
Family head.....	2.2	1.5	22	18
no children...	.1	.1	1	2
any children..	2.1	1.4	21	16
Age 65 or older...	1.8	1.3	18	15
Individual.....	1.7	1.1	17	13
Family head.....	.1	.2	1	2

It is worth recalling here that whatever her age and family status, a woman, by the numbers, has a higher risk of poverty than a man in a similar situation.

In the unliberated days of yesteryear, the income position of an older woman reflected in large measure how well her husband had been able to provide for her as a wife during a lifetime or as widow after his death. It probably, in some measure, still does. That fact, early on, led to postulating that, compared with a man, a woman got two chances at poverty--she could marry into it or just make it on her own. There appears to be a third way that works for women as well as men. Like a man, a woman can settle her economic status early on in old age by choosing the right number of brothers and sisters at the place of residence to which the stork will deliver her, as the figures below illustrate.

Although time and space preclude detailing all the findings here, it should be evident that the relationship between prevalence of poverty among adults and the number of brothers and sisters in their childhood family is neither fortuitous nor obscure. A search for explanatory variables seems in order and at least one does present itself. It is educational attainment, itself, correlated with

Age	Female household heads by number of siblings			
	0-1	2-3	4-5	6 or more
	(Percent poor 1967)			
Family heads under 35	41	48	57	59
Family heads 35-54	25	24	31	42
Individuals 55 or older.....	43	48	52	61
Born in -				
large city.....	38	40	39	49
small city.....	43	46	51	58
on farm or open country..	45	57	60	66

income and poverty risk, that provides the link between the size of the childhood family and the ultimate income outcome. Among male household heads 55 years or older in 1968, for example, half had not gone beyond elementary school and only one in seven went to college. But the percentages change dramatically with family size: with no more than one brother or sister in the childhood family, 37 percent of the heads had gone no farther than the eighth grade, and one in four had been to college. Of those older men growing up with six or more brothers or sisters, two out of three failed to get past grade school and only one in twelve got to college.

These are, to be sure, older men and we do better now, don't we? We do, but the same pattern pertains except that all groups have more education than used to be the case, as the following summary figures for male household heads suggest:

Number of brothers and sisters	Percent not a high school graduate		
	Under 35	35-54	55 or older
All.....	27	41	67
0-1	14	25	52
2-3	21	33	58
4-5	34	49	70
6 or more	52	62	80

Another indicator is that, all told, nearly half the heads under 35 with fewer than two brothers or sisters had attended college compared with only a tenth of those with six or more siblings. Admittedly some of the younger men, particularly if still an individual rather than already head of a family, will go on to complete more schooling than they now have, but it is unlikely the differentials already evident will disappear altogether.

When the household heads are classified further as heads of families and unrelated individuals, the pattern of 'the more brothers and sisters the less education' repeats sometimes even more sharply. It is evident for women heads in each category as well. And for each subgroup the corresponding poverty rates behave as one would expect--the more brothers and sisters in childhood, the less education, and, accordingly, the greater the likelihood of low income in adult life.

No standard errors of estimate nor tests of statistical significance have yet been computed, but statistical patterns replicated over time, space and age must be considered presumptive evidence of association as good as any tests: statistical continuity is no accident.

The data so far tabulated suggest, too, that being born in a small town is an added high risk factor as far as educational attainment is concerned and carries an accompanying greater risk of adult poverty. The extent of relationship is somewhat constrained by the particular urbanization classes used in the questionnaire. Changing residence patterns may now impose greater hazards on youngsters born in a ghetto area in the central city of a metropolitan area than on those born in its suburbs. Children born in very large cities may no longer have the edge on natives of middle-size cities. In addition, enough moving about by families occurs today so that perhaps questions on place of birth need supplementation with place of residence during school age. We must acknowledge probable differences in the quality of education offered from place to place that may affect both motivation to continue schooling and eventual economic performance. Such considerations hopefully can be taken into account in future research.

For the nonce, it seems safe to affirm, despite the limitations noted, that by and large persons born in rural areas and small towns continue to receive less formal schooling--age for age, sex for sex, family size for family size--than persons born in large cities. This can be illustrated for male family heads under 35, the "best" group in our current sample with respect to completeness and representativeness, and the group one might expect to have benefited most from the general upward mobility in the greening of America. With no brothers or sisters, or only one, more than half of those born in a large city had attended college compared with less than a third of the young men born in open country or on a farm. By contrast, with as many as six brothers or sisters, only a fifth of the young male family heads from large cities attended college, and only 6 percent of those born in a rural place. The figures below are for men under 35 who headed a primary family in March-April 1968:

Clearly, race must be considered in any analysis inasmuch as it continues even today to affect educational opportunity. Race is also associated with place of birth and size of family, factors which in themselves can influence the years of schooling a youngster is likely to attain. In our present investigation, analyses are still under

Birthplace	Number of Siblings			
	0-1	2-3	4-5	6 or more
	(Percent with any college)			
Large city.....	53	42	26	18
Middle-size city.....	53	32	35	12
Small city.....	45	35	22	10
Suburb	36	47	26	1/
Open country or farm.....	27	21	16	6
	(Percent not a high school graduate)			
Large city.....	10	18	30	34
Middle-size city.....	13	18	28	48
Small city.....	14	22	30	52
Suburb	24	17	34	1/
Open country or farm.....	22	32	44	59

1/ Base too small to calculate percentages.

Number of siblings and race	Male households under 35 by place of birth		
	Large city	Small city	Open Country or farm
	(Percent not a high school graduate)		
0-3			
Negro.....	26	33	51
White.....	13	18	26
4 or more			
Negro.....	38	45	67
White.....	31	40	51
	(Percent with any College)		
0-3			
Negro.....	25	27	13
White.....	50	42	25
4 or more			
Negro.....	16	14	3
White.....	24	17	11

way, and the relatively small numbers of nonwhite heads impede some of the comparisons by age, size of childhood family and place of birth. These qualifications aside, the data do confirm what one would anticipate a priori: age for age, Negroes received less education than white persons. In addition, the adverse effect of being born into a large family in a small town on chances for children to attain higher education is apparent for Negroes as well as for whites. As one example, of men under 35 who were household heads in March 1968, one in six of the Negroes had completed at least one year of college, only half the proportion among the corresponding group of white men. Further classification by number of brothers and sisters and by urbanization of birthplace yields results illustrated below:

One additional finding warrants mention in this quick rundown. How good a level of living a given amount of income provided makes possible depends in part on how many persons the income must support. The poverty income thresholds officially used as rough indices of adequacy take account of family size and composition. In young families, the number of dependent children is a critical factor associated with poverty status. As discussed here, the focus has been on the size of the head's family. We did not ascertain how many children these heads themselves have had, nor how many more are yet to come before their families are complete. We know only the number of "own" children (of the head or wife) under 18 still at home.

In young families, namely those with a head under age 35, it is reasonable to assume that the children still there are representative of the number ever born. Few children will already have left home except through death or divorce: few are likely to have already gone off as young adults to take a job or set up households of their own. From the number of "own" children still present in the families of men under 35, one must conclude that it is young men themselves from large families who tend to have fathered the most children. 8/It could be that some young men from smaller families, having spent a longer period at school, merely have delayed starting their family and will eventually catch up, but that is not unlikely to reverse the group finding.

Even more striking and more dismaying is the finding for young women: women under 35, listed as head of a family and thus with no husband present, have more children than men of the same age whose marriage is still intact, as the distributions of number of own children relative to size of childhood family suggest.

Such findings replicate those found in an earlier and more sophisticated analysis of fertility. For example, cumulative fertility rates were one-fourth greater among women who were mothers in 1960 but no longer living with a husband than among those married and still living with a husband. They impel reiteration of an earlier speculation on the relation between too little income, too many children and the breakup of a marriage. 9/ The figures remain old-fashioned. They zsuggest if a woman is to bring up children, they will all fare better with a man to share the financial responsibility. Presumably, in modern times, he need not be officially designated as husband, so long as the relationship is financially meaningful.

And now to move on to another data base. Because the CPS data we have is scant and undoubtedly subject to error, we have been extending them from several other sources. One such source is a

Own children present	Family heads under 35			
	Men		Women	
	0-3 siblings	4 or more siblings	0-3 siblings	4 or more siblings
WHITE				
Total percent...	100	100	100	100
None.....	23	16	9	7
1-2.....	54	53	65	52
3-4.....	20	25	20	29
5 or more.....	3	6	5	12
NEGRO				
Total percent...	100	100	100	100
None.....	25	15	4	7
1-2.....	47	49	45	35
3-4.....	20	21	31	35
5 or more.....	8	15	20	23

longitudinal Social Security Administration study, the Retirement History Survey. 10/ That survey, begun in 1969, and scheduled for a ten-year run, ascertained at initial interview the number of living brothers and sisters of the respondents. The study sample comprised married men living with their wives, and some men and women without a spouse, all aged 58 to 63 years at initial interview. For such a narrow age band the fact that some brothers or sisters were no longer living should not distort relationships. Respondents from this survey, classified by marital status, exhibit patterns strikingly similar to those already noted between size of childhood family educational attainment, and income late in life. Money income of the respondent for the year 1968 has been used in lieu of poverty status. For married men, that means no account is taken of the wife's income for the present analysis. Among married men with no living siblings, 30 percent had less than $5,000 income for the year and 28 percent had $10,000 or more. Of the husbands with 4 or more living brothers and sisters, 53 percent had less than $5,000 income for the year and only 18 percent had as much as $10,000.

With no siblings living, or only one, fewer than a third of the men had quit school at eighth grade or before; half had gone at least through high school. In contrast, with four or more living brothers or sisters more than half had not gone beyond grade school, and only a fourth had completed high school whether or not they'd gone on to college. As the appended tables show, similar results are reported by the nonmarried respondents, male and female alike. Unfortunately, we have no information about the wives in this survey either.

Respondents were not asked where they were born, but curiously enough, classification by urbanization of current residence parallels for number of siblings and educational attainment our CPS findings by place of birth. Many older people continue to live not far from where they were born. Obviously, patterns of migration differ by educational attainment and occupation among other things, and may well be different today from what was common when the survey respondents were starting on their careers. The nature of geographic mobility--or the lack of it--by age, sex, color, size of childhood family and education, is something we hope to investigate from the CPS data already cited.

Conceivably some of the legendary warmth and friendliness characterizing rural areas and small towns stems from the fact that some of the brothers and sisters from the large childhood families common in small towns are likely to still be around when they have set up housekeeping on their own. In any case, the fact that rural areas and small cities tend to have adult populations with less formal schooling than residents of large cities means that incomes in those areas are likely to remain low. Thus, children born there may continue to lose out on their own educational opportunity unless special effort is made to enable them to stay in school longer.

Just where does this quick statistical journey lead us or leave us? Are there any likely policy and program implications? From the technician's view, the data may inject new snags into the problem of scaling or equivalence: How much does it take for a family to live at the same standard or equivalent level of satisfaction in one place as compared with another? "Everybody knows it costs more" to live in a big city than a small, or in one part of the country compared with another. Everybody, that is, but those of us concerned with the possible lack in small towns and rural areas of services and institutions that big city dwellers take for granted. That is one reason our present poverty lines incorporate no geographic adjustment, another being that there is yet no satisfactory way to measure the differential costs. The fact that there are usually fewer doctors, and in particular, fewer medical specialists and ancillary facilities is one obvious disadvantage that can render living in a small town or out-of-the way place less of a bargain. It may be that lack of equal educational opportunity, for whatever reason, is another.

Then there are presumed to be economies of scale making for lesser income needs per person among larger families--what about them? We all know that two once were supposed to live as cheaply as one. What that meant, presumably, is that once a household is established it takes less additional expense to add the second person than the first, the third than the second, etc. Some standards assuredly can't be the same for large families as for small: the number of ten-room mansions or apartments for large families is small at any price. Thus, the American luxury of a room to oneself may well have to be given up by children in large families for the presumed joys of playing or fighting with one another. But is the

opportunity for a good education and the economic benefits thereunto belonging all that expendable? Though there be some question these days about the dollar-for-dollar return in income of additional years of education, in our credential Society the high school diploma--and some schooling beyond--will still raise you up from poverty even if it won't make you rich. For those minorities of our Society, who remain especially vulnerable to low-income status, getting across that poverty line is no mean achievement.

Moving from the technical side to other implications for policy, one can foresee possibility for additional import of this study. The last decade has brought for all Americans a heightened social consciousness, rising expectations, and the conviction that everyone has a right to a chance to share in the land of abundance. Many proposals, some worse, some better, have been made to ease the plight of those who do not fare so well, namely the aged, the large family of the working poor--and the nonworking poor--as well. Children's allowances and guaranteed incomes have not been popular in this country, and may not be except under some other name. Time and changing customs are lowering American family size but also changing its composition. Along with a general reduction in number of children per family, we are witnessing a larger and larger proportion of young families headed only by a woman, with all the economic disadvantage thereunto belonging. Wouldn't it be interesting if adequate provision to raise and educate today's poor children and offer equal access and opportunity to all youngsters, wherever they are born, could be achieved on the rationale that it might reduce the need to provide for the aged poor in the years ahead? Or have we merely engaged in a statistical exercise, afterall?

FOOTNOTES

1/ Orshansky, M., "Counting the Poor: Another Look at the Proverty Profile," Social Security Bulletin, Jan. 1965.

2/ Orshansky, M., "Children of the Poor," Social Security Bulletin, July 1963.

3/ Orshansky, M., "The Aged Negro and His Income," Social Security Bulletin, Feb. 1964.

4/ U.S. Bureau of the Census Current Population Reports Series P-60, No. 99, issued July 1975. See also Cobern, M., Salem, C., and Mushkin, S., "Indicators of Educational Outcome Fall 1972," National Center for Educational Statistics, DHEW Publication No. (OE) 74-11400, 1973.

5/ Orshansky, M., "Recounting the Poor - A Five-Year Review," Social Security Bulletin, April 1965.

6/ For this preliminary report, the assigned weight for each household matched in the March-April 1968 tapes represents the March CPS weight expanded by 1.33.

7/ Data on poverty status for 1967 as reported here do not replicate statistics previously published--as in Census Report P-60, No. 68. The present analysis is limited only to heads of primary families and primary individuals in the Current Population Survey Sample for both March and April 1968. Moreover, the March 1968 tape itself has been corrected by SSA to remove some observed errors in income codes.

8/ See for example the parallel relationship on childhood family size to number of own children in table 4-10 "Patterns of Aging on Welfare" by Thomas Tissue, State of California-Human Relations Agency, July 1972.

9/ Beresford, J.C., and Rivlin, A., "Characteristics of Other Families" presented at the Population Association of America, April 1963. See also Lauriat, P., "The Effect of Marital Dissolution on Fertility," Journal of Marriage and the Family, XXXI, No. 3.

10/ For description see Irelan, L. M., Retirement History Study, Introduction, Social Security Bulletin, November 1972.

Table 1

Place of birth, number of siblings, educational attainment and poverty among male household heads, March 1968

	All	Urbanization of birthplace 1/					
		Large city	Middle or small city	Small city	Suburb near large city	Open country	Farm
	All incomes						
Number (000's).....	43,375	8,608	4,940	14,205	2,539	3,319	9,765
Educational attainment:							
Total percent.....	100	100	100	100	100	100	100
Elementary only.....	29	16	17	24	26	43	49
Some high school....	17	17	17	18	17	19	16
High school graduate	30	32	35	32	29	25	24
Any college.....	24	35	31	26	28	13	11
Number of siblings:							
Total percent.....	100	100	100	100	100	100	100
0-1.....	23	33	29	23	39	16	12
2-3.....	30	34	34	32	28	26	24
4-5.....	21	18	20	21	17	25	23
6 or more.....	26	15	17	24	16	33	41
	Percent with income below poverty level in 1967 2/						
All households.....	10	5	6	8	7	13	18
Elementary only.....	21	15	17	17	16	22	27
Some high school....	8	5	5	7	6	11	13
High school graduate	5	3	3	4	4	4	9
Any college.....	4	3	4	4	2	3	4
Number of siblings:							
0-1.....	7	4	5	6	8	10	16
2-3.....	8	5	5	6	5	10	15
4-5.....	11	7	6	8	5	16	18
6 or more.....	14	7	9	10	9	15	20

1/ Large city--250,000 or more persons; middle or small size--50,000 to 250,000 persons; small city--under 50,000 persons.
2/ Income of family or unrelated individual below appropriate poverty income threshold for family size and composition.

Table 2

Household Heads March 1968: Number of brothers and sisters, by age, sex, and place of birth

Age and number of siblings	Urbanization of birthplace						
	Total	Large city	Middle or small size city	Small city	Suburb near large city	Open country	Farm
	Male heads						
Under 35 (000's)...	10,874	2,551	1,582	3,742	635	802	1,561
Total percent.....	100	100	100	100	100	100	100
0-1.....	29	40	34	26	38	18	15
2-3.....	35	35	36	37	33	30	30
4-5.....	18	16	16	19	16	23	21
6 or more.....	18	9	14	18	13	28	34
Age 35-54 (000's)..	18,651	3,855	2,152	6,266	1,134	1,323	3,921
Total percent.....	100	100	100	100	100	100	100
0-1.....	25	34	29	24	35	16	12
2-3.....	30	35	34	31	31	25	25
4-5.....	20	17	20	21	17	24	23
6 or more.....	25	14	17	24	17	35	40
Age 55 or older (000's).....	13,849	2,201	1,206	4,197	769	1,194	4,282
Total percent.....	100	100	100	100	100	100	100
0-1.....	18	23	20	18	46	16	10
2-3.....	26	32	31	28	21	23	22
4-5.....	24	22	25	25	16	27	24
6 or more.....	32	22	23	30	16	35	44
	Female heads						
Under 35 (000's)...	1,683	457	281	521	134	97	192
Total percent.....	100	100	100	100	100	100	100
0-1.....	30	35	32	25	57	29	14
2-3.....	33	37	39	33	28	33	20
4-5.....	17	12	16	21	7	26	24
6 or more.....	19	16	13	21	7	13	42
Age 35-54 (000's)..	3,199	750	349	1,041	190	254	615
Total percent.....	100	100	100	100	100	100	100
0-1.....	25	35	26	23	47	19	14
2-3.....	28	31	33	30	17	29	21
4-5.....	21	17	23	22	17	17	22
6 or more.....	26	17	18	25	19	35	43
Age 55 or older (000's).....	6,658	1,068	605	2,012	394	599	1,981
Total percent.....	100	100	100	100	100	100	100
0-1.....	18	26	19	17	49	13	9
2-3.....	26	31	33	29	19	23	21
4-5.....	23	21	22	25	16	27	22
6 or more.....	33	22	26	29	16	37	49

Table 3

Urbanization of Birthplace, Number of Siblings and Educational Attainment: Percent Distributions of Male Household Heads by Age
March 1968

Place of birth and educational attainment	Age of head and number of siblings											
	Under 35 years				Age 35-54 years				Age 55 or older			
	0-1	2-3	4-5	6 or more	0-1	2-3	4-5	6 or more	0-1	2-3	4-5	6 or more
All places	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Elementary only	4.7	6.7	13.2	24.0	10.7	16.2	27.3	39.1	36.9	41.9	54.4	65.1
Some high school	9.7	14.6	20.3	28.1	14.1	16.9	21.5	22.5	15.5	16.5	15.8	14.4
High school graduate	37.9	42.7	43.0	38.4	35.3	35.4	32.7	26.4	23.3	22.4	17.5	12.0
Any college	47.6	36.0	23.5	9.5	39.9	31.5	18.5	11.9	24.3	19.2	12.3	8.5
Large city1/	100.0	100	100	100	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Elementary only	2.3	3.2	8.6	11.5	5.4	9.5	14.7	23.5	27.7	31.7	44.5	48.5
Some high school	8.1	14.1	22.7	21.7	11.2	16.4	21.8	26.6	17.0	17.5	21.1	21.7
High school graduate	36.0	40.6	42.3	48.6	33.0	33.3	37.9	33.6	27.3	22.9	17.2	15.9
Any college	53.5	42.2	26.3	18.1	50.4	40.8	25.6	16.2	28.0	27.9	17.2	13.9
Middle or small size city	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Elementary only	4.4	2.7	9.7	17.4	6.2	7.6	14.8	30.3	26.8	32.7	39.2	51.8
Some high school	8.8	14.5	17.2	28.9	12.3	16.6	24.6	26.6	14.9	17.7	19.7	21.6
High school graduate	33.3	44.5	38.6	40.7	38.3	37.8	39.3	29.4	25.9	28.9	23.9	17.2
Any college	53.5	38.3	34.5	12.9	43.2	38.0	21.3	13.6	32.4	20.7	17.2	9.4
Small city1/	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Elementary only	4.2	7.2	12.7	20.6	8.8	14.2	25.0	31.7	29.9	37.1	46.3	57.9
Some high school	9.9	14.0	17.1	31.7	14.9	16.4	21.3	23.9	17.4	17.6	16.3	16.5
High school graduate	38.2	42.3	47.4	37.8	35.6	38.0	34.2	28.8	24.8	24.4	21.8	14.5
Any college	47.7	36.5	22.8	10.0	40.6	31.4	19.4	15.5	28.0	20.9	15.6	11.1
Surburb near large city	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Elementary only	9.8	4.7	6.7	22.1	11.7	17.5	23.9	32.0	48.4	41.9	52.1	54.8
Some high school	13.8	11.7	25.0	33.5	17.9	17.2	19.7	23.5	11.1	13.2	14.9	15.9
High school graduate	36.3	34.6	39.8	39.9	35.6	29.6	33.9	30.1	19.5	18.2	18.8	14.1
Any college	40.1	49.1	28.4	4.4	34.7	35.7	22.5	14.4	20.9	26.7	14.2	15.2
Open country	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Elementary only	12.6	14.3	18.0	34.2	27.2	27.3	44.3	46.1	48.8	51.1	64.6	75.8
Some high school	16.9	21.5	35.1	26.1	19.6	21.1	17.4	24.0	15.4	20.3	10.0	11.0
High school graduate	43.3	48.9	28.8	32.6	31.4	33.0	25.1	23.4	15.7	17.8	16.4	8.7
Any college	27.2	15.3	18.1	7.0	21.7	18.6	13.1	6.5	20.1	10.8	9.0	4.5
Farm	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Elementary only	7.9	13.6	21.8	32.6	29.3	31.1	40.4	52.7	51.9	56.7	68.5	74.3
Some high school	9.5	15.2	16.7	26.2	16.3	17.2	22.1	18.3	14.1	13.4	13.6	10.6
High school graduate	53.1	46.3	47.1	35.9	38.3	34.4	26.1	21.2	20.7	19.0	11.7	9.3
Any college	29.5	24.9	14.5	5.3	16.1	17.3	11.4	7.8	13.3	10.9	6.2	5.8
	Percent with income below poverty line 1967 2/											
All places	5.8	6.5	9.4	13.8	3.9	5.1	7.3	8.9	15.5	13.8	16.5	20.0
Large city	6.4	4.2	7.9	8.5	2.1	4.1	3.8	4.3	8.2	9.1	11.4	11.1
Middle or small size city	4.7	3.3	5.9	10.1	1.3	2.9	5.3	6.5	15.4	12.3	8.9	13.8
Small city	6.0	6.3	8.7	11.9	3.9	4.4	5.5	7.3	13.1	11.3	12.0	13.0
Surburb near large city	3.7	7.2	5.0	14.1	4.2	1.9	1.6	4.8	15.9	13.6	10.9	10.5
Open country	8.4	10.0	9.6	17.2	8.9	7.6	10.2	11.0	14.3	15.5	25.9	20.0
Farm	5.9	13.6	16.4	18.7	10.2	9.6	13.7	12.4	29.1	20.8	23.4	28.5

1/ Large city - 250,000 or more persons; Middle or small city - 50,000 to 250,000; Small city - under 50,000
2/ Income of primary family or unrelated individual below appropriate poverty income threshold for family size and composition.

Table 4

Urbanization of Birthplace, Number of Siblings and Educational Attainment: Percent distributions of female household heads by age, March 1968

Age and educ. attainment	Total	Number of siblings				Urbanization of place of birth					
		0-1	2-3	4-5	6 or more	Large city	Middle or small city	Small city	Suburb or large city	Open country	Farm
Under 35	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Elem. over	11.0	4.7	6.1	14.3	26.6	6.0	7.2	15.7	3.4	13.0	20.2
Some H.S.	23.0	17.8	19.3	24.6	36.2	22.5	23.6	20.2	18.6	36.4	27.2
H.S. grad.	37.7	39.5	40.0	40.3	28.8	36.6	34.5	38.8	39.0	42.1	39.3
Any college	28.2	37.9	34.6	20.8	8.3	34.8	34.7	25.3	39.0	8.5	12.3
Age 35-54	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Elem. only	25.8	13.8	17.9	32.3	40.6	12.5	20.5	24.1	14.2	38.6	46.1
Some H.S.	21.3	20.5	20.4	18.7	25.2	23.4	18.2	20.1	24.2	26.2	19.9
H.S. grad.	34.6	37.2	39.2	37.7	24.8	42.7	39.9	35.5	37.4	27.8	22.0
Any college	18.3	28.5	22.6	11.3	9.4	21.4	21.4	20.3	24.2	7.4	12.0
Age 55 or older	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Elem. over	50.7	37.2	42.5	52.1	63.3	42.6	44.9	43.3	42.0	62.2	62.6
Some H.S.	15.1	13.3	16.8	16.6	13.7	16.5	16.5	16.1	12.8	16.3	13.1
H.S. grad.	19.3	25.0	23.6	19.2	13.0	24.8	20.8	23.0	28.3	10.0	13.2
Any college	14.9	24.5	17.0	12.1	10.0	16.1	17.8	17.6	16.8	11.6	11.2
	Percent with income below poverty line, 1967 2/										
Under 35	40.9	31.2	38.5	49.0	53.0	33.7	47.2	41.3	35.9	39.9	51.3
Age 35-54	28.3	22.8	23.1	27.2	39.9	19.5	25.4	25.4	27.8	38.7	41.4
Age 55 or over	44.0	37.5	41.0	42.0	51.0	33.3	36.3	41.6	42.4	47.1	53.8

1/ Large city -250,000 or more persons, middle or small-size - 50,000 to 250,000 persons; small city, under 50,000 persons.

2/ Income of primary family or unrelated individual below appropriate poverty income threshold for family size and compositions.

Table 5

Poverty among primary families and individuals by age and sex of head and number of siblings, 1967

Age of head and number of siblings	Percent with income below poverty line 1/						
	Total	Male head			Female head		
		Total	Family	Unrelated individual	Total	Family	Unrelated individual
All households.....	16.2	10.1	8.8	25.8	39.2	32.3	44.3
0-1.....	12.0	7.3	7.9	18.3	31.4	27.7	33.9
2-3.....	13.3	7.9	6.7	23.2	35.6	29.5	39.6
4-5.....	17.0	11.1	10.0	26.1	38.9	30.6	45.4
6 or more.....	22.2	14.2	12.6	35.7	48.5	39.3	55.9
Under 35 years.....	12.5	8.2	7.8	10.7	40.9	50.3	19.1
0-1.....	9.4	5.8	5.3	6.3	31.2	40.5	17.5
2-3.....	10.7	6.5	5.9	13.0	38.5	47.7	17.6
4-5.....	14.4	9.4	9.4	13.4	49.0	57.3	23.4
6 or more.....	19.3	13.8	13.7		53.0	80.6	
35-54 years.....	9.4	6.2	5.8	13.6	28.3	30.6	23.0
0-1.....	6.7	3.9	3.5	11.7	22.8	24.7	19.7
2-3.....	7.5	5.1	4.8	10.6	23.1	24.4	20.6
4-5.....	10.2	7.3	6.9	15.5	27.2	30.7	20.3
6 or more.....	13.6	8.9	8.5	17.6	39.9	41.6	32.9
55 or older.....	25.6	16.8	13.9	38.1	43.9	24.2	51.9
0-1.....	22.5	15.5	12.8	33.0	37.5	20.0	42.7
2-3.....	22.7	13.8	10.9	35.4	41.0	23.6	47.6
4-5.....	24.5	16.5	14.1	34.6	42.0	19.9	51.9
6 or more.....	30.4	20.0	16.7	46.0	51.0	29.5	60.7

1/ Income of family or unrelated individual below appropriate poverty income threshold for family size and composition.

Table 6

Poverty among primary families by sex and race of head, and number of siblings

Age of head and number of siblings	Percent poor in 1967 1/			
	Male head		Female head	
	White	Negro	White	Negro
All ages	7.4	26.7	24.7	57.5
0-1	5.1	19.7	19.9	55.8
2-3	5.8	25.5	23.6	51.2
4-5	8.6	30.5	22.7	60.3
6 or more	10.5	29.3	31.0	61.2
Under 35 years	6.6	21.2	41.1	67.0
0-1	4.9	12.4	29.1	60.8
2-3	5.3	17.4	45.2	
4-5	7.9	26.1	46.2	72.3
6 or more	11.2	25.8	47.4	
35-54 years	4.7	21.5	21.9	57.5
0-1	2.6	16.5	17.5	48.0
2-3	3.8	24.2	15.6	59.5
4-5	6.0	21.3	22.5	61.2
6 or more	6.9	23.2	32.7	
55 years or older	11.9	39.2	20.8	44.2
0-1	10.8	32.4	16.6	38.4
2-3	9.6	37.1	20.8	
4-5	12.2	47.9	16.4	46.8
6 or more	14.3	39.5	26.0	

1/ Income of family below appropriate poverty threshold for family size and composition.

Table 7

Race, number of siblings, educational attainment of head and poverty in 1967
(Numbers in thousands)

Educational attainment	All household heads									
	Male					Female				
	Number of siblings					Number of siblings				
	Total	0-1	2-3	4-5	6 or more	Total	0-1	2-3	4-5	6 or more
Total Number	43,373	10,181	13,030	9,068	11,095	11,539	2,489	3,189	2,470	3,391
Total percent	100	100	100	100	100	100	100	100	100	100
Elem.	28.9	15.2	20.5	34.1	46.9	38.0	22.9	29.2	42.3	54.2
Some H.S.	17.1	13.1	16.1	19.1	20.2	18.0	16.6	18.3	18.1	18.7
H.S. grad.	30.0	33.2	34.0	29.4	22.7	26.2	31.9	30.8	26.6	17.4
Any college	24.1	38.5	29.4	17.3	10.1	17.8	28.6	21.7	12.9	9.7
WHITE										
Total Number	39,619	9.394	12,241	8,302	9,683	9,694	2,118	2,746	2,096	2,734
Total percent	100	100	100	100	100	100	100	100	100	100
Elem.	27.1	13.5	19.0	32.9	45.7	36.0	20.6	27.3	40.5	53.0
Some H.S.	16.9	12.4	16.0	19.0	20.4	16.4	13.2	17.0	17.3	17.5
H.S. grad.	30.8	33.8	34.4	30.4	23.5	27.9	34.4	32.2	27.8	18.7
Any college	25.2	40.3	30.5	17.6	10.4	19.7	31.8	23.4	14.4	10.8
NEGRO										
Total Number	3,358	698	703	655	1,302	1,769	356	425	346	642
Total percent	100	100	100	100	100	100	100	100	100	100
Elem.	49.2	35.7	46.2	50.6	57.3	49.6	37.1	42.1	52.6	59.8
Some H.S.	20.4	22.9	18.1	21.5	19.8	27.1	36.8	26.6	24.3	23.3
H.S. grad.	20.5	24.4	25.9	19.4	16.1	16.1	17.4	20.2	17.9	11.7
Any college	9.9	17.0	9.8	8.5	6.8	7.3	8.7	11.1	5.2	5.2
	Percent with income below poverty line 1/									
Total	10.1	7.3	7.9	11.1	14.2	39.2	31.4	35.6	38.9	48.5
Elem.	21.3	22.9	20.2	21.4	22.3	50.5	54.4	53.9	52.6	58.6
Some H.S.	7.8	6.8	7.5	8.6	9.5	40.2	34.0	40.0	40.0	44.5
H.S. grad.	4.5	4.6	4.3	5.1	5.8	26.3	24.0	26.4	25.1	30.3
Any college	3.6	3.7	3.7	3.7	5.4	21.8	19.7	20.1	20.4	31.5
WHITE										
Total	8.5	6.2	6.8	9.6	11.9	35.5	27.6	32.8	35.2	44.7
Elem.	18.6	19.8	17.4	18.4	19.0	52.3	49.4	51.1	49.5	55.4
Some H.S.	7.0	6.3	6.2	7.8	7.5	34.6	26.5	35.7	33.1	39.5
H.S. grad.	4.4	4.1	4.0	4.5	5.2	23.9	21.7	24.4	23.7	26.3
Any college	3.7	3.4	3.7	3.8	4.8	22.0	19.9	20.8	19.6	32.1
NEGRO										
Total	28.0	20.8	26.3	30.5	31.5	59.6	55.9	52.5	62.4	65.6
Elem.	41.3	37.6	39.2	45.5	41.6	69.2	70.5	64.8	68.7	71.5
Some H.S.	20.9	11.3	27.6	18.4	24.4	59.3	51.1	57.5	55.5	63.1
H.S. grad.	12.3	11.4	9.2	12.6	11.8	48.1	41.9	31.6		48.1
Any college	9.0					20.2				

1/ Income of primary family or unrelated individual below appropriate poverty income threshold for family size and composition.

Table 8

Educational attainment and income in 1968, by number of living siblings for persons aged 58-63, by marital status

Selected characteristics	Married men, wife present				Nonmarried men				Nonmarried women			
		Living siblings				Living siblings				Living siblings		
	Total	0-1	2-3	4 or more	Total	0-1	2-3	4 or more	Total	0-1	2-3	4 or more
Total respondents 1/.....	5,900	1,480	1,959	2,461	980	263	321	396	2,489	718	836	935
Income in 1968:												
Total percent.....	100	100	100	100	100	100	100	100	100	100	100	100
Under $2,000.....	12	9	11	14	31	31	26	35	41	38	37	46
2,000-4,999.....	22	19	20	25	28	29	28	27	36	37	37	34
5,000-7,499.....	25	24	26	26	19	17	22	19	14	15	17	12
7,500-9,999.....	19	21	19	17	11	19	12	10	5	5	5	5
10,000 or over.....	22	27	24	18	11	14	12	9	4	6	4	3
Educational attainment:												
Total percent.....	100	100	100	100	100	100	100	100	100	100	100	100
Elementary only.....	44	32	40	54	53	41	50	64	42	34	42	50
1-3 years high school.....	19	19	19	19	17	20	17	16	18	18	18	19
High school graduate or better.	37	49	41	27	30	39	34	20	39	48	40	31
Urbanization of current residence, 1969:												
Total percent.....	100	100	100	100	100	100	100	100	100	100	100	100
Urban: 1 million or more.....	26	31	28	21	32	36	35	27	31	37	34	23
¼ to 1 million.....	23	26	22	21	24	25	22	25	28	28	28	30
Less than ¼ million....	15	15	16	15	14	14	15	14	17	16	17	17
Rural.....	36	28	34	43	30	26	28	34	24	19	21	30

1/ Excludes respondents not reporting on income, number of living brothers and sisters or schooling completed.

Source: Unpublished data from the Social Security Administration Retirement History Survey.

Table 9

Educational attainment and income in 1968, by number of living siblings for persons aged 58-63, now living in small towns and rural areas

Selected characteristics	Married men, wife present				Nonmarried men				Nonmarried women			
		Living siblings				Living siblings				Living siblings		
	Total	0-1	2-3	4 or more	Total	0-1	2-3	4 or more	Total	0-1	2-3	4 or more
	Residing in urban area of less than ¼ million persons, 1969											
Total respondents 1/.....	909	218	318	373	140	36	47	57	418	117	142	159
Income in 1968:												
Total percent.....	100	100	100	100	100	100	100	100	100	100	100	100
Under $2,000.....	10	6	11	10	35	33	25	44	43	39	40	48
2,000-4,999.....	22	19	23	23	29	36	32	23	33	39	27	35
5,000-7,499.....	26	25	27	27	16	6	19	21	15	11	20	13
7,500-9,999.....	20	21	18	21	9	11	11	7	6	5	9	3
10,000 or over.....	22	29	21	20	10	14	13	5	3	5	3	1
Educational attainment:												
Total percent.....	100	100	100	100	100	100	100	100	100	100	100	100
Elementary only.....	43	31	42	51	59	39	62	70	46	37	37	60
1-3 years high school.....	16	16	14	18	15	17	8	19	13	16	11	14
High school graduate or better..	41	53	44	31	26	44	30	11	41	47	52	26
	Rural resident, 1969											
Total respondents 1/.....	2,137	414	666	1,057	292	68	90	134	596	134	177	285
Income in 1968:												
Total percent.....	100	100	100	100	100	100	100	100	100	100	100	100
Under $2,000.....	20	16	19	22	45	46	38	49	59	58	51	64
2,000-4,999.....	30	25	28	34	30	28	33	29	28	28	32	26
5,000-7,499.....	24	26	23	24	13	10	14	13	8	8	13	6
7,500-9,999.....	12	15	15	10	6	9	4	7	3	2	2	3
10,000 or over.....	4	18	15	10	6	7	10	2	2	4	2	1
Educational attainment:												
Total percent.....	100	100	100	100	100	100	100	100	100	100	100	100
Elementary only.....	55	43	50	63	64	47	59	77	53	44	46	61
1-3 years high school.....	17	19	19	16	12	15	12	10	17	19	18	15
High school graduate or better..	28	38	31	21	24	38	29	13	30	37	36	24

1/ Excludes respondents failing to report on income, number of living brothers and sisters or school years completed.

Source: Unpublished data from the Social Security Administration Retirement History Survey.

Table 10

Educational attainment and income in 1968, by number of living siblings, for persons aged 58-63, now living in large cities

Selected characteristics	Married men, wife present				Nonmarried men				Nonmarried women			
		Living siblings				Living siblings				Living siblings		
	Total	0-1	2-3	4 or more	Total	0-1	2-3	4 or more	Total	0-1	2-3	4 or more
	Residing in urban area of 1 million or more persons, 1969											
Total respondents 1/	1,522	461	543	518	312	94	112	106	772	269	287	216
Income in 1968:												
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Under $2,000	5	5	5	5	22	27	17	24	31	29	32	32
2,000-4,999	13	14	13	13	21	22	19	23	39	39	37	40
5,000-7,499	26	24	27	27	26	21	35	22	19	21	19	16
7,500-9,999	23	23	22	24	14	11	18	14	6	4	6	8
10,000 or over	32	34	33	30	16	19	12	18	6	7	6	4
Educational attainment, highest grade completed:												
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Elementary only	38	28	37	46	45	41	37	58	40	32	42	47
1-3 years high school	20	20	18	22	21	22	21	18	20	21	20	21
High school graduate or better	42	52	45	32	34	37	42	24	40	47	38	32
	Residing in urban area of ¼-1 million persons, 1969											
Total respondents 1/	332	387	432	513	236	65	72	99	703	198	230	275
Income in 1968:												
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Under $2,000	8	8	6	9	23	20	24	24	35	35	32	37
2,000-4,999	18	18	16	21	33	35	33	30	41	39	45	38
5,000-7,499	26	22	28	27	20	25	14	22	14	14	14	14
7,500-9,999	23	23	21	24	12	8	14	13	6	7	4	7
10,000 or more	25	29	29	19	12	12	15	10	5	5	5	4
Educational attainment, highest grade completed:												
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Elementary only	34	24	28	46	46	38	49	50	34	28	41	32
1-3 years high school	22	20	22	24	21	24	19	19	20	13	19	26
High school graduate or better	44	56	50	30	33	38	31	31	46	59	40	42

1/ Excludes respondents failing to report on income, number of living brothers and sisters or school years completed.

Source: Unpublished data from the Social Security Administration Retirement History Survey.

GENERAL INTRODUCTION TO THE SESSION ON THE RECONCILIATION OF SURVEY AND ADMINISTRATIVE INCOME DISTRIBUTION STATISTICS THROUGH DATA LINKAGE*

As statisticians and researchers, we are all concerned with the quality of information available to us for analysis. Income data, particularly that collected in household surveys, is notably deficient in quality and, therefore, hard to use properly. The papers at this session provide some initial results from a recently completed project which promises to go a long way towards aiding our understanding of the measurement problems involved with income and suggesting some means for their resolution.

BACKGROUND

In an attempt to obtain an improved data base for use in studies of income distribution and redistribution, the Census Bureau and the Social Security Administration (SSA) have been involved in a joint project, assisted by the Internal Revenue Service (IRS), which matches the Bureau's March 1973 Current Population Survey (CPS) data to Social Security's administrative record files and selected information provided by IRS.

The subject matter content of the 1973 Study is quite similar to that in earlier CPS-IRS-SSA linkages. The items being extracted from SSA's files are about the same as in the pilot work directed by Joseph Steinberg [1]. The IRS data that is available, however, is far more limited than in the past 1/--so limited, in fact, that it will be necessary to supplement it with IRS data introduced by means of "statistical" matching [2]. Perhaps the chief difference between the 1973 study and earlier linkages is that the sample involved, consisting, as it does, of over 100,000 individuals age 14 or older, is many times larger than that used in any previous joint effort.

MATCHING PROCEDURES AND CONFIDENTIALITY PRECAUTIONS

Last year at these Annual Meetings we spoke to you about the procedures being used to create the linked data set [3, 4, 5]. We have come a long way since then. All the basic matching steps have been completed. In fact, a computer tape of the CPS-SSA portion of the match is now available for public use through the National Archives Record Service. 2/ Several reports are in publication [7] which should answer most questions about the actual linkage process. The confidentiality precautions taken are also discussed in these reports, but it may be well to reiterate some of them here.

Throughout the study, great care has been taken to insure the confidentiality of the shared information. The laws and regulations under which the three agencies operate impose very definite restrictions [e.g., 8] on such exchanges, and special procedures had to be followed at all times. A summary of these will be found in the session appendix which was available as a handout at the meeting. The matching, in all cases, was carried out by Census Bureau personnel. At no time did either IRS or SSA have access to identified records from each other's files or from those of the Census Bureau.

NATURE OF PAPERS

The four papers at this session focus on the conceptual and reporting differences among the linked data sets. For the most part, they are descriptive and nontheoretical. The comparisons made are preliminary ones of quite limited scope and should be viewed as just hors d'oeuvres for the analyses that are to come. 3/

A major use of the data base resulting from the matching will be as an input to the Social Security Administration's simulation models of the tax-transfer system and that system's impact on the distribution of income. A contributed paper given at these meetings by Mary P. Johnston [9] provides one illustration of this use.

At the Census Bureau, the linked administrative information will be employed to examine the CPS data in order to ascertain any biases in the Bureau's statistics. Part of that work is discussed by Roger Herriot and Emmett Spiers in their paper at this session. The matched data base will also play an important role in the construction of annual "personal" income size distributions of the U. S. population. This work is being carried out at the Bureau of Economic Analysis and is a follow-on to the work by Budd and Radner for 1964 [10].

To the extent that confidentiality requirements permit, other analyses of the matched information will be possible by members of the research community at large, since much of the microdata will eventually be "published." A sample of one such analysis can be found in a contributed paper given at these meetings by Joyce Stevens and Roger Herriot [11] which employs data taken from the first such computer tape file (see[6]) to be made publicly available.

LIMITATIONS

The results provided at this session suffer from a number of limitation due to erroneous nonmatches and mismatches. While care has been taken to minimize errors in matching, available resources precluded the total elimination of such problems. Coverage errors in the CPS also need to be mentioned as a possible source of bias. Discussions of the matching and coverage problems in the 1973 study and what we have done about them will be found in two contributed papers also given at these meetings [12, 13].

For the first three papers at the session, preliminary adjustments have been made which are believed to lessen the impact of CPS coverage errors and biases due to nonmatches. However, no adjustment has been made for the small number of mismatches which went undetected. The fourth

paper at this session is based solely on unadjusted CPS sample counts.

ACKNOWLEDGEMENTS

The authors would like to conclude this introduction by acknowledging the extensive assistance given them by Fritz Scheuren, who organized the session, and H. Lock Oh, who prepared much of the tabular material. The authors would also like to thank Margaret Martin for her gracious and thoughtful participation as chairperson.

Denton Vaughan oversaw the production of the copy for these Proceedings on the IBM/360 Administrative Terminal System (ATS). Andrea Novotny, with the assistance of Lois Gale, Cynthia Edwards, and Tillie Mazor, entered the text in the system. Gina Savinelli assisted in production of the tabular material. Alberta Thompson provided valuable technical assistance in preparation of the charts.

FOOTNOTES

*Because of the interrelatedness of the papers given at this session, the authors felt that readers of the Proceedings would find it easier to follow the presentations if a general introduction were provided first. To this end a number of the remarks made by the individual speakers (including the session chairperson, Margaret Martin) have been brought together here.

1/ For this project, IRS made available to the Census Bureau magnetic tape abstracts of limited income information from tax returns, subject to the confidentiality arrangements discussed in this introduction and in the session appendix. The dollar items abstracted consisted of total income, salaries and wages, dividends, and interest. Codes were also included to indicate the type of return filed (e.g., joint, surviving spouse, etc.), the types of schedules used (e.g., Schedules C, D, F, etc.), and the number of exemptions claimed.

2/ Details on the items selected for inclusion on this file are available in [6] or can be obtained by writing to the National Archives Record Service, Machine-Readable Archives Division (NNR), Washington, D.C. 20408.

3/ At the session, extensive tabular material supporting the results in the papers was provided as a handout. For reasons of space, most of these tables could not be included in the Proceedings; however, they are available on request. The mailing address for Census authors is--U.S. Bureau of the Census, Population Division, FOB No. 3, Suitland, Md. 20233. For other authors write to -- Division of Economic and Long-Range Studies, Office of Research and Statistics, Social Security Administration, 1875 Connecticut Avenue, N.W., Washington, D.C. 20009.

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