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ABSTRACT

The six articles in the reprint (with supplementary tables) from the October 1979 Monthly Labor Review, marking the International Year of the Child, are about children and work. Two articles examine the labor force experience of young U.S. workers in general and young black workers in particular over the past quarter century (1955-78). A third article reports on efforts to follow the experience of young workers in the labor force by means of a panel survey, while a fourth reports on the most recent experience of school graduates and dropouts in the labor market. The remaining two articles explore the effects of the work situation of adults upon children. One deals with the employment, income, and marital situations of the U.S. families in which children are growing up, and the other examines the arrangements families have effected for the care of children to permit adults to work. (YLB)

Young Workers and Families: A Special Section

Special Labor
Force Report 233

U.S. Department of Labor
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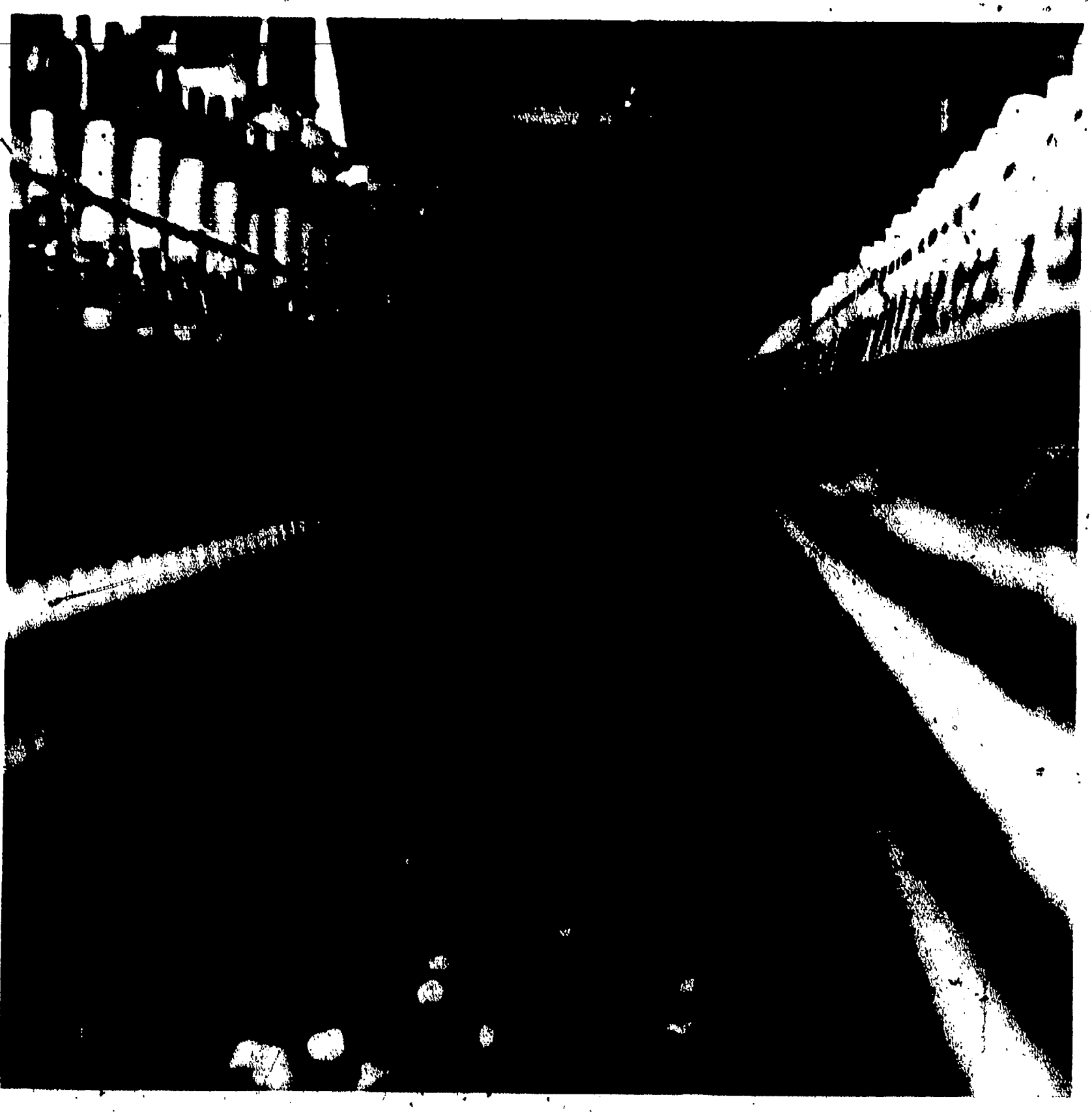

Following is a list of Special Labor Force Reports which have been published in the *Monthly Labor Review* since March 1975. Copies may be obtained, while the supply lasts, upon request to the Bureau of Labor Statistics or to any of its regional offices.

Number

190 Women Who Head Families: A socioeconomic Analysis, March 1975
191 Students, Graduates, and Dropouts in the Labor Market, October 1975
192 Work Experience of the Population, 1975
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230 Median earnings in 1977 Reported for Year-round Full-time workers, June 1979
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International Year of the Child 1979

Children and work. When the United Nations proclaimed 1979 The International Year of the Child, it sought to direct the world's attention to the special needs of children, who make up about a third of the world's human inhabitants. Twenty years earlier, the world body had enunciated a bill of rights for children. The declaration called for emotional security (affection, love, understanding); physical security (adequate nutrition and medical care, special care if handicapped, aid in time of disaster); and social security (free education, play and recreation, a name and a nationality; and an opportunity to develop as an individual in an environment of peace and brotherhood). Approaching the 20th anniversary of the promulgation of these rights, the United Nations called for a redoubling of efforts to promote the "well-being, safety and development of children" because "children are our future—our most precious resource."

Children are the future of the human race. But each child also has a future. The English poet William Wordsworth wrote: "The Child is father of the Man." The child is also parent of the worker. Before reaching 16 years of age, when one is first counted in the official U.S. labor force, children perform chores around the urban (and suburban) home, on the farm, and in jobs outside the home not prohibited by child labor laws. More significantly, the child of today is the worker of tomorrow. Of the millions of children in the United States who were 6 to 14 years of age in 1968, well over two-thirds were in the full- and part-time labor force a decade later. Thus a very large part of the *future* of a substantial majority of children is work in the factory, the office, the field, the mine, and on the road.

The six articles in the special section of this issue of the *Review*, marking the International Year of the Child, are about work. Two articles examine the labor force experience of young U.S. workers in general and young black workers in particular over the past quarter century. A third article reports on efforts to follow the experience of young workers in the labor force by means of a panel survey, while a fourth reports on the most recent experience of school graduates and dropouts in the labor market. The remaining two articles in the special section explore the effects of the work situation of adults upon children: One deals with the employment, income, and marital situations of the U.S. families in which children are growing up and the other examines the arrangements families have effected for the care of children to permit adults to work.

THE EDITORS thank Elizabeth Waldman, a senior economist in the Division of Labor Force Studies, Bureau of Labor Statistics, for her work in coordinating preparation of the articles in the special section.

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U.S. DEPARTMENT OF LABOR
Bureau of Labor Statistics

Young and marginal: an overview of youth employment

Workers 16 to 24 years of age experienced high unemployment, sagging employment ratios, and rising racial differentials in 1954–78; among hypotheses examined are those dealing with the postwar baby boom and minimum wage

NORMAN BOWERS

Many facts concerning the labor market experience of young people are well known. Teenage and young adult unemployment rates are persistently much higher than those of adults, with new entrants and reentrants generally accounting for approximately two-thirds of teenage and one-fourth of young adult joblessness. Moreover, considerable evidence suggests that these high rates of unemployment result from a much higher incidence of unemployment rather than from any long-term difficulty finding a job: young people tend to change labor force status more frequently than do adults, often experiencing brief intervening spells of unemployment.[1]

This article presents an overview of historical trends for selected labor market indicators—unemployment rates, labor force participation rates, and employment-population ratios—for teenagers and young adults to age 24, with an analysis of these trends by race and sex.[2] A review of current explanations for the labor market problems that confront these young people is also included, although no new hypotheses are advanced or tested.

Examining historical trends

Table 1 places youth unemployment into some historical perspective, minimizing the effect of the business cycle by focusing on the years 1955, 1965, and 1973, when the overall unemployment rate was approximately the same.[3] These comparisons show that the unemployment rates of *all* teenage groups were higher in 1965 than in 1955, particularly for black teenagers. In 1973, white teenage unemployment was at approximately its 1965 rate, while black teenage unemployment had increased markedly. For all 4 years, the unemployment rates of each race/sex group consistently declined with age, suggesting a process of adjustment; that is, as young people complete or leave school, settle down, and generally mature, they begin to come to grips with the realities of the full-time labor market.[4]

Part of the explanation for the relatively high unemployment and loose labor force attachment of young people is straightforward: young people make up a clearly distinguishable component of the marginal or peripheral labor force, whose employment is generally casual, intermittent, and part time. The basis for this marginal status rests in both the supply of and the demand for youth employment.[5]

Because characteristics of young people differ somewhat by age, it is useful and important to distinguish those 16 to 17 years old from those 18 to 19 and 20 to 24. Most young people 16 to 17 are in school (89 percent in October 1978), a fact that alone imposes certain constraints on the kinds of jobs available to them and on their job-search behavior. Of this group, most are working after school or on weekends or are seeking part-time jobs. Although fewer youths 18 to 19 are enrolled in school and a higher proportion of the unem-

Norman Bowers is an economist in the Office of Current Employment Analysis, Bureau of Labor Statistics. Bob Whitmore, an economist in the same office, assisted in producing the charts for this article.

ployed are seeking full-time work, there is a similar casualness toward any kind of permanent, career-oriented job as with those age 16 to 17. Young adults (age 20 to 24) exhibit a turnover pattern similar to that of teenagers but are clearly in the process of settling down. For all these age groups, jobs are often seen in purely instrumental terms: other activities are more important and these other activities often require money.

By itself, however, the youth supply explanation is inadequate. For example, school enrollment may itself be a response to economic conditions and poor job prospects. Going to school may be perceived as better than working in a low-paid, menial, or arduous full-time job.[6] Also, the labor market behavior of young people may be affected by the array of jobs employers make available to them. That is, the settling down process is conditioned and constrained by employer needs and hiring practices and by the structure of the labor market — the demand side.

Regarding demand, a number of economists have noted the usefulness of distinguishing between "secondary" and "primary" firms and jobs because the characteristics of the jobs offered by each tend to differ.[7] Most young people work in secondary jobs — jobs with low wages, requiring menial work, and with little prospect or incentive for continuous employment. As Paul Osterman has noted, "The employees work, for example, as loaders, handlers, stock clerks, packers, and retail salespeople. These jobs provide virtually no training, except in the most basic work habits, and perhaps not even that, since there is little penalty for dereliction."[8] One exception occurs among white young men age 20 to 24 without a college education, who, unlike blacks and women, often find jobs in small machine, body, and printing shops, which, although subject to unstable product demand and paying relatively low wages, usually provide their workers with both a wide range of technical skills and job contacts for the next step in the adjustment to the labor market.

The occupational distribution of employment shows that, in 1978, about half of the employed male teenagers were nonfarm laborers or in service occupations. Typically, males age 20 to 24 work in craft and operative jobs, although many remain nonfarm laborers and service workers. Young women, however, are often heavily concentrated in clerical and service jobs. (See table 2.) The nature of many of the jobs held by young people, then, would seem to require little firm-specific training or employment continuity, requirements not needed for "secondary jobs."

A critical question arises, why are only a certain array of jobs "made available" to youth, and why do hiring practices tend to preclude young people from jobs that tend to offer reasonably stable employment and substantial investment in training? Based on interviews with 30 business executives and independent historical research, Osterman concluded the following:

> Because primary firms have structured promotion ladders and provide considerable on-the-job training, they are understandably leery of hiring and investing in workers who may soon leave. For such firms, age is the obvious measure of maturity and stability. When the demand for labor is high, the primary firms do hire younger people. Even in the best of times, however, they do this with reluctance. As a result, many youths can find work only in unstable secondary firms. This hiring pattern, I believe, is the underlying structural cause of unemployment for out-of-school teenagers.[9]

These institutional arrangements are an important part of the explanation of the role youth play in the economy and their relatively high unemployment and marginal labor force attachment.

Table 1. Unemployment rates by race, sex, and age, selected years, 1955–78

(In percent)

Race, sex, and age	1955	1965	1973	1978
Total, 16 years and over	4.4	4.5	4.9	6.0
Both sexes, 16 to 19 years	11.0	14.8	14.5	16.3
Both sexes, 20 to 24 years	7.0	6.7	7.8	9.5
Both sexes, 25 years and over	3.6	3.2	3.1	4.0
White men				
16 to 19 years	11.3	12.9	12.3	13.5
16 to 17 years	12.2	14.7	15.1	16.9
18 to 19 years	10.8	11.4	10.0	10.8
20 to 24 years	7.0	5.9	6.5	7.6
25 years and over	3.0	2.5	2.4	3.0
White women				
16 to 19 years	9.1	14.0	13.0	14.4
16 to 17 years	11.6	15.0	15.7	17.1
18 to 19 years	7.7	13.4	10.9	12.4
20 to 24 years	5.1	6.3	7.0	8.3
25 years and over	3.7	3.6	3.7	4.5
Black and other men				
16 to 19 years	13.4	23.3	26.9	34.4
16 to 17 years	14.8	27.1	34.4	40.0
18 to 19 years	12.9	20.2	22.1	30.8
20 to 24 years	12.4	9.3	12.6	20.0
25 years and over	8.0	5.5	4.2	6.3
Black and other women				
16 to 19 years	19.2	31.7	34.5	38.4
16 to 17 years	15.4	37.8	36.5	41.7
18 to 19 years	21.4	27.8	33.3	36.5
20 to 24 years	13.0	13.7	17.6	21.3
25 years and over	8.9	9.4	6.1	8.2

Racial differentials among young men

Evidence of a persistent and chronic racial differential for virtually all labor market indicators has been amply documented. Data have shown that the unemployment rates of black males have worsened relative to white males. Labor force participation rates and employment-population ratios have dropped steeply among blacks, while there has been little change for whites; and the proportion of young black men with work experience in any given year has been declining.

Table 2. Employed 16- to 24-year-olds by age, occupation, race, and sex, 1978 annual averages

[Percent distribution]

Occupation	White				Black and other			
	Men		Women		Men		Women	
	16 to 19 years	20 to 24 years	16 to 19 years	20 to 24 years	16 to 19 years	20 to 24 years	16 to 19 years	20 to 24 years
Total employed (thousands)	3,916	6,560	3,396	5,418	363	770	306	750
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Professional and technical workers	2.3	9.7	2.6	14.5	1.9	7.5	2.6	8.7
Managers and administrators, except farm	1.4	5.9	1.1	4.1	.3	3.1	.3	2.0
Sales workers	5.5	5.9	7.4	6.9	4.1	3.0	7.8	3.9
Clerical workers	6.1	7.2	34.1	42.2	8.0	10.5	39.9	42.5
Craft and kindred workers	21.2	23.2	2.2	1.7	5.0	12.1	1.3	.9
Operatives, except transport	16.6	11.0	7.9	8.9	12.9	19.1	9.5	16.9
Transport equipment operatives	4.4	6.1	.4	.5	4.4	7.4	.7	.4
Nonfarm laborers	14.2	13.5	3.6	1.6	24.3	18.4	3.3	1.2
Private household workers	.1	*	6.8	1.2	.3	*	3.3	1.5
Other service workers	21.1	8.4	30.2	17.6	33.1	16.0	30.4	21.3
Farmworkers	6.4	3.1	1.5	.8	5.5	2.7	1.3	.7

* Less than 0.05 percent

Deterioration evident. Since 1954, unemployment has increased continuously for blacks both absolutely and relative to whites. Of most interest is the relative position of specific race age groups for a given set of economic conditions.[10]

Table 1 shows unemployment rates for white males and black males age 16 to 17, 18 to 19, and 20 to 24. Some caution must be taken in interpreting changes between years when the overall rate is slightly different because of the cyclical sensitivity of youth unemployment.

The position of black male teens age 16 to 17 and 18 to 19 has deteriorated dramatically over the entire period, 1954 to 1978. For blacks age 20 to 24, unemployment began to worsen in the mid-1960's. No trend of rising unemployment rates emerged for white men in the same age group. Indeed, rates of white males age 18 to 24 appear to have decreased slightly over time.

The evidence indicates that the differential between the unemployment experience of black youth and white youth has been worsening since the mid-1960's. Table 3 provides black-white unemployment ratios for selected years from 1954 to 1978. For teenagers, there was a clear increase in the ratio: for the period 1954-65, the black-to-white teenage ratio averaged 1.583; while, from 1966 to the present, the ratio averaged 2.149. Although less pronounced, the ratio for those age 20 to 24 also drifted upward, particularly throughout most of the 1970's.

The employment-population ratios and labor force participation rates of young black men have fallen substantially over the last 25 years. To the extent this decline reflects the relatively poor quality of available job prospects, the unemployment differential understates the labor market problems confronting black males. This implies that the behavior of nonparticipants is critical to understanding black youth employment problems.

Youth employment-population ratios are displayed in chart 1 and the following tabulation:

Age	*1955*	*1965*	*1973*	*1978*
Black males:				
16 to 19	55.7	39.4	33.9	29.8
16 to 17	41.1	28.8	22.0	20.0
18 to 19	66.0	53.4	47.9	41.1
20 to 24	78.6	81.6	71.4	62.3
White males:				
16 to 19	52.0	47.1	54.4	56.3
16 to 17	42.2	38.0	44.8	46.0
18 to 19	64.2	58.3	65.1	67.2
20 to 24	80.4	80.2	80.2	80.6

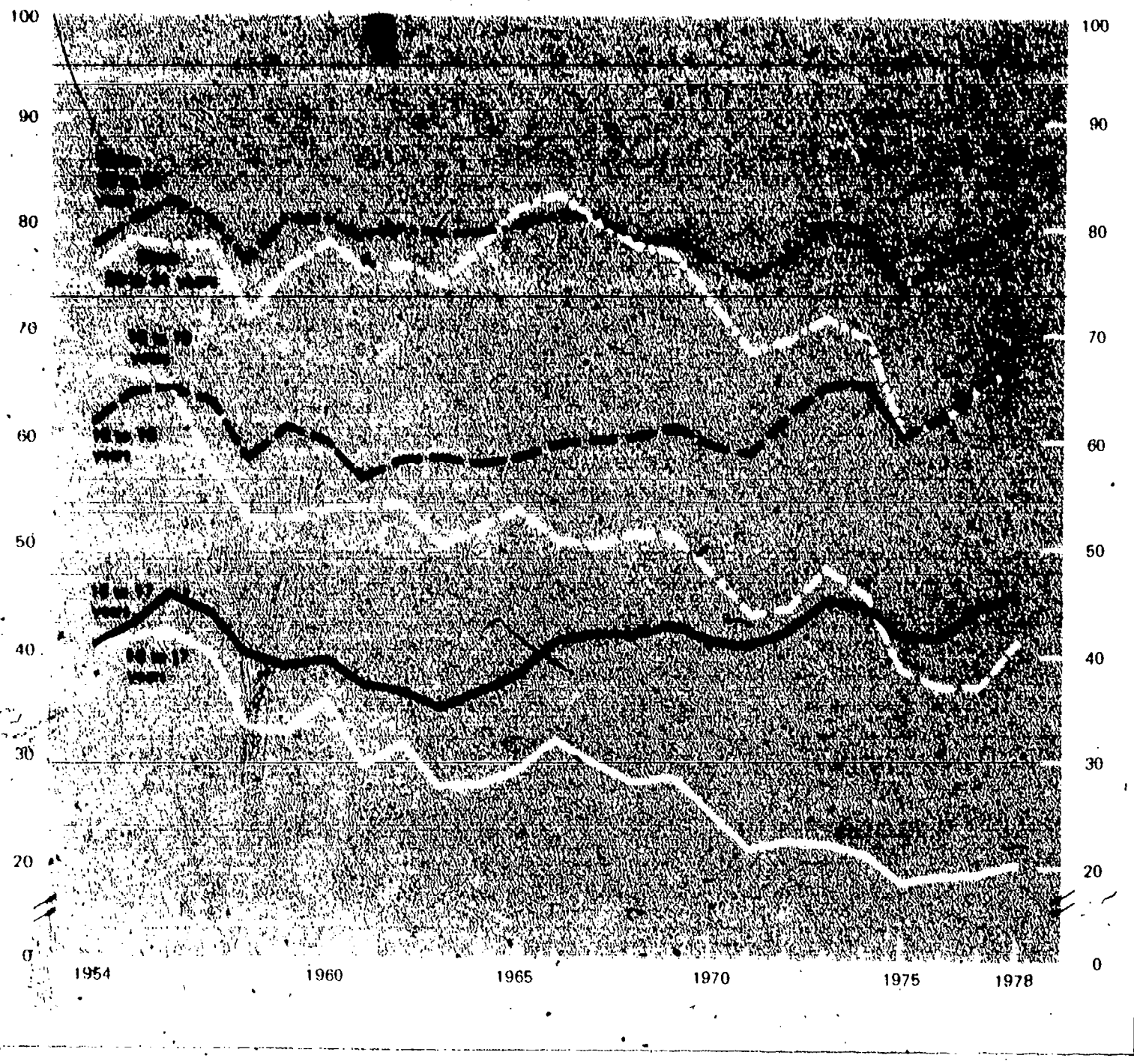
The employment-population ratios of white male teens have inched up slightly, particularly since 1965, while no change has been posted among those age 20 to 24. For black teenagers, however, employment-population ratios have declined sharply. Moreover, this decline has extended to those age 20 to 24 since the mid-1960's, a condition consistent with the black unemployment experience.[11]

Similar trends are evident among labor force participation rates. (See chart 2.) Participation rates of all young black males have declined rather steeply. For example, the rate for those age 16 to 17 fell from 47 percent in 1954 to 33 percent in 1978; for those age 18 to 19, the drop was from 78 percent to 60 percent; and for those age 20 to 24 the rate declined from 91 to 78 percent. These patterns did not emerge for white males; on the contrary, participation rates increased slightly for both those age 16 to 17 and 18 to 19, while participation of young adults remained remarkably steady. Of

Table 3. Ratios of black-to-white unemployment rates, by sex and age, selected years, 1954-78

Sex and age	1954	1955	1965	1969	1973	1978
MEN						
16 to 19 years	1.07	1.19	1.81	2.14	2.19	2.55
16 to 17 years	0.96	1.21	1.84	1.98	2.28	2.37
18 to 19 years	1.13	1.24	1.77	2.41	2.21	2.85
20 to 24 years	1.72	1.77	1.58	1.83	1.94	2.63
WOMEN						
16 to 19 years	1.98	2.11	2.26	2.40	2.65	2.67
16 to 17 years	1.59	1.33	2.52	2.26	2.32	2.44
18 to 19 years	2.30	2.78	2.08	2.57	3.06	2.94
20 to 24 years	2.06	2.55	2.18	2.18	2.51	2.57

Chart 1. Civilian employment-population ratios for young men by race and age, annual averages, 1954-78

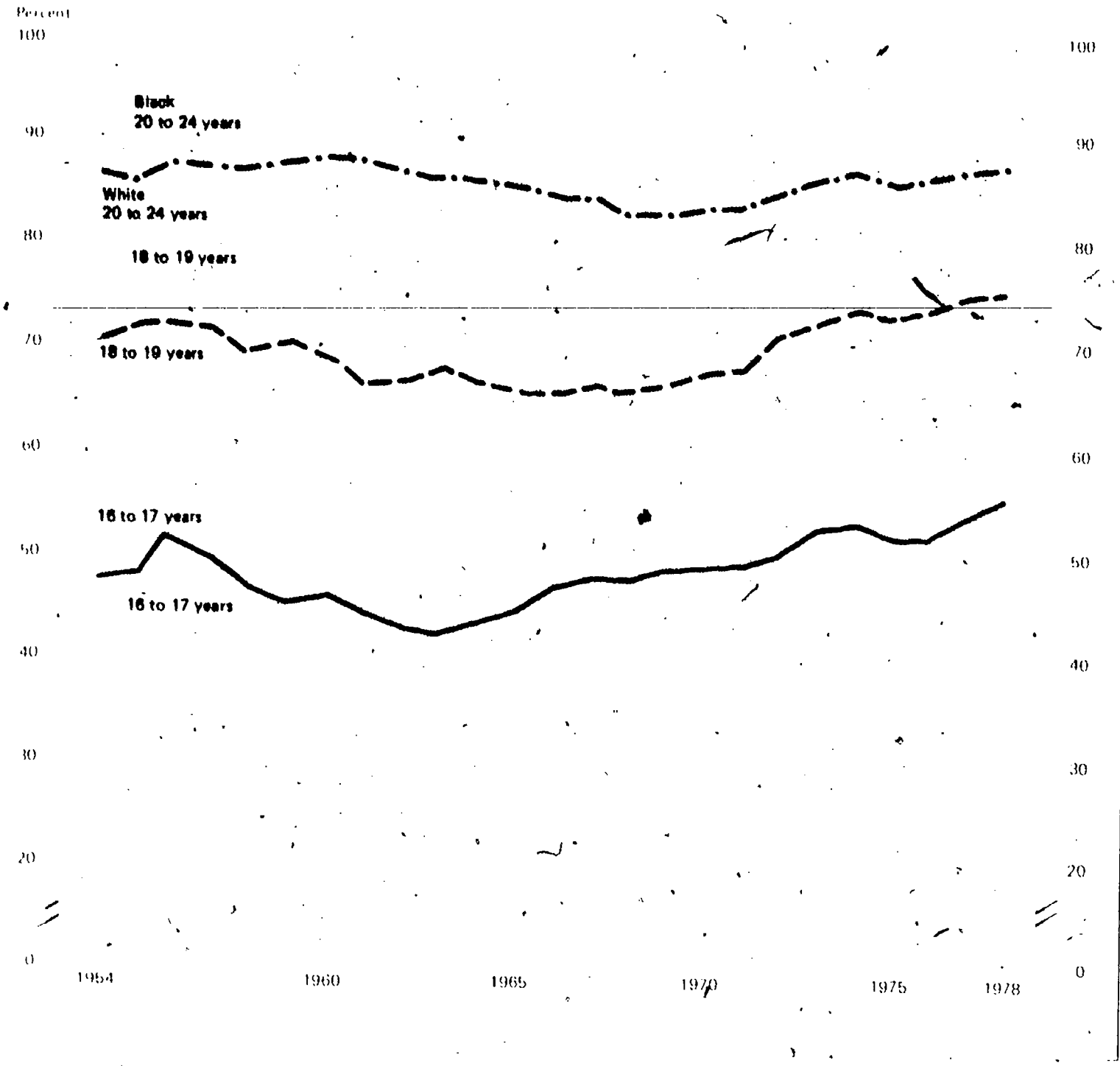


course, such comparisons ignore the cyclical sensitivity of youth participation, but the declines for young blacks are simply too pronounced to explain as a result of cyclical factors.

Permanent nonparticipation? A widening black-white unemployment differential, declining employment-population ratios, and falling participation rates for black youth are clearly evident from the data. Some researchers have suggested, particularly on the strength of declining participation rates, that the labor market prospects of many young black men are so bleak that many have permanently dropped out of the conventional, measured labor force.[12]

This theory of permanent nonparticipation may be true, but none of the statistics presented thus far can be used as rigorous support for that position because data on specific points in time do not reflect the dynamics of labor force movements.[13] While rapid, sporadic labor force movements certainly suggest something about the marginal status of certain groups, particularly if buttressed by information on the characteristics of the jobs held by or available to these groups, rigorous evidence of an enlarged pool of permanent nonparticipants

Chart 2. Civilian labor force participation rates for young men by race and age, annual averages, 1954-78



would require longitudinal information.

None of the data challenges recent research suggesting that some groups of black workers have improved their relative labor market position. There is evidence, for example, of some improvement in the measured "relative wage" of young blacks to whites.[14] However, a paradox arises: other things equal, economic theory predicts that the probability of labor force participation is a positive function of expected wages. Just the opposite apparently has occurred for young blacks over the long run.[15]

Some relevant information on the extent of permanent nonparticipation may be garnered from data on work experience. Every March, a series of supplementary questions on total work experience during the previous year is asked of respondents in the Current Population Survey. Table 4 contains data on the percent of the male population with *any* work experience by age and race.[16]

The data indicate a significant drop in the proportion of black male teenagers with work experience over any given year, from 67.3 percent in 1966 to 47.2 percent in 1977. A similar significant decline is apparent for black males age 20 to 24, with 90.1 percent estimated to have

had some work experience in 1966, but just 76.7 percent in 1977. No discernible trend is evident for whites in either of the age groups.

Although lack of work experience in any given year does not necessarily indicate total nonparticipation in the labor force, data on participation, employment, and work experience indicate a marked decline in the utilization of young black workers. Moreover, recent longitudinal research has provided evidence that joblessness for many black youth has adverse long-term consequences.[17]

Differentials among young women

During 1954–78, the most important features of the labor market experience of young women were sharp increases in unemployment among black women, an upward trend in the female-male unemployment differential, and important changes in the patterns of labor force participation between blacks and whites. Table 1 shows that the already-high unemployment rates of female black teenagers have increased dramatically over time. Unemployment among young black women age 20 to 24 demonstrated a slight upward trend after 1965. The unemployment rates of white teenage women appear to have increased only slightly, not approaching the magnitude of the increase for black teens.

Racial unemployment differentials have been as persistent for women as for men. However, the female differential has generally been of a larger magnitude: rarely has the unemployment rate of black women been less than twice that of whites. (See table 3.)

Table 4. Percent of the population 16 to 24 years of age with work experience during the year, by race and sex, 1958–77

Year	White				Black and other			
	Men		Women		Men		Women	
	Age 16 to 19	Age 20 to 24	Age 16 to 19	Age 20 to 24	Age 16 to 19	Age 20 to 24	Age 16 to 19	Age 20 to 24
1958	58 8	89 3	45 9	60 4	59 1	88 8	37 8	61 7
1959	58 0	92 0	45 9	62 2	58 3	91 7	43 4	55 4
1960	59 7	92 9	45 3	62 0	57 6	93 1	41 3	63 3
1961	56 5	92 9	44 0	58 5	50 3	89 8	35 9	65 7
1962	58 1	92 6	44 0	64 0	44 9	90 0	35 0	58 3
1963	56 4	91 8	42 8	66 3	48 2	89 4	32 9	65 5
1964	58 4	92 8	43 9	65 6	50 4	90 3	36 5	65 8
1965	61 1	92 4	46 1	66 2	54 3	92 0	34 6	66 8
1966	75 9	93 8	59 8	69 8	67 3	90 J	48 9	67 2
1967	76 0	90 5	61 3	71 2	69 3	88 2	49 8	69 2
1968	77 2	91 5	59 9	73 1.	65 2	87 4	51 6	69 2
1969	75 5	90 2	61 3	74 1	67 3	87 2	40 0	69 7
1970	72 7	90 1	60 1	73 9	58 3	80 8	44 6	67 0
1971	70 5	89 6	57 8	72 4	54 7	81 1	39 6	63 2
1972	72 1	91 8	58 8	75 0	50 2	83 5	37 8	63 7
1973	75 1	93 0	64 1	76 2	57 6	85 5	41 8	62 8
1974	75 0	92 7	64 0	77 0	56 0	82 0	41 8	65 1
1975	70 1	90 5	62 0	75 7	47 2	77 9	36 9	61 5
1976	72 4	92 8	63 6	78 5	46 1	79 8	34 1	60 3
1977	73 8	93 2	64 8	79 0	47 2	76 7	37 5	63 6

Data for 1958–65 refer to persons age 14 to 19

The following tabulation shows the rate of unemployment among young men to that of young women:

Year	Age 16 to 19	Age 20 to 24
1954	0.84	0.68
1955	.88	.79
1965	1.11	1.14
1969	1.17	1.24
1973	1.09	1.15
1978	1.08	1.11

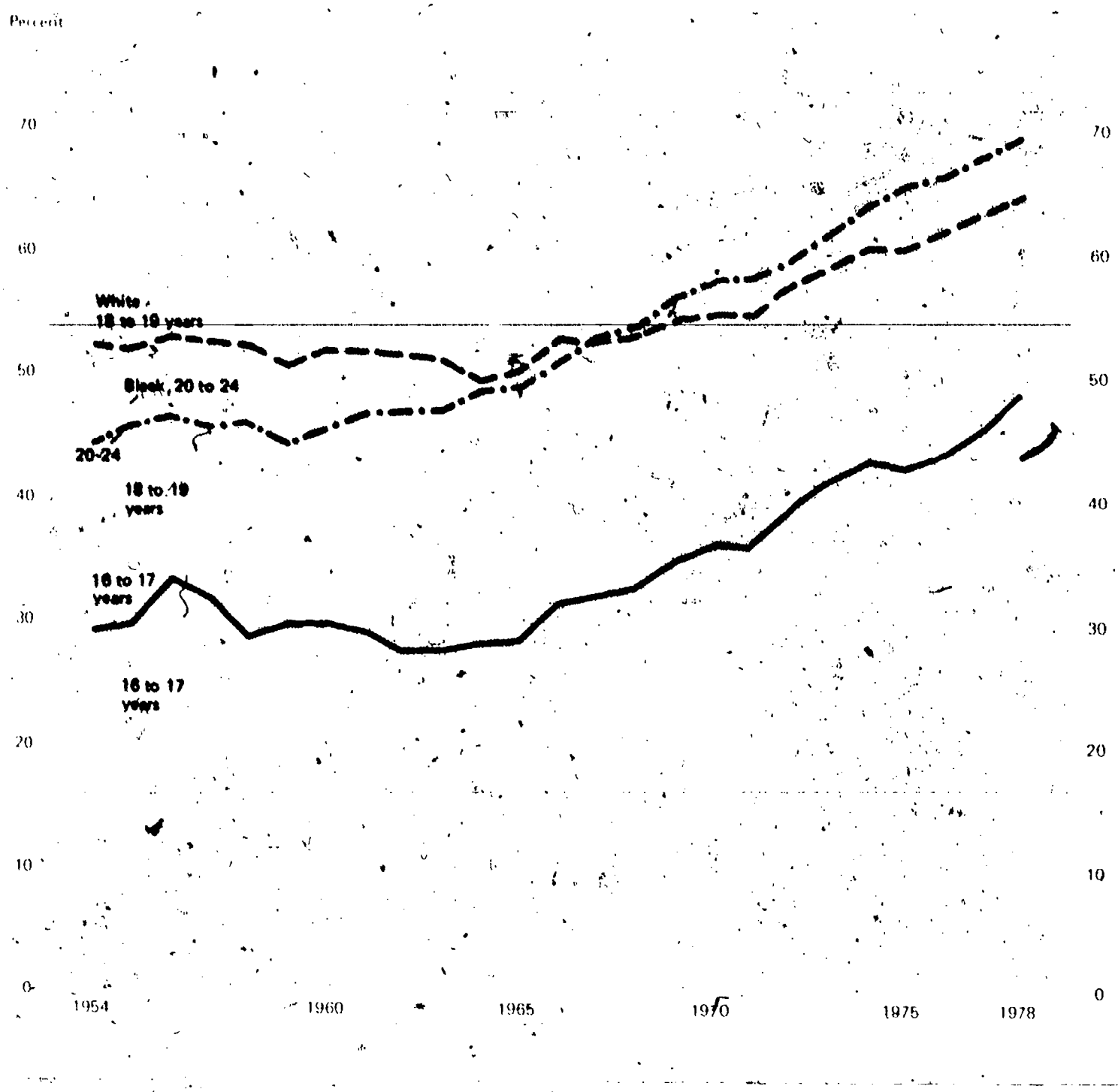
The data show that prior to 1965 female teenagers had lower unemployment rates than their male counterparts, whereas the reverse was true from 1965 on.[18] Among young adults age 20 to 24, the differential also widened, but not consistently.

There are several reasons for this reversal in trend among female teens. The labor force participation rates of women in virtually all age groups have increased substantially in the past 30 years. Although this has not necessarily led to higher unemployment rates, there is considerable evidence of occupational crowding: women tend to be employed in a relatively small subset of occupations. (See table 2.) This crowding effect suggests that the elasticity of substitution between men and women workers is limited. Other things being equal, therefore, an increase in the female labor supply would be expected to be associated with a relative increase in unemployment.

Labor force participation dynamic. Dramatic changes have occurred in female labor force participation rates.[19] Between 1954 and 1978, the labor force activity of white female teens and young women increased markedly in each age group: for those age 16 to 17, the increase was from 29 to 49 percent; for those age 18 to 19, participation expanded from 52 to 65 percent; and the participation of young adults age 20 to 24 jumped from 44 to 69 percent. The same 2-year comparison indicates much smaller increases for black women: from 25 to 28 percent among those age 16 to 17; from 38 to 49 percent for those age 18 to 19; and from 50 to 63 percent for young adults. Thus, while there was no downward trend in participation rates among young black women, they have dropped sharply *relative* to the rates for white women. (See chart 3.)

The most interesting changes have occurred among the young adult group (age 20 to 24). While white participation rates rose consistently from the 1950's to the late 1970's, black participation leveled off in the late 1960's before increasing again in the mid-1970's. As noted in chart 3, after lagging behind black participation for many years, the white participation rate for young white adult females surpassed the black rate in 1970; and, by 1978, the white group had a significantly higher rate of participation.

Chart 3. Civilian labor force participation rates for young women by race and age, annual averages, 1954-78



Using data from the National Longitudinal Surveys of Young Women for 1967 and 1972, Frank Mott has examined some detailed characteristics—education, hourly wage in 1967, marital status, whether or not receiving welfare, and others—to determine the association between these variables and labor force participation.[9] The results of his analysis for young women age 20 to 24 led to no firm conclusion. Others have suggested that the expansion of government transfer programs explains the decline in participation among unmarried black women. These analysts assert this group of women find Aid to Families with Dependent Children (AFDC) more profitable than a very low paying job. However, an association between the "relative wage" (AFDC/market wage) and participation does not prove that a higher "relative wage" caused the nonparticipation behavior. This is especially true because, as Mott has shown, between 1967 and 1972 the average AFDC payment was well below the earnings level of unskilled jobs.

Table 4 shows that, consistent with an increasing employment-population ratio and rising labor force participation, the percent of white women age 20 to 24 with some work experience increased steadily from about 60

percent in 1958 to 79 percent in 1977. For blacks of the same age there was little change over the entire 20-year period: roughly 62 percent reported some work experience in both years. However, during 1967–77, a slight downward trend emerged among young black women. For the white teenage group (age 16 to 19), little change occurred; however, black teens experienced a significant drop, from 49 to 36 percent, consistent with this group's increasingly high unemployment rates and declining employment-population ratios. (See chart 4.)

Explaining the situation

Many reasons have been given to explain the youth employment situation. Although no consensus has been reached among analysts, certain contributing factors are persistently cited. No one factor is cited as telling the whole story, rather, each is seen as explaining a part of the problem.

A crowded market? The most popular explanation, not only for unemployment among all youth but also for the relative and absolute employment deterioration among blacks, is the post-World War II baby boom. Among many others, Stephen Seninger asserts, "The postwar baby boom was a major underlying force leading to the labor market problems of teenagers throughout the 1960's and 1970's."[20] This surge in population, it is stated, resulted in an excess supply of young people and, other things equal, higher unemployment rates. Especially important for this explanation are key racial differences in these demographic trends. From the mid-1950's to mid-1960's, the white teenage and black teenage populations increased by roughly the same amount, 55 and 50 percent, respectively; yet, from 1964 on, the annual growth in the black population accelerated relative to whites. Between 1964 and 1976, the young black population grew at an annual rate of 4.3 percent, compared with 2.3 percent for white youth.[22]

There are some serious problems with this as an explanation. First, differential population growth and the (assumed) result of a differential unemployment impact would seem to have potential relevance only if it is assumed that the labor market is segmented or divided in some way along racial lines. Otherwise, as Paul Osterman has noted, "It is not clear why a surplus of young blacks should increase their unemployment relative to whites instead of doing damage to both."[23] The *1978 Economic Report of the President* also notes, "This [population] explanation also rests on the proposition that the labor markets for black and white youth are to a large extent separated, perhaps because of a geographical separation within particular areas or because of labor market discrimination against black youth."[24] If labor market segmentation by race is the source of racial differences in unemployment, then future research into the issue of racial labor market disparities will require more explicit analyses of the process of segmentation. (A similar argument applies to employment differences by sex.)

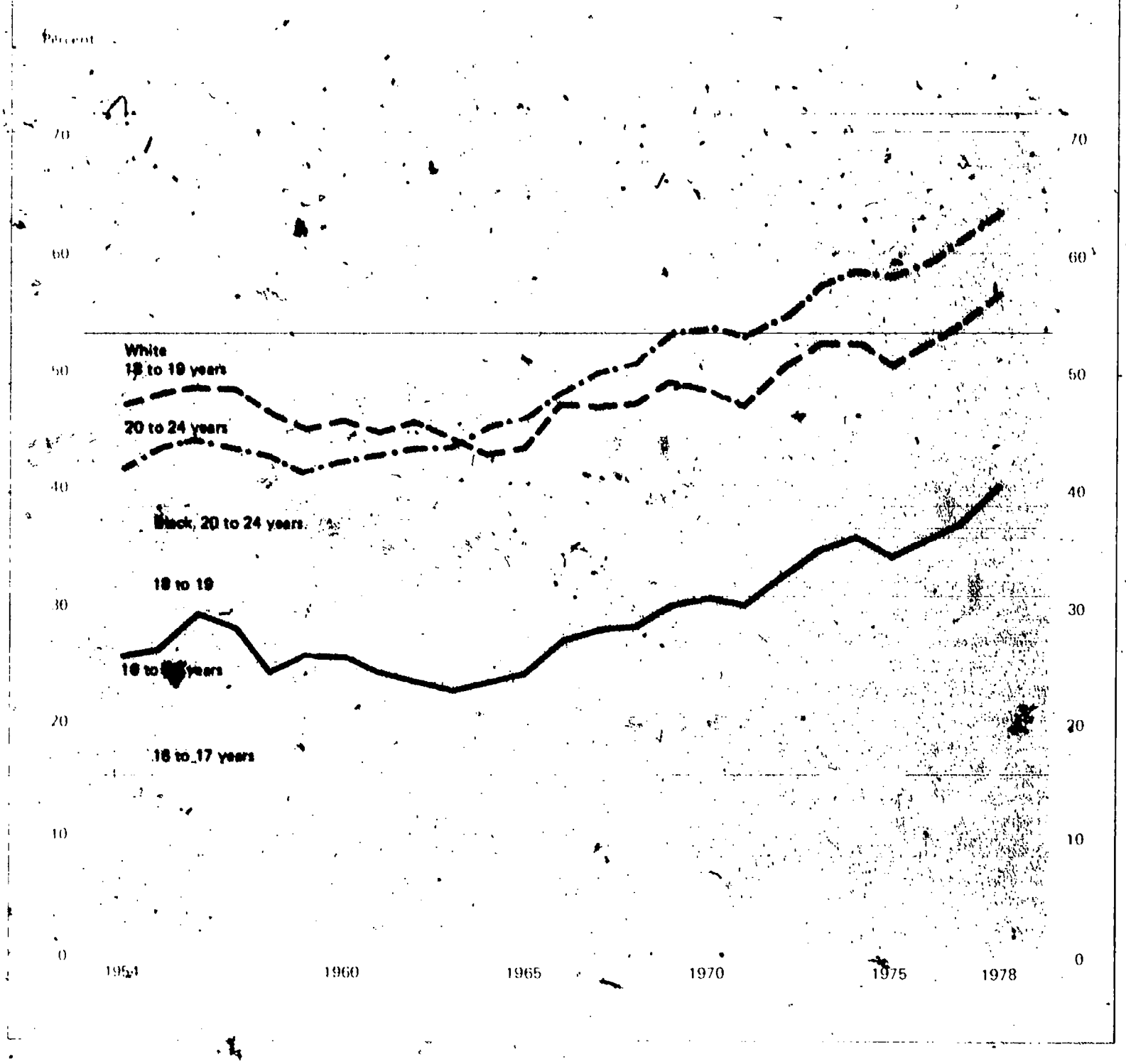
Some research has found a statistical association between a population measure of labor supply and higher black unemployment (and lower employment). Such measures are generally unrelated to white employment and unemployment. For example, a recent analysis of the employment effects of the minimum wage also indicated that a higher ratio of black teenage population to total population was statistically associated with lower black teenage employment. A similar measure of the supply of white teenagers was unrelated to their employment. One reason given for this statistical result is that "since many employers prefer white workers, an increasing supply of youths may induce substitution of white youths for nonwhite."[25] The problem with this, as an explanation rather than simply a description of a labor market outcome, is that not only does it assume that there is some unexplained youth employment quota, but no attempt is made to reconcile this with other evidence that labor market discrimination has eased somewhat over time. The regression results leave unspecified how labor market outcomes are produced.

Also, what is the mechanism or labor market process by which an increase in relative supply results in an increase in relative unemployment rates? To put it another way, how does demand, that is, employers' behavior and the kinds of jobs they supply, enter the picture? Unfortunately, these questions have not yet been answered by researchers.

"Priced-out" by minimum wage? The traditional explanation that dominates the literature on youth unemployment *per se* is the effect of the minimum wage. The existence of a minimum wage is hypothesized to have two effects, which are especially deleterious for young people.[26] First, an effective minimum wage is said to price many allegedly "less productive" young people out of the job market. That is, if employers are forced to pay higher wages as a result of the minimum than they otherwise would have, they will substitute older, more productive workers for young ones. A minimum wage sets in motion a complex set of labor force flows that not only increases unemployment and decreases employment in the covered sector but also leads some young people to drop out of the labor force. Second, it has been suggested that an effective minimum wage restricts the opportunity for young people who would work for wages below the minimum to acquire valuable on-the-job training.[27]

Empirical evidence suggests some disemployment effect (although there are some studies that find a minimal to nonexistent impact).[28] A recent estimate by

Chart 4. Civilian employment-population ratios for young women by race and age, annual averages, 1954-78



James Ragan suggested that in 1972 the unemployment rate of black teens was 3.0 percentage points, and that of white teens 3.9 percentage points, higher than if the 1966 amendments to the minimum wage law had not been enacted. This is not negligible, but does leave the bulk of youth unemployment unaccounted for.

The minimum wage argument has not been explicitly used as an explanation for the worsening black-white unemployment differential, even though it would be one way to try to link the demand side with population changes. Perhaps one reason this argument has not been made is that it is difficult to think of sound theoretical reasons why increases in the minimum wage should have a highly selective impact by race within the same age groups of young workers. Of course, it might be argued that any differential or selective impact is the result of discrimination or segmentation or both. However, in this case an explicit analysis of the process of discrimination/segmentation is necessary to explain labor market outcomes. Michael Wachter, while certainly not intending to explain black-white unemployment differentials, has specified how the "wage rigidity" enforced by a minimum wage might be linked with the supply side of the labor market to explain rising unemployment:

> Whether purposeful or not, the extension of coverage [of the minimum wage] coincided with the massive influx of young workers and females into the lower wage industries. This increase in supply meant that wages in the low-wage occupations and industries should have suffered erosion. The extension of coverage mitigated this erosion and protected the wages of established workers. This effectively closed out some of the new workers, driving up their relative unemployment rates and rendering them structurally unemployed at prevailing wage rates. Relative wage rates were not permitted to adjust to clear the market and the established workers maintained their relative wage position.[9]

However, in a very thorough study of the impact of minimum wages, Edward Gramlich noted that the minimum wage could not explain rising unemployment over time, simply because, relative to the median wage, it is no higher now than in the 1950's, and because there appears to be no separate disemployment impact as a result of coverage extensions.[10]

A new labor market? A number of analysts have noticed the coincidence of rising unemployment and falling employment-population ratios among blacks with an apparent reduction in discrimination with respect to earnings; for some this is seen as a rather paradoxical situation. One attempt to incorporate the facts about this "new labor market" with respect to earnings into an explanation for the deteriorating unemployment position of young blacks relative to whites is based on the work of Robert Flanagan.[11] He argues that it is important to analyze the relative unemployment experience of black males defined by age, schooling, and marital status because important changes have occurred within these groups in recent years. Moreover, these changes are emphasized by separating unemployment over the life cycle changes associated with the aging of a labor force cohort from vintage effects changes associated with the employment experience of successive cohorts. By tracing out the relative unemployment experience of each cohort between 1960 and 1970 Flanagan concluded that for the decade of the 1960's the data showed significant declines in the relative unemployment rates of black males (relative to whites) in virtually all age and schooling groups and that the largest improvements were for those who had the highest relative unemployment in 1960. This is consistent with the view that antidiscrimination activity has had a favorable impact on the experience of the most educated and most recently graduated black males, that is, the "new labor market" of more equal earnings per unit of human capital.[12]

One would expect, therefore, that the relative unemployment of more recent cohorts, who are completing more years of schooling, would also have declined substantially. However, Flanagan finds that over the decade the racial unemployment differential for males age 16 to 19 *increased* irrespective of marital status; the differential also increased for those age 20 to 24 who were not married (there was a very small decline for the married group).

Citing data for 1967–72, Flanagan argues that the decline in wage discrimination and greater market opportunities for black males "induced" an increase in the "rate of gross labor force entry" among young black males that resulted in rising unemployment among new entrants (most of the relative increase in black teenage unemployment is associated with labor force entry in this argument). While this hypothesis is interesting, there are a few problems. First, this view of an increasing flow of entrants is difficult to reconcile with continued declines in participation rates. If many more opportunities were opening up for blacks and the black relative wage were increasing, economic theory would predict that participation rates would increase. Yet, between 1960 and 1970, the years Flanagan used to trace out relative unemployment, participation rates for black males age 16 to 17 fell from 45.6 to 34.8 percent; for 18-to 19-year-olds it dropped from 71.2 to 61.8 percent; and for the 20 to 24 age group participation declined from 90.4 to 83.5 percent. Second, the hypothesis would seem to require that the probability of labor force entry has increased over time for young black males. Research by Smith and Vanski, using gross change data for July 1967 to September 1977, estimated the probability of labor force entry as a function of cyclical and seasonal factors as well as a trend variable for teenagers by race and sex. In their regressions the trend variable was negative and not significant.[13] In Flanagan's hypothesis, the trend variable would be expected to be significantly positive. Last, table 5 contains annual average data on the percent of unemployment attributable to new entrants and reentrants for 1967–78. While there are no controls for cyclical factors, it is still rather clear that, until possibly the big jump in the proportion of new entrants among the unemployed for black youth between 1975 and 1976, there was no trend increase in the proportion of unemployed black teens who were new entrants. Moreover, racial *differences* in the proportion of new entrants were miniscule and variable, at least until 1976. For these reasons, Flanagan's explanation of the rising unemployment ratio is inadequate.

Job-search difference? A job-search hypothesis was recently offered by Flanagan as an explanation for certain differences in the unemployment experience of young black males relative to whites, based on evidence from the National Longitudinal Surveys of Young Men (NLS). NLS data for 1967 indicate that the probability

Table 5. Unemployed male new entrants and reentrants as a percent of unemployed youth, by race and age, 1967–78 annual averages

Year	White men				Black and other men			
	Age 16 to 19		Age 20 to 24		Age 16 to 19		Age 20 to 24	
	New entrants	Reentrants	New entrants	Reentrants	New entrants	Reentrants	New entrants	Reentrants
1967	10.5	35.5	9.6	29.5	32.0	34.9	5.9	22.6
1968	9.7	36.1	7.4	33.7	31.1	34.8	3.7	19.6
1969	8.5	35.6	6.2	35.4	28.9	38.1	10.8	20.8
1970	10.9	35.1	7.2	31.5	27.0	38.7	7.4	24.5
1971	12.9	33.2	9.8	33.8	32.4	36.1	9.5	28.3
1972	14.7	29.9	9.7	32.9	34.4	36.1	9.9	30.8
1973	13.2	27.3	7.5	27.9	38.8	33.0	9.0	26.0
1974	13.3	29.9	8.9	24.8	36.3	34.0	7.2	23.4
1975	10.7	27.3	8.0	20.7	33.2	34.4	8.1	21.4
1976	14.7	28.9	9.1	21.7	42.0	32.0	12.1	24.2
1977	13.0	28.0	8.4	22.3	45.0	32.1	13.6	22.1
1978	15.8	27.6	9.8	22.2	44.8	32.9	14.5	26.5

of blacks experiencing spells of unemployment after quitting their job, is much higher than for whites.[14] While the analysis is not intended as an explanation for increasing racial unemployment differentials, it is an instructive piece of research on unemployment differentials *per se*.

The critical question is centered on why blacks would be more likely than whites to experience a spell of unemployment after quitting a job. Flanagan argues that because the combined effects of wage discrimination and occupational segregation result in lower average wages and a lower distribution of wage offers for young black males, "time-intensive" job search is less costly to them, and the conditional probability that they will choose to leave a job and seek another is greater. His estimated "quit behavior" model does suggest the existence of a positive association between a measure of wage discrimination and the probability of quitting a job and then experiencing unemployment. However, this statistical result does not provide any evidence that blacks choose to leave a job to engage in time-intensive job search. Indeed, no direct information on search methods or hours per week spent searching is presented; yet, the argument requires significant racial differences.

Using NLS data for 1969, Osterman has shown that no significant racial differences exist in job-search methods or job finding.[15] Moreover, more recent evidence on the quit behavior of blacks relative to whites has suggested that the differences between blacks and whites are not readily explainable as simply the result of differences in wages and personal characteristics; yet, differences along these dimensions are essential to the argument, because such differences are supposed to cause different search choices. Finally, data from a special supplement to the January 1973 Current Population Survey on the search methods persons used in 1972 to find jobs provide evidence that job-search patterns by race are very similar. Additional data from the survey show that racial differences in both job-search methods and time spent looking for work are not statistically significant (See table 6.)

Swelling school rolls? Increased school enrollment rates have been cited as effecting a significant shift of youth from full-time to part-time and temporary employment.[16] This increase, coupled with generally higher family incomes, is said to have made young people not as committed to "market" work and more casual in their work and search behavior. The hypothesis, therefore, is that school attendance indirectly *causes* more unemployment among young people and is a source of rising youth unemployment.

The casual link between attendance and unemployment is difficult to specify, because the two variables are each highly correlated with other influences on labor market status, such as family income. Also, measured youth unemployment rates do not vary with student status, which is contrary to the hypothesis.

Racial unemployment differences are even more difficult to attribute to school enrollment. As table 7 shows, there was little difference in youth enrollment among different racial groups in 1977.[17] However, blacks tended to have marginally higher enrollment rates, and these enrollment rates have increased more over time than for whites. This suggests some support for the unemployment-enrollment connection. However, although enrollment rates of white males age 18 to 19 and 20 to 24 increased substantially from 1954 to 1966,

Table 6. Job search method used to obtain current job and hours looked per week, by race, sex, and age, January 1973[1]

(Percent distribution)

Method and hours looked	White men		Black and other men	
	Age 16 to 19	Age 20 to 24	Age 16 to 19	Age 20 to 24
Total successful jobseekers (thousands)	1,234	1,613	126	218
METHOD				
Percent	100.0	100.0	100.0	100.0
Applied directly to employer	34.5	35.9	26.4	33.0
Asked friends	30.1	18.6	21.8	17.5
Asked relatives	13.2	12.0	13.8	13.4
Answered newspaper ads	5.5	9.4	6.9	9.3
Private employment agency	1.7	3.2		
State employment service	3.3	4.9	6.9	9.3
School placement office	4.1	5.7	9.2	3.1
Civil service test	.4	1.4		2.0
Asked teacher or professor	1.3	2.3	2.3	1.0
Other method	5.9	6.6	12.7	11.4
HOURS LOOKED PER WEEK				
Percent	100.0	100.0	100.0	100.0
5 or less	6.9.9	5.9.3	6.5.4	5.7.6
6 to 10	11.9	18.8	19.6	18.8
11 to 15	5.1	8.6	8.4	4.0
16 to 20	3.8	5.0	1.9	4.5
21 to 25	3.0	2.4		6.1
26 or more	5.9	6.0	5.6	9.1

[1] Data are from a special survey conducted in January 1973 on the jobseeking methods of currently employed workers who had looked for and found their present job in 1972.

there is no evidence of increasing unemployment for these groups during this period (table 1). The same comparison for black males age 18 to 19 does suggest some secular coincidence between higher enrollment and unemployment rates; yet most of the unemployed in this group were not enrolled in school. Furthermore, as table 7 shows, historically, there has been *little* racial difference in enrollment rates among young women. Yet, racial unemployment differences among female teenagers have widened over time. One can only conclude from these data that rising school enrollment is apparently not an important cause of increasing unemployment.

Moreover, it is inappropriate to treat school enrollment as an exogenous, independent variable when, in fact, it may be a response to poor job prospects. The marginally higher enrollment rates of blacks, coupled with their much lower participation rates relative to whites enrolled in school, are consistent with some discouragement.[38] Also, the racial unemployment gap among males began to widen in the mid-to-late-1960's. By that time, racial enrollment rates had roughly equalized. Since then, rates of enrollment have moved in a comparable pattern.

Job suburbanization and skill mismatch? The rapid suburbanization of jobs in addition to de facto housing segregation and inadequate reverse-commuting transportation has trapped many black workers in the central city where they have saturated the job market.[39] Analysts suggest that higher unemployment and a lower employment-population ratio of blacks are the results of such conditions. Moreover, the bulk of the jobs that are located in the central city generally require greater and different skills than the central city ghetto dweller possesses.[40]

Before turning to the evidence for these propositions, it is important to specify the assumptions upon which these contentions are based. The job suburbanization-housing discrimination assertion makes the critical assumption that, if whites and blacks had the same residential patterns, job access would be roughly equivalent. This assumption underlies virtually all calculations purporting to estimate the jobs blacks cannot accept because of residential segregation. The critical question is whether blacks could get the jobs even if they lived close by. For example, the existence of employer discrimination will result in employment differences even in the absence of residential differences. In fact, there is evidence that racial employment differences are substantial even after residence is accounted for.

Even abstracting from these conceptual problems, the evidence that black youth employment problems are central-city specific is scanty. In fact, there is evidence

Table 7. School enrollment rates of youth, by race, sex, and age, selected years, 1954-77

(In percent)

Race, sex, and age	1954	1960	1965	1970	1976	1977
White men						
16 to 17 years	(1)	85.2	88.6	92.2	91.0	89.5
18 to 19 years	43.3	49.5	56.6	56.0	49.6	47.7
20 to 24 years	20.5	21.5	29.8	30.9	27.1	25.7
White women						
16 to 17 years	(1)	81.4	87.0	88.0	87.5	87.8
18 to 19 years	25.3	29.7	38.3	41.8	43.5	43.4
20 to 24 years	6.4	7.6	12.2	15.5	16.6	19.5
Black and other men						
16 to 17 years	(1)	78.1	83.3	86.0	88.9	92.5
18 to 19 years	21.6	36.9	47.5	43.9	51.6	52.9
20 to 24 years	10.1	9.4	11.7	18.1	21.8	27.4
Black and other women						
16 to 17 years	(1)	74.7	85.9	86.4	85.7	87.3
18 to 19 years	25.7	32.2	33.5	40.2	47.8	47.4
20 to 24 years	2.9	5.9	6.9	13.0	19.7	21.2

(1) Not available

that black unemployment is insensitive to central-city residence.[41] Racial differences in unemployment rates and employment-population ratios remain substantially the same regardless of place of residence. The following tabulation shows the employment-population ratio for teenagers by place of residence:

	1975	*1977*	*1978*
Black, central city	22.1	21.2	24.3
Black, suburbs	26.1	25.3	30.0
White, central city	44.7	47.7	50.2
White, suburbs	45.7	51.9	53.0

It has been suggested that one reason black youths have not fared as well as whites through most of the post-1974–75 recession is that proportionally more blacks than whites reside in central cities and cities have not shared much in the recovery. Changes in employment-population ratios do not support this proposition. For example, between 1975 and 1977, the proportion of black teens residing in the central city remained constant at 55 percent, while the proportion of white teenagers fell from 23 to 22 percent. The employment-population ratio of central city blacks fell 0.9 percentage point; for whites, the ratio increased 3.0 percentage points. The ratio for suburban blacks dropped 0.8 percentage point and increased 3.9 percentage points for whites. Between 1977 and 1978, the employment-population ratio increased for all groups: 3.1 percentage points for central-city blacks, 4.7 percentage points for suburban blacks, and 2.5 and 2.1 percentage points for central-city and suburban whites, respectively. Thus, the situation of blacks relative to whites does not seem to be specific to the central city.

Other evidence also gives little support for the job suburbanization thesis. Using 1960 census data and data from the Urban Employment Survey, Stanley

Friedlander regressed the unemployment rates of ghetto blacks on the ratio of suburban to total Standard Metropolitan Statistical Area jobs, after controlling for a number of demographic characteristics. Rarely was there a statistically significant positive relation between unemployment and job dispersion.[42]

The skill mismatch issue raises several questions. What does "skill" refer to? Years of education? Years of work experience? Specific vocational training? Specific personality characteristics? Are these important in all jobs or just some? Moreover, the assumption is made that workers acquire work skills exogenously, in formal education or training, and then bring these skills to the labor market. As a number of economists have argued recently, most job skills, whether general or specific, are basically acquired, formally or informally, on the job.[43] Therefore, skills acquired by different groups in the labor force may depend upon employer practices in hiring, screening, and job assignments. For example, Duncan and Hoffman have found that even after human capital variables are controlled for, white males have a much greater likelihood of receiving any job training.[44] The critical question would be whether blacks have the same access to training and receive the same payoff to that training as whites.

The little evidence that exists is inconsistent with the "skill mismatch" hypothesis. Charlotte Fremon's research, based on eight large SMSA's, suggests that the growth in central city jobs was not skewed toward "high-skill" jobs, defined as managers, professionals, and technicians. Indeed, about 70 percent of the job growth in the eight central cities were semiskilled sales, clerical, operatives, craftworkers and low skilled laborers and service workers.[45]

Influx of women? Dramatic increases in the labor force participation rates of women may have reduced the demand for young labor, driving up their unemployment rates. Because many women work at part-time, entry-level jobs, the hypothesis has intuitive appeal. Moreover, an increasing supply of female labor, given occupational crowding, might be expected to raise the unemployment rates of young women as well. Little research has been done on this particular issue. However, an interesting study by Edward Gramlich showed that unlike the case with teenagers, a higher minimum wage was not associated with less full-time employment for women. He conjectured that "a plausible, though untested, explanation might be that a higher minimum wage brings adult females from the part-time into the full-time labor force, forcing even lower-wage teenagers out into part-time jobs they have vacated."[46]

That there is a secular coincidence in the movement of these two variables cannot be denied. However, a rigorous test of the hypothesis that the increasing supply of women has reduced the demand for young labor, thereby pushing up their unemployment rates, would be very difficult. Analyzing the labor market process behind this association would have to be the next step.

AMONG THE MORE important secular changes in the youth employment situation suggested by all these data are: (1) racial unemployment differences have widened; (2) racial disparities in male labor force participation rates and employment-population ratios are increasing; (3) the female-male unemployment differential has increased moderately; and (4) after lagging behind black female participation for many years, the participation rates of young white women are now generally significantly higher than those of blacks.

The largely economic literature on the subject of youth employment offers a number of explanations for these diverse developments, and the bulk of the research has focused on racial differences, especially among males. As has been seen, existing hypotheses do not fully explain the complex labor market problems of young people. □

FOOTNOTES

See George Perry, "Unemployment Flows in the U.S. Labor Market," *Brookings Papers on Economic Activity*, No. 2, 1972. However, some recent research has indicated that, while most spells of unemployment experienced by young people are brief, the bulk of youth unemployment is accounted for by a relatively small minority who experience chronic, long-term spells of unemployment. See Kim Clark and Lawrence Summers, "The Dynamics of Youth Unemployment," paper presented at the National Bureau for Economic Research Conference on Youth Joblessness and Employment, May 17 and 18, 1979.

For reasons of time, space, and lack of appropriate data, we cannot possibly discuss the myriad of important kinds of labor market outcomes. Thus, we will ignore issues like job tenure and turnover, and earnings and changes in earnings over time. For information on these and other issues, see Robert Buchele, *Jobs and Workers: A Labor Market Segmentation Perspective*, unpublished Ph.D. thesis (Harvard University, 1976). Andrew Kohen et al., *Career Thresholds*, Volume 6 (U.S. Department of Labor, 1977); Paul Osterman, *The Labor Market for Young People*, unpublished Ph.D. thesis (Massachusetts Institute of Technology, 1976); and Frank Mott et. al., *Years for Decision*, Volume 4 (U.S. Department of Labor, 1978). Throughout this article, "black" refers to the "black and other" population. According to the 1970 census, 89 percent of the latter group were black, the residual being American Indians, Asian and Pacific Islanders, and other nonwhite races.

A number of economists have recently questioned the accuracy of historical comparisons such as presented in table 1 on the grounds that the measured aggregate unemployment rate is no longer an indicator of comparable economic conditions both because of changes in the demographic composition of the labor force and because the same aggregate unemployment rate at different times may correspond to different levels of aggregate demand. While cognizant of these concerns, it is beyond the scope of this article to discuss this position, and our procedure is still a commonly used one to make a certain set of (limited) points. See George Perry, "Changing Labor Markets and Inflation," *Brookings Papers on Economic Activity*, No. 3, 1970; and Michael Wachter, "The Demographic Impact on Unemployment:

Past Experience and the Outlook for the Future," in *Demographic Trends and Full Employment*, Special Report No. 12 (Washington, National Commission for Manpower Policy, 1976), pp. 27–99.

[7] See Paul Osterman, *Labor Market*, and Paul Osterman, "Youth, Work, and Unemployment," *Challenge*, May-June 1978, pp. 65–69. Lest we become too sanguine, it is inappropriate to extrapolate this kind of maturation process into the future. Some researchers have suggested that because of demographic changes, and, more importantly, because of trends in the industrial occupational structure of the economy and a general deskilling fragmentation of job structures, that the process of settling into good full-time jobs may become dramatically altered. See Marcia Freedman, *Labor Markets: Segments and Shelters* (Montclair, New Jersey: Allanheld, Osmun & Co., 1976), and Harry Braverman, *Labor and Monopoly Capital* (New York, Monthly Review Press, 1975).

Edward Kalachek, *The Youth Labor Market* (University of Michigan and Wayne State University, Institute of Labor and Industrial Relations, 1969), Dean Morse, *The Peripheral Worker* (New York, Columbia University Press, 1969), Paul Osterman, *Labor Market*, and Michael Piore, "Unemployment and Inflation: An Alternative View," *Challenge*, May-June 1978, pp. 24–32.

[8] *Economic Report of the President* (Washington, U.S. Government Printing Office, 1978), p. 161. Also see William Bowen and T. Aldrich Finegan, *The Economics of Labor Force Participation* (Princeton, New Jersey, Princeton University Press, 1969), and Robert Lerman, "Some Determinants of Youth School Activity," *Journal of Human Resources*, Summer 1972. However, another recent study was able to find a significant positive relation between school enrollment and the unemployment rate only for young black males. See Linda Nasif Edwards, "School Retention of Teenagers Over the Business Cycle," *Journal of Human Resources*, Summer 1976. A complete analysis would have to explain the historical development of and functions performed by the educational system. As one example of such research see Samuel Bowles and Herbert Gintis, *Schooling in Capitalist America* (New York, Basic Books, 1976).

[9] See Peter Doeringer and Michael Piore, *Internal Labor Markets and Manpower Analysis* (Lexington, Mass., D.C. Heath & Co., 1971); Richard Edwards et. al. eds., *Labor Market Segmentation* (Lexington, Mass., D.C. Heath & Co., 1975), and Bennett Harrison, *Education, Training, and the Urban Ghetto* (Baltimore, Johns Hopkins Press, 1972).

[10] Paul Osterman, "Youth, Work, and Unemployment," p. 67.

[11] Paul Osterman, "Understanding Youth Unemployment," *Working Papers for a New Society*, January-February 1978, pp. 61–62.

[12] This approach ignores the fact that when labor market conditions worsen, some of the unemployed drop out of the labor force. This is particularly true of young people, and especially of blacks. Therefore, to the extent that dropping out is positively related to the level of unemployment for a group, we may be underestimating the magnitude of the problem. See Alan Fisher, *The Teenage Unemployment Problem*, unpublished Ph.D. thesis (Berkeley, University of California, 1973), Chapter 1.

[13] A more systematic statistical presentation of these trends is in Orley Ashenfelter, "What Do Teenage Unemployment Statistics Measure?" in *Supplemental Papers from the Conference on Youth Unemployment* (U.S. Department of Labor, 1978), pp. 37–55.

[14] Some researchers have argued, that "unofficial", but not necessarily illegal, activities the irregular labor market have become an important source of income for some young people. See Louis Ferman et. al. *Analysis of the Irregular Economy: Cash Flow in the Informal Sector* (University of Michigan and Wayne State University, Institute of Labor and Industrial Relations, March 1978), and Paul Bullock, *Aspiration vs. Opportunity: "Careers" in the Inner City* (University of Michigan and Wayne State University, Institute of Labor and Industrial Relations, 1973).

[15] See Paul Smith and Jean Vanski, "The Volatility of the Teenage Labor Market: Labor Force Entry, Exit, and Unemployment Flows," in *Conference Report on Youth Unemployment: Its Measurement and Meaning* (U.S. Department of Labor, 1978), pp. 35–64.

[16] See Richard Freeman, "Changes in the Labor Market for Black Americans," *Brookings Papers on Economic Activity*, No. 1, 1973, pp. 67–120, and Finis Welch, "Black-White Differences in Returns to Schooling," *American Economic Review*, June 1973, pp. 893–907.

[17] See Richard Butler and James Heckman, "The Impact of Government Programs on the Relative Status of Black Americans: A Critical Evaluation," Proceedings of the Thirtieth Annual Meeting of the *Industrial Relations Research Association*, 1978. However, their tentative resolution to the paradox as involving labor supply shifts *caused* by government transfer programs should be treated with some skepticism.

[18] Data for teenagers are available by race only from 1966, prior to that the data refer to 14-to-19-year olds. Information on young adults is available for all years. There is probably a certain amount of retrospective bias in the data, as well as bias from the use of proxy-respondents. However, the trends are so clear that this should not be a critical problem and there is no evidence of any racial bias.

[19] See Paul Osterman, "Racial Differences in Male Youth Unemployment," in *Conference Report on Youth Unemployment*, pp. 145–80, Howard Birnbaum, "The Economic Effect of Career Origins," in Richard Edwards et. al. eds., *Labor Market*, pp. 151–72, Brian Becker and Stephen Hills, "Today's Teenage Unemployed—Tomorrow's Working Poor?" *Monthly Labor Review*, January 1979, pp. 69–71, and Wayne Stevenson, "The Relationship Between Youth Employment and Future Employability and Earnings," *Supplementary Papers from the Conference on Youth Unemployment*, pp. 191–206.

[20] Since 1963, the ratio has fallen just slightly below 1 only in 1975 and 1976. Given the economic conditions in these 2 years, particularly most of 1975, this is not surprising. Francine Blau has estimated that unemployment has a larger impact on the probability of young women participating in the labor force. The greater cyclical sensitivity of young women's participation is a recurring theme in the literature. There is some evidence that this sensitivity has narrowed considerably for some age groups. See Francine Blau, "Youth Participation Rates and the Availability of Jobs," in *Supplementary Papers from the Conference on Youth Unemployment*, pp. 56–77, Jacob Mincer, "Labor Force Participation and Unemployment: A Review of the Evidence," in R.A. and M.S. Gordon, eds., *Prosperity and Unemployment* (New York, John Wiley and Sons, Inc., 1968), pp. 73–91, and Robert Bednarzik and Deborah P. Klein, *Labor Force Trends: A Synthesis and Analysis* and Bibliography, Special Labor Force Report 208 (Bureau of Labor Statistics, 1977).

[21] We will not explicitly discuss trends in employment-population ratios among young women. However, it should be noted that the ratios for young white women have drifted upward in much the same way as that of white adult women. Among black women there has been little trend, save perhaps for those age 20 to 24 from the late 1960's forward.

[22] Frank Mott, *Racial Differences in Female Labor Force Participation: Trends and Implications for the Future* (Ohio State University, Center for Human Resources Research, 1978).

[23] Arvil Adams et. al., *The Lingering Crisis of Youth Unemployment* (Kalamazoo, Michigan, W.E. Upjohn Institute, 1978), p. 19. Also see *Policy Options for the Teenage Unemployment Problem*, (Washington, Congressional Budget Office, September 21, 1976), pp. 15–17; *Economic Report of the President* (Washington, U.S. Government Printing Office, 1978), p. 168; Edward Kalachek, *The Youth Labor Market*, chapter 4; Hugh Folk, "The Problem of Youth Unemployment," in *The Transition from School to Work* (Princeton, New Jersey, Princeton Manpower Symposium, May 1968); Lowell Gallaway, "Unemployment Levels Among Nonwhite Teenagers," *Journal of Business*, July 1969, pp. 265–76; and Michael Lovell, "The Minimum Wage, Teenage Unemployment, and the Business Cycle," *Western Economic Journal*, December 1972, pp. 414–27.

[24] *Economic Report of the President* (Washington, U.S. Government Printing Office, 1978), p. 168. Because the black birth rate peaked later than that of whites, the young black population is expected to continue growing through the 1980's such that the youth population will become increasingly composed of blacks.

[25] Paul Osterman, "Racial Differentials," p. 146.

[26] *Economic Report of the President, 1978*, pp. 165–66. Richard Freeman has also noted the inadequacy of the population explosion

argument by pointing out that over the same time period the supply of adult women increased, but it was not accompanied by sharply rising unemployment. Moreover, the labor force participation of young blacks declined over virtually all this time period which, ceteris paribus, would tend to reduce supply (in other words, supply changes are composed of population changes at given participation rates, and changes in participation rates). See Richard Freeman, "Teenage Unemployment: Can Reallocating Educational Resources Help?" in *The Teenage Unemployment Problem: What are the Options?* (Washington, Congressional Budget Office, October 14, 1976), pp. 41–47.

[7] James Ragan Jr., "Minimum Wages and the Youth Labor Market," *Review of Economics and Statistics*, May 1977, p. 134.

[8] The literature on the impact of the minimum wage is vast. See Ronald Goldfarb, "The Policy Content of Quantitative Minimum Wage Research," Proceedings of the Twenty-Seventh Annual Meeting of the *Industrial Relations Research Association*, 1975, Martin Feldstein, *Lowering the Permanent Rate of Unemployment* (Washington, U.S. Government Printing Office, 1973), Alan Fisher, *Teenage Unemployment*, Edward Gramlich, "Impact of Minimum Wages on Other Wages, Employment, and Family Income," *Brookings Papers on Economic Activity*, No. 2, 1976, Michael Lovell, "The Minimum Wage", Jacob Mincer, "Unemployment Effects of Minimum Wages," *Journal of Political Economy*, August 1976, Part 2, and James Ragan Jr., "Minimum Wage."

[9] Martin Feldstein, *Lowering*.

[10] Phillip Cotterill and Walter Wadycki, "Teenagers and the Minimum Wage in Retail Trade," *Journal of Human Resources*, Winter 1976, pp. 69–85.

[11] Michael Wachter, "Comment: Impact of Minimum Wages on Other Wages, Employment, and Family Income," *Brookings Papers on Economic Activity*, No. 2, 1976, p. 458.

[12] Edward Gramlich, "Impact." Also see Sar A. Levitan and R. S. Belous, "The minimum wage today: how well does it work?" *Monthly Labor Review*, July 1979, pp. 17–21.

[13] Robert Hanagan, "On the Stability of the Racial Unemployment Differential," *American Economic Review*, May 1976, pp. 302–07.

[14] Richard Freeman, "Changes in the Labor Market."

[15] Ralph Smith and Jean Vanski, "The Volatility."

[16] Robert Hanagan, "Discrimination Theory, Labor Turnover, and Racial Unemployment Differentials," *Journal of Human Resources*, Spring 1978, pp. 187–206.

[17] Paul Osterman, "Racial Differentials," pp. 172–73.

[18] See Hugh Folk, "The Problem", and Edward Kalachek, *The Youth Labor Market*. For some critical comments on this perspective see Glen Cain, *Labor Force Concepts and Definitions in View of their Purposes*, Background Paper No. 13 (Washington, National Commission on Employment and Unemployment Statistics, March 1978).

[19] The data are from the October Special Supplement to the Current Population Survey. Some caution should be used when interpreting the data. The statistics refer only to October of each year, thus no data exists on either the (yearly) continuity of enrollment or the actual number of hours allocated to school attendance.

[20] In October 1977 the participation rate of white males enrolled in school was 49.9 percent for those age 16 to 17, 48.3 percent for those age 18 to 19, and 55.7 percent for those age 20 to 24. For blacks, the rates were 22.7 percent, 38.2 percent, and 40.7 percent, respectively.

[21] Anthony Downs, "Alternative Futures for the American Ghetto," *Daedalus*, Fall 1968. John Kain, "The Distribution and Movement of Jobs and Industry," in James Q. Wilson ed., *The Metropolitan Enigma* (Boston, Harvard University Press, 1968), John Kain, "Housing Segregation, Negro Employment, and Metropolitan Decentralization," *Quarterly Journal of Economics*, May 1968, and Bennett Harrison, *Urban Economic Development: Suburbanization, Minority Opportunity, and the Condition of the Central City* (Washington, The Urban Institute, 1974).

[22] See Daniel Moynihan, "Poverty in Cities," in *The Metropolitan Enigma*.

[23] Benjamin Cohen, "Trends in Negro Employment within Large Metropolitan Areas," *Public Policy*, Fall 1971, Bennett Harrison, *Education*, and Diane Westcott, "Youth in the labor force—an area study," *Monthly Labor Review*, July 1976, pp. 3–9.

[24] Stanley Friedlander, *Unemployment in the Urban Core* (New York, Praeger, 1972).

[25] See Sherwin Rosen, "Learning and Experience in the Labor Market," *Journal of Human Resources*, Summer 1972, and Lester Thurow, *Generating Inequality* (New York, Basic Books, 1976).

[26] Greg Duncan and Saul Hoffman, "Training and Earnings," in Greg J. Duncan and James N. Morgan eds., *Five Thousand American Families - Patterns of Economic Progress*, Volume VI (Ann Arbor, Institute for Survey Research, 1978), pp. 105–50; and Greg Duncan and Saul Hoffman, "On-the-Job Training and Earnings Differences by Race and Sex," *Review of Economics and Statistics*, (forthcoming).

[27] Charlotte Fremon, *Central City and Suburban Employment Growth, 1965–67* (Washington, The Urban Institute, 1970).

[28] Edward Gramlich, "Impact," p. 443.

A child's pace in the mills

In contrast to adults, children worked under intense pressure for short periods broken by intervals of rest. . . . Harriet Robinson began her career in the mills as a bobbin girl and described her work.

"I can see myself now, racing down the alley, between the spinning frames, carrying in front of me a bobbin-box bigger than I was. These mites had to by very swift . . . so as not to keep the spinning-frames stopped long, and they worked only about 15 minutes every hour. The rest of the time was their own, and when the overseer was kind they were allowed to read, knit, or even to go outside the millyard to play."

THOMAS DUBLIN

Women at Work: The Transformation of Work and Community in Lowell, Mass., 1826–60 (New York, Columbia University Press, 1979), p. 69.

APPENDIX

This reprint contains in addition to the article which was published in the October 1979 issue of the review, regression results on youth employment and unemployment.

In table A-1 the following equation was estimated to test the hypothesis that youth unemployment has increased over time:

$$(U_i)_t = \alpha + \beta(T)_t + \delta(M)_t + \psi(UP) + (\epsilon)_{ti}$$

$t = 1....25$

i = race/sex/age group

where U represents the unemployment rate; α is a constant term; T is a time trend; M is the proportion of the population in the military; UP is the unemployment rate of adults 35-44 years old; and ϵ is the error term.

Equations were estimated by generalized least squares to correct for first-order serial correlation of the residuals which were initially in evidence. The overall estimates are similar to the findings of previous studies. Thus, youth unemployment, especially among blacks, has increased over time. In addition, unemployment is very sensitive to our cyclical variable, a sensitivity that strengthens with age as evidenced by the generally larger coefficients for older youth.

Table A-2 contains an elaboration of the trends in the employment/population ratios of young people outlined in the main body of this article. The equation estimated was:

$$(E/P_i)_{t+1} - (E/P_i)_t = \alpha + \beta\{(E)_{t+1} - (E)_t\} + (\epsilon)_{ti}$$

i = race/sex/age group

where the dependent variable is the first-difference of the employment/population ratio of each group; α is a constant term; E is the employment/population ratio of adults 25-44 years old; and ϵ is the error term.

The coefficients in the table show the annual average trend in the employment/population ratio of the indicated group while holding constant the employment/population ratio of adults. Thus, the coefficients are the constant term estimates from these regressions. This table indicates that there has been no discernible trend for whites 16-17 years old. Among white males 18-24 years old, on the other hand, there has been a downward trend, whereas no such trend is shown for white females. Rather sharp declines in the employment/population ratios of black males are apparent from the table, while no statistically significant trend exists for black females.

To test the hypothesis that the increasing supply of adult women has reduced the demand for young labor, thereby pushing up their unemployment rates, the following equation was estimated, using generalized least squares to correct for first-order serial correlation:

$$(U_i)_t = \alpha + \beta(F)_t + \delta(UP)_t + \psi(M)_t + (\varepsilon)_{ti}$$

$t = 1....25$

i = race/sex/age group

where U represents the unemployment rate; α is a constant term; F is the percent of the labor force that are adult women; UP is a cyclical variable measured by the unemployment rate of adults 35-44 years old; M is the percent of the indicated group in the military; and ε is the error term.

Table A-3 contains the results of these regressions. For all groups except white males 18-19 years old there is a positive and statistically significant association between the supply of adult women and youth unemployment. However, it should be noted that this measured association may be no more than a secular coincidence between two variables. It would be inappropriate to assert that a causal relationship exists without a more detailed specification of the structure of the labor market.

SUPPLEMENTARY TABLES

Table A-1. Regression results showing the relationship between race/sex/age unemployment rates and cyclical and secular changes, 1954-1978

Dependent Variable (U_i)	Constant	Time Trend	Armed Forces	Cycle	R^2
1954-1978					
White Males					
16-17 years	8.047	.143	-.251	1.624	.83
	(1.743)	(.062)	(.235)	(.205)	
18-19 years	6.766	-.091	-.126	2.358	.90
	(3.328)	(.090)	(.103)	(.201)	
20-24 years	-2.794	.077	.046	2.347	.92
	(1.671)	(.054)	(.041)	(.150)	
Black Males					
16-17 years	8.447	.971	-.767	2.283	.94
	(2.460)	(.063)	(.439)	(.476)	
18-19 years	11.285	.572	-.442	3.002	.80
	(4.548)	(.083)	(.240)	(.574)	
20-24 years	-.530	.184	.037	3.314	.74
	(2.927)	(.084)	(.096)	(.445)	
White Females					
16-17 years	7.336	.227	--	1.322	.72
	(1.114)	(.046)	--	(.223)	
18-19 years	3.873	.198	--	1.406	.71
	(1.133)	(.047)	--	(.228)	
20-24 years	.839	.144	--	1.221	.94
	(.354)	(.012)	--	(.080)	
Black Females					
16-17 years	14.064	.999	--	1.455	.67
	(4.045)	(.152)	--	(.870)	
18-19 years	14.932	.608	--	1.925	.78
	(2.265)	(.073)	--	(.524)	
20-24 years	3.900	.291	--	2.420	.78
	(1.515)	(.053)	--	(.340)	

Note: standard errors are in parentheses

Table A-2. Annual average changes in the employment/population ratios of youth relative to adults 35-34 years old

1954-1978	Black males	White males	Black females	White females
16-17 years	-1.759	-.505	-.476	-.054
	(.447)	(.299)	(.395)	(.244)
18-19 years	-1.958	-.834	-.495	-.141
	(.505)	(.258)	(.646)	(.270)
20-24 years	-1.163	-.828	-.329	.592
	(.578)	(.274)	(.455)	(.209)

Note: standard errors are in parentheses

Table A-3. Regression results showing the relationship between race/sex/age unemployment rates and secular changes in the proportion of the labor force consisting of adult women

Dependent Variable (U_i)	Constant	FPERT	Armed Forces	Cycle	R^2
1954-1978.					
White Males					
16-17 years	-.210	.323	-.355	1.602	.81
	(6.358)	(.172)	(.229)	(.213)	
18-19 years	14.309	-.267	-.127	2.354	.91
	(8.177)	(.202)	(.080)	(.189)	
20-24 years	-8.124	.198	.041	2.344	.92
	(5.499)	(.145)	(.040)	(.151)	
Black Males					
16-17 years	-68.164	2.746	-.928	2.328	.89
	(8.831)	(.241)	(.557)	(.596)	
18-19 years	-34.056	1.642	-.505	3.057	.82
	(8.420)	(.221)	(.231)	(.554)	
20-24 years	-16.626	.562	.042	3.339	.75
	(8.388)	(.228)	(.093)	(.437)	
White Females					
16-17 years	-9.776	.615	--	1.333	.69
	(4.883)	(.145)	--	(.230)	
18-19 years	-10.219	.510	--	1.419	.67
	(4.908)	(.146)	--	(.238)	
20-24 years	-10.014	.392	--	1.205	.91
	(1.512)	(.044)	--	(.093)	
Black Females					
16-17 years	-62.238	2.731	--	1.544	.60
	(16.642)	(.492)	--	(.920)	
18-19 years	-32.503	1.697	--	1.949	.72
	(8.496)	(.248)	--	(.583)	
20-24 years	-19.594	.840	--	2.401	.77
	(5.269)	(.155)	--	(.340)	

Note: standard errors are in parentheses

The labor market experience of black youth, 1954–78

The racial employment-population gap widened as limited recovery followed recessionary setbacks for black teenagers; since 1970, black young adults have faced similar problems

MORRIS J. NEWMAN

In recent years, much concern has centered on the problem of black[1] teenage joblessness. The unemployment rate for this group has been consistently greater than 30 percent for 9 years, with no recovery from the recession of 1973–75. This lack of substantial improvement stands in contrast to the recovery among black men and women over age 25 and among white men and women of all age groups, including teenagers. A question that has important implications for public policy is whether the lack of recovery among black teenagers is a lingering remnant of the last recession or a long-term condition. The purpose of this article is to identify the appropriate time frame for understanding this situation and to determine whether the employment and unemployment patterns of black teenagers are similar to those of black young adults (20 to 24 years old).

This analysis is based on data from the Current Population Survey, disaggregated by race, sex, and age. The specific measures used are the unemployment rate—the number of unemployed workers as a percent of the civilian labor force—and the employment-population ratio—the proportion of the civilian noninstitutional population that is employed—with a focus on the secular (long-term) and cyclical (recession-recovery) movements in these two measures among blacks and whites in the quarter century since 1954.

To examine patterns of unemployment, the unemployment rate was converted into a Mean Unemployment Rate Index (MURI). This index expresses the relationship between a given group's monthly jobless rate and its mean rate for the 1954–78 period. Graphs of this index, for men in chart 1 and women in chart 2, facilitate comparison of unemployment rate patterns among groups with widely divergent absolute rates of unemployment.[2]

To examine patterns of employment, employment-population ratios were analyzed (charts 3 and 4); and the employment-population ratio difference was computed to show relative movements by race. Constructed specifically for this article, the employment-population ratio difference is the monthly employment-population ratio of a given black group subtracted from the ratio of its white counterpart. The graph of these differences by age and sex are displayed in chart 5.

These data indicate that the employment situation of black teenagers deteriorated—unevenly but persistently—over the course of the 1954–78 period.[3] Both the unemployment rate and the employment-population ratio worsened with the recessions of 1957–58, 1969–70, and 1973–75, with little improvement during recovery periods.[4] This pattern was quite different from that of adult blacks (age 25 and over) or of whites in each age group. However, a similar pattern also has appeared among black young men and women (age 20 to 24) in the 1970's.

Morris J. Newman was formerly an economist in the Office of Current Employment Analysis, Bureau of Labor Statistics. Bob Whitmore and George Methee, in the same office, and Sandra Clarke, formerly of that office, assisted in the compilation and charting of the data for this article

Patterns of unemployment

The unemployment rate for all workers reached its post-World-War-II peak during the 1973–75 recession, 8.9 percent in the second quarter of 1975. By the fourth quarter of 1978, the total unemployment rate had declined to 5.8 percent. All major age-sex-race groups except black teenagers and young adults shared in this improvement. (See table 1.)

The lack of recovery among black teenagers was not unique to this most recent cycle, however. Between 1954 and 1978, black teenagers had characteristically increasing unemployment rates during recessions, with minimal improvement during recovery periods. As can be seen in charts 1 and 2, this pattern differed markedly from the pattern for adults age 25 to 34, regardless of their sex or race. Furthermore, even the jobless rates of white teenagers improved proportionally more than blacks during every recovery period; the divergence was strongest in the two most recent cycles.

From 1970 to 1978, the unemployment rate pattern of blacks age 20 to 24 was similar to that of black teens. Prior to the 1969–70 recession, the unemployment rate trends of young adult blacks were quite similar to their white counterparts. Further, the extent of responsiveness to economic cycles was comparable to those for older workers of both races. In the two most recent recessions, however, unemployment rates among young black women rose and did not subside in recovery periods. Black men in this age group also experienced little post-1975 recovery, although their rate did decline from 1971 to 1973. In the 1970's, then, there is some evidence that the unemployment rate behavior of these young adults has begun to follow a secular pattern of deterioration similar to that of teenage blacks.

In contrast to the situation among black teenagers and young adults, blacks age 25 to 34 exhibited a jobless rate pattern with more typical cyclical behavior. Whites in each group also consistently showed cyclical unemployment rate behavior. Further, despite the wide differences in absolute unemployment rates, the relative movements between black adults and white adults (age 25 and over) were similar in each cycle. This also suggests that the changed pattern for black young adults has not extended into older age categories. (See charts 1 and 2.)

Patterns of employment

Employment is a more objective and observable condition than unemployment. It is also a much larger figure than unemployment and, hence, less subject to measurement (sampling) error. The primary employment measure used in this analysis, the employment-population ratio, has a further advantage in that it uses population as its base (which grows at a relatively constant rate) and is, therefore, not affected by changes in the rate of labor force growth resulting from changes in economic conditions (as is the unemployment rate).

Losses for black male teens. From 1954 to 1978, the employment-population ratio among black male teenagers declined sharply, both absolutely and relative to their white counterparts. The ratio for these black teens fell from 54 to 29 percent, while that for their white counterparts, which was also 54 percent in 1954, increased slightly to 57 percent. (See chart 3.) Table 2 shows that this difference resulted primarily from a much greater rate of employment growth among white male teenagers and only to a lesser degree from a proportionally larger increase in the black teenage population.

As seen in chart 3, the decline in the employment ratio for black male teenagers appears to have been most strongly affected by the 1957–58 and 1969–70 recessions, with a somewhat lesser impact during the 1973–75 period. Their employment level fell by 27 percent in the earlier period (fourth quarter 1955—fourth quarter 1958) and by 21 percent in the latter period (first quarter 1970—first quarter 1972). As a result, their em-

Table 1. Unemployment rates by age, race, and sex, second quarter 1975 and fourth quarter 1978, seasonally adjusted

(In percent)

Age	Total		White				Black and other			
			Men		Women		Men		Women	
	II 1975	IV 1978	II 1975	IV 1978	II 1975	IV 1978	II 1975	IV 1978	II 1975	IV 1978
Total 16 years and over	8.9	5.8	7.6	4.4	9.1	6.0	14.3	10.6	14.2	12.5
16 to 19 years	20.4	16.3	19.1	14.1	17.4	13.9	36.1	34.8	37.2	35.9
20 to 24 years	14.2	9.0	14.0	7.3	11.6	7.7	23.7	20.4	22.4	20.1
25 to 34 years	8.4	5.1	6.7	3.8	9.0	5.7	12.1	8.1	13.2	10.1
35 to 44 years	6.0	3.6	4.9	2.5	6.8	4.5	8.3	4.5	13.3	10.1
45 to 54 years	5.5	3.2	4.4	2.5	6.2	3.7	9.4	5.3	(*)	(*)
55 to 64 years	4.8	2.8	4.2	2.4	5.3	2.9	6.4	4.1	(*)	(*)
65 years and over	5.8	3.2	5.3	3.1	(*)	(*)	11.7	3.4	(*)	(*)

Seasonally adjusted data are not presented for these series, because the variations that are due to seasonal influences cannot be separated with sufficient precision from those that stem from the trend-cycle and irregular components of original time series.

NOTE: Data refer to the civilian noninstitutional population.

Chart 1. Mean unemployment rate index for men, age 16 to 34, by age and race, 1954-78

(Seasonally adjusted 3-month moving average)

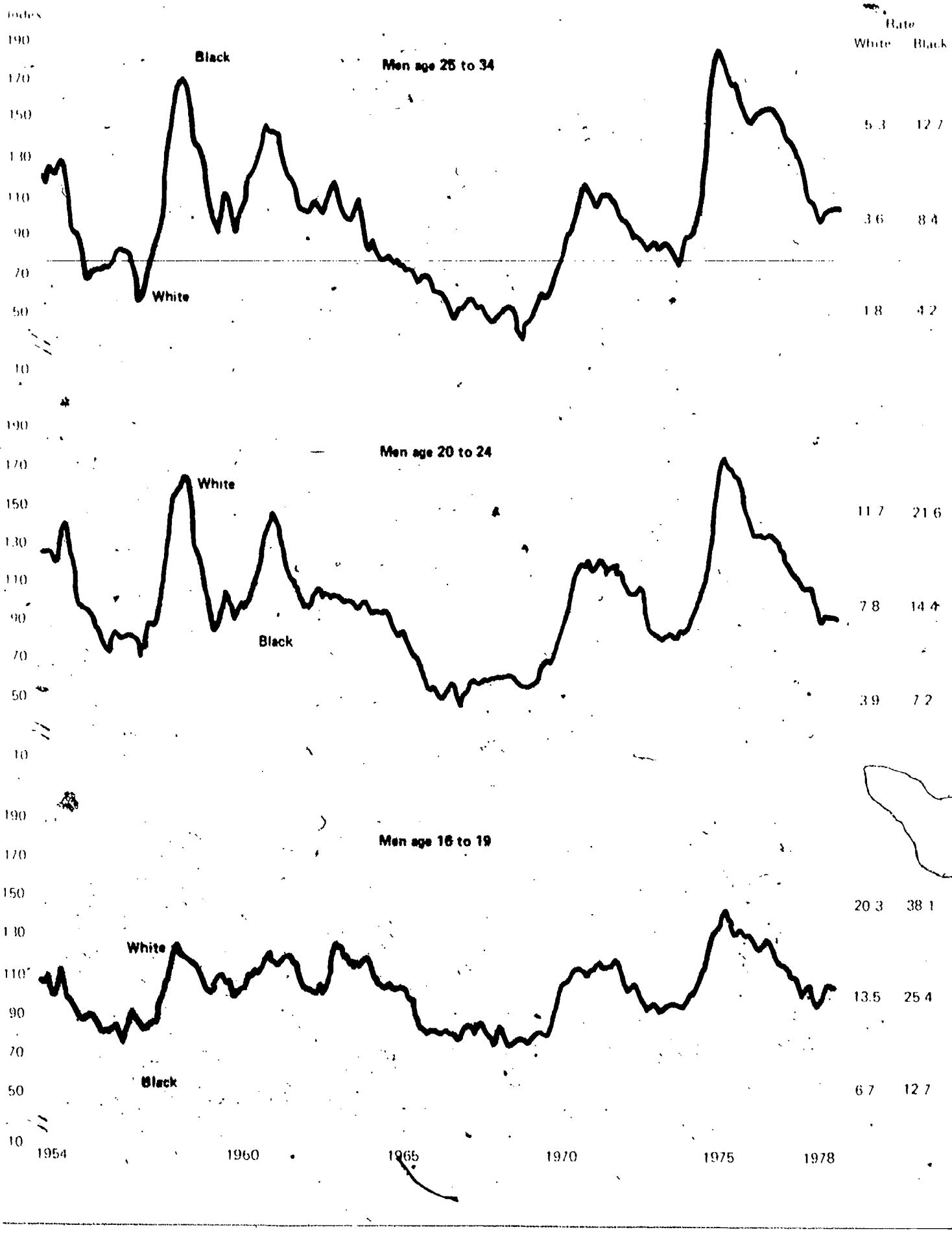


Chart 2. Mean unemployment rate index for women, age 16 to 34, by age and race, 1954-78

[Seasonally adjusted, 3-month moving average]

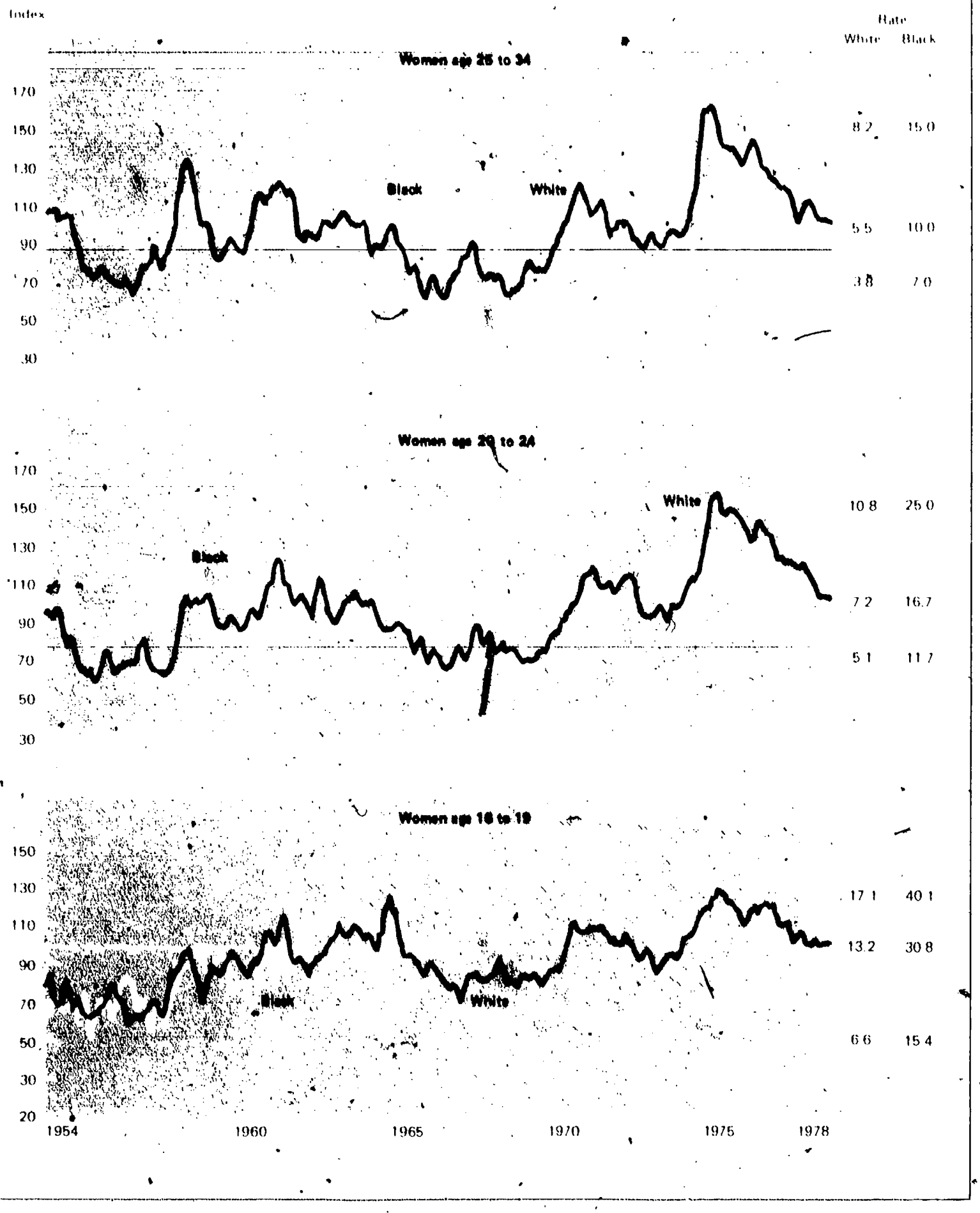


Chart 3. Employment-population ratio for men, age 16 to 34, by age and race, 1954-78

[Seasonally adjusted, 3 month moving average]

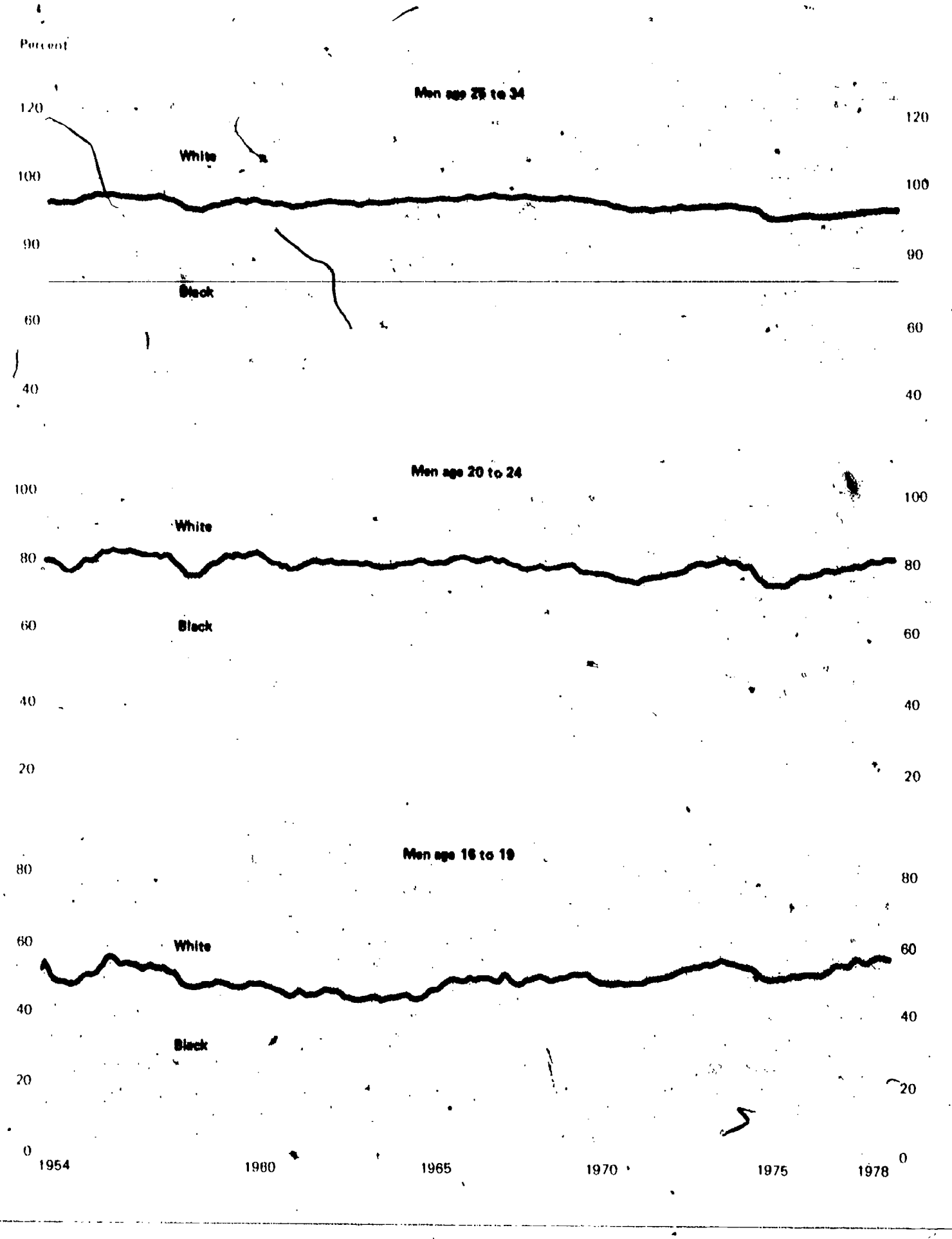


Chart 4. Employment-population ratio for women, age 16 to 34, by age and race, 1954-78

[Seasonally adjusted 3-month moving average]

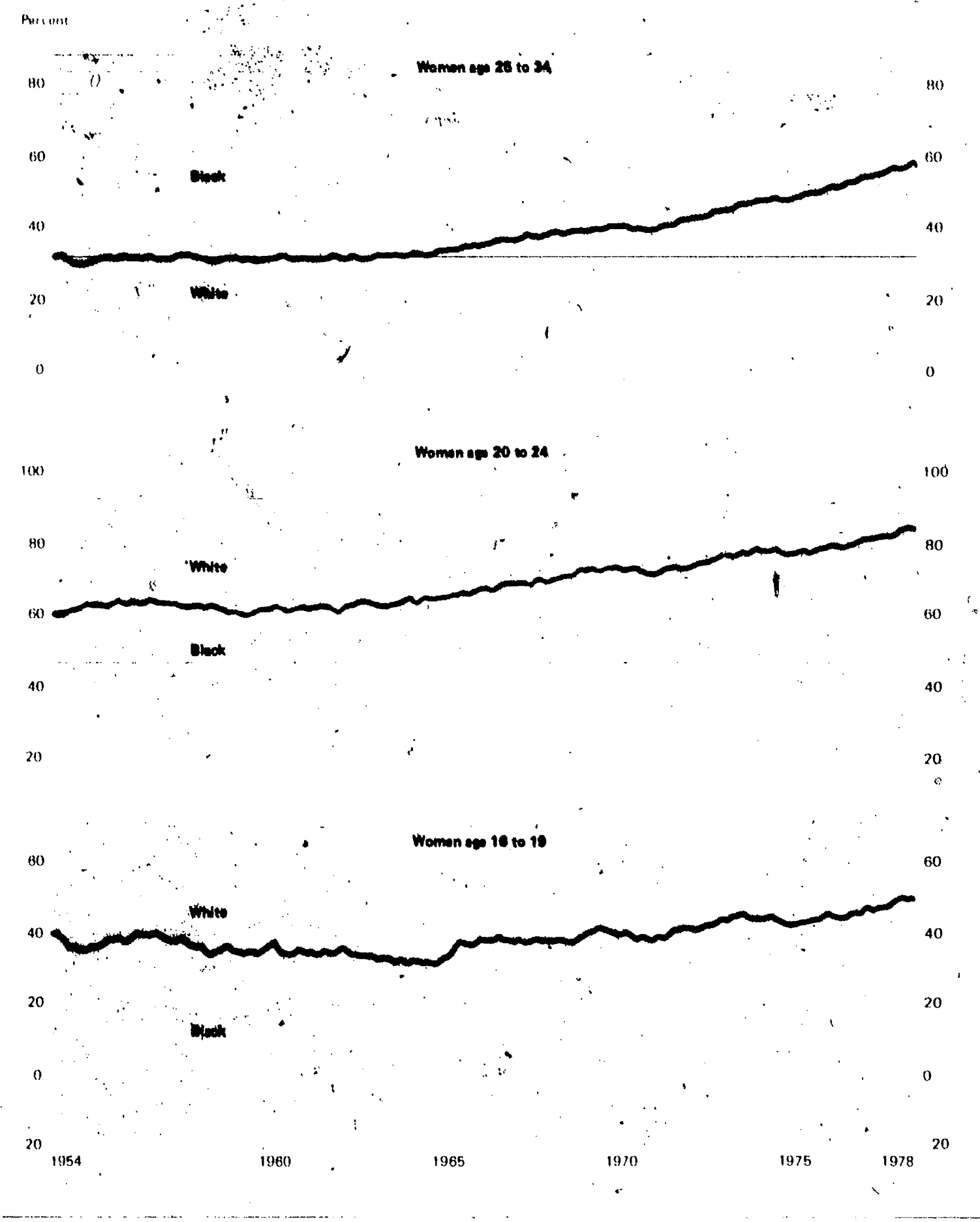


Chart 5. White-black employment-population ratio difference for men and women, age 16 to 34, 1954-78

[Seasonally adjusted 3-month moving average]

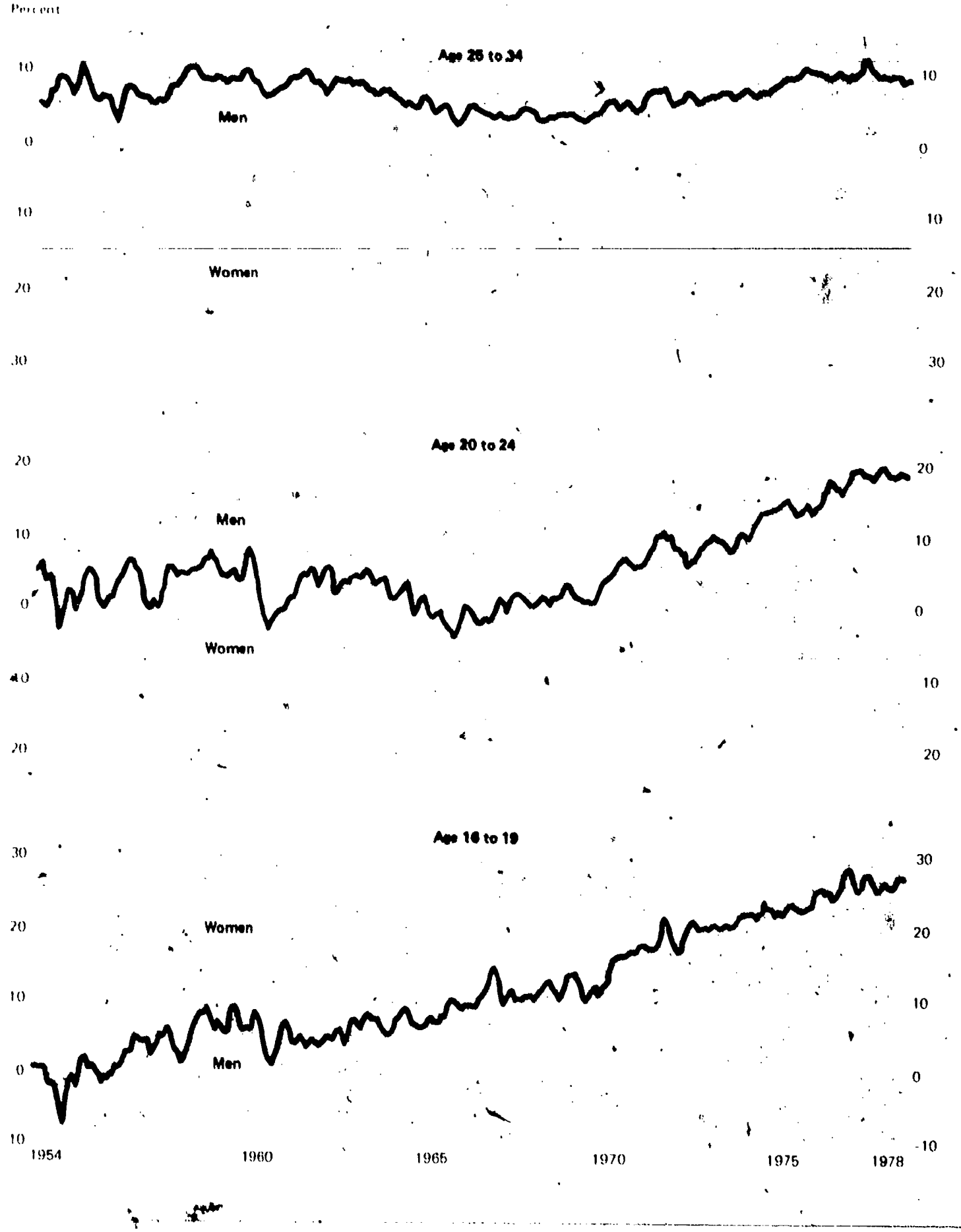


Table 2. Employment and population growth of men and women age 16 to 34, by age and race, first quarter 1954-fourth quarter 1978, seasonally adjusted

Characteristic	16 to 19 years		20 to 24 years		25 to 34 years	
	White	Black[1]	White	Black[1]	White	Black[1]
MEN						
Percent growth in employment	11.4	.36	17.0	15.1	4.4	6.3
Percent growth in population	10.5	15.0	16.7	19.4	4.3	7.3
Percentage point change in employment-population ratio	2.4	-24.4	1.0	-10.5	1.1	-5.3
WOMEN						
Percent growth in employment	14.0	11.6	19.0	17.9	15.2	13.9
Percent growth in population	8.8	14.1	8.0	13.5	3.5	8.0
Percentage point change in employment-population ratio	10.7	-3.0	24.4	-8.0	27.3	-15.3

[1] Black refers to all other than white
NOTE: Data refer to the civilian noninstitutional population

ployment ratio dropped 18.7 percentage points in the first recession and 11.6 points in the second, with no substantial improvement in the subsequent recovery periods.

In contrast to the experience of black youth, the recessionary impact on their white counterparts was much less severe. The employment level of white teens declined only 5 percent in the former period and increased 6 percent in the latter. Their employment-population ratio slipped 7.7 percentage points in the first recession but only 0.8 point in the second.

In 1954, then, the employment ratios of black male teenagers and their white counterparts were about the same (roughly 54 percent). However, because the ratio for the white teens increased during recovery periods while among blacks it did not, the actual gap in their employment ratios had reached 27 percentage points by the end of 1978. With the exception of the 4-year period from early 1959 to late 1962, when the gap narrowed slightly, this difference grew at a fairly consistent rate from 1954 to 1978. Apparently, overall economic conditions, including the boom period of the mid-to-late 1960's and the four post-1954 recessions, neither advanced nor slowed the widening of the employment-population ratio gap between black male and white male teens. (See chart 5.)

Gains for white female teens. Female teenagers had different secular employment patterns. Black female teens had a fairly constant, albeit low, employment-population ratio throughout the 1954-78 period, with some expected cyclical, but little secular, movement. As with their male counterparts, they experienced sharp employment declines during 1955-58 and, to a lesser extent, 1970-72. Unlike the pattern for male teens, however, the ensuing recovery periods of each cycle returned the employment ratio for female teens to near the prerecession level. (See chart 4.)

Throughout the period, the employment ratio for white female teens exceeded that for blacks. The difference in the ratios for female whites and blacks remained roughly constant from 1954 through 1967, at about 10 to 15 percentage points. During 1967-78, this gap widened at a rate very similar to that of male teens, although the widening of the gap for female teens resulted from white employment gains while among the males it was caused primarily by the lack of growth in black employment. (See charts 4 and 5.)

Black young adult ratios slide. Young adult blacks of both sexes in the late 1960's and early 1970's developed employment ratio patterns similar to teenagers. White men age 20 to 24 maintained a fairly-consistent 80-percent ratio throughout the 1954-78 period. From 1954 to 1970, black men also had a ratio around 80 percent, although in this age group it fluctuated in response to economic cycles much more than among whites.

Beginning in 1966, the black employment ratio, which then stood at 85 percent of the population, began to slide, falling to 64 percent by the end of 1978. Two large specific declines were encountered during this period, the first in response to the 1970 recession, the second to the 1973-75 downturn. The first decline saw the employment ratio of these young men drop from 77 to 67 percent. After some subsequent recovery, the second recession brought a somewhat more severe reduction, as the ratio fell from 72 percent in the first quarter of 1974 to 61 percent by the fourth quarter of 1975. During the ensuing 3 years (to the end of 1978), this measure did not improve significantly. The ratio for young white men also showed cyclical declines during these two periods, although they were less pronounced, and the ratio returned to its prerecession level in each recovery. (See charts 3 and 5.)

Although the gap in the black-white ratio for women age 20 to 24 was nearly identical to that for men throughout the 1954-78 period, the underlying behavior was considerably different between the sexes. Among men, the declining employment ratio of blacks and fairly constant ratio of whites caused their post-1966 divergence; among women, increases in white employment and a fairly constant ratio for blacks generated their post-1966 pattern. These sex-race developments were similar to those of teenagers. From 1954 to 1963, the ratio of black women age 20 to 24 was a consistent 40 percent, slightly less than that of whites (about 43 percent). From 1964 to 1970, the ratios for both races increased about 10 percentage points, so again the relative ratio remained roughly constant, ranging from about −5 to +5 percentage points. In 1970, the ratio for blacks leveled off at about 50 percent of their population, while that

for whites continued to increase, reaching about 64 percent in late 1978.

Adult trends less divergent. The employment-population ratios of men of both races age 25 to 34 showed little, if any, secular movement over the 1954–78 period. Whites, however, were consistently 5 to 10 percentage points more likely to have been employed than blacks. As a result of the greater black sensitivity to overall economic conditions, the gap was greatest during economic downturns. Little perceptible narrowing in the gap, however, occurred in the most recent recovery. In each age group over age 35, there was a similar 5- to 10-percentage-point gap in the employment ratio. Again, this gap was greatest during recessions, although, among each of the groups, there was a narrowing in the employment-population ratio gap between whites and blacks during the post-1975 recovery.

Among women age 25 to 34, blacks were more likely to have been employed than whites throughout the quarter century. However, the strong employment increases that have occurred among white women since 1964 narrowed this gap to a point where it had almost entirely disappeared by 1978. (See charts 4 and 5.)

A growing economic dichotomy?

The poor employment situation of young blacks in 1978 is part of a long-term deterioration and not simply a lingering effect of the 1973–75 recession. A distinct secular downtrend in the incidence of employment among black male teenagers, both absolutely and relative to whites, occurred during 1954–78. Although the major declines in the employment-population ratio for black teens were associated with a recessionary period, a widening of the black-white employment gap occurred throughout the 25-year period. Black female teenagers, who even in 1954 had a rather low incidence of employment when compared to white women of the same age, had little net change in their employment-population ratio.[7] However, the employment increases that began among white female teenagers in the mid-1960's caused the white-black gap in employment to approximate the pattern of male teens.

Limited recovery from each recession was the dominant feature of black teenage unemployment rates for both sexes. This behavior is in stark contrast to the predominantly cyclical pattern (deterioration followed by improvement) of both employment and unemployment rates among blacks over age 25 and whites of all age and sex groups.

Among blacks age 20 to 24, patterns of employment decline similar to those of black teenagers began to appear in 1966, when the employment ratio among young black men began to taper off. As the ratio for white men in this age group remained essentially unchanged, the gap in the black/white ratio consistently increased, similar to the pattern that occurred among teenagers throughout the 1954–78 period. The unemployment rate among young adult black men paralleled the pattern of the overall jobless rate until 1977, when it failed to show continued recovery from the 1975 recession.

Little or no unemployment rate recovery from either of the 1970's recessions occurred among young black women. However, because of their increasing participation in the labor force, they did experience some employment recovery from the 1970 recessionary lows. At 50 percent at the end of 1978, their employment-population ratio was only about 3 percentage points below its all-time high reached in late 1969. Because of greater employment gains among whites, however, a gap developed in the relative incidence of employment among women age 20 to 24 in the 1970's. Unlike the similar gap that existed among men of the same age, which occurred because of employment declines among blacks, the gap among young women resulted primarily from strong employment gains among whites.

During the 25-year period, the employment situation of young blacks continued to deteriorate, even in times of general economic improvement. Further, the lack of jobs, which increasingly plagued black teenagers throughout the 1954–78 period, now follows them into early adulthood. □

FOOTNOTES

[1] Throughout this article, "black" refers to the "black and other" population. According to the 1970 census, 89 percent of this group were black, the residual being American Indians, Asian and Pacific Islanders, and other nonwhite races.

MURI is a measure based on the arithmetic average (mean) of the monthly seasonally adjusted unemployment rates of each age-race-sex group over the January 1954–December 1978 period. Each monthly value is indexed to the mean rate of the series, set equal to 100. For example, the mean unemployment rate of 20 to 24 year-old black males was 14.4 percent over the period. Therefore, an actual seasonally adjusted monthly unemployment rate of 14.4 percent would have a value of 100, while a rate of 7.2 percent would have an index value of 50. Employment and unemployment data for age groups 20 to 24 and 25 to 34 were seasonally adjusted specifically for this article.

[3] The 1954 starting date for analysis was chosen because it marks the beginning of the period for which disaggregation of CPS monthly data by race became possible. This resulted from the introduction of comparable independent population controls in 1954.

[4] Recession data are designated by the National Bureau of Economic Research as August 1957 to April 1958, April 1960 to February 1961, December 1969 to November 1970, and November 1973 to March 1975. The cyclical behavior of unemployment rate movements among black teens in response to the 1960–61 recession is not readily discernible, due to the masking effects of measurement error.

[5] Employment and unemployment trends for those age 25 to 34 are very similar to trends of those age 35 to 44, 45 to 54, 55 to 64, and 65 and over.

Using National Longitudinal Surveys to track young workers

Labor force experiences of thousands of youth have been captured with the NLS; a new 1979 cohort, comprising 13,000 young men and women, will provide expanded data on youth labor market behavior and problems

KEZIA SPROAT

As illustrated elsewhere in this issue, the labor market experiences of youth are diverse and highly complex. For some, entployment and unemployment patterns can change significantly from one year to the next. Others apparently suffer chronic employment difficulties. Characteristics such as race, sex, and educational achievement can have important — but varied — effects on these experiences, as youth make the transition from school to work.

How can young people's employment difficulties be resolved, or better still, prevented? Data from the National Longitudinal Surveys of Labor Force Experience (NLS) hold rich potential for answering questions about labor force dynamics as they affect youth employment and unemployment. This article summarizes recent findings and ongoing research based on the three NLS youth cohorts.

The data base

The NLS include three nationally representative probability samples totaling 23,000 young people.[1] Since 1966, the NLS have followed 5,000 young men who were age 14 to 24 at the time of their first interview and, since 1968, a cohort of 5,000 young women who were also age 14 to 24.[2] Early in 1979, a new cohort of 13,000 young men and women age 14 to 21 was interviewed for the first time. The new youth cohort includes approximately 2,000 Hispanics, 3,000 blacks, 2,000 whites below the poverty level, and a socioeconomic cross-section of 5,000 whites. The oversampling of minority groups in all NLS cohorts permits statistically reliable generalizations about those most likely to experience labor market difficulties.

Each youth cohort is interviewed annually,[3] and the extensive data thus produced is made available for public use by the Center for Human Resource Research at The Ohio State University, under contract from the U.S. Department of Labor. An interdisciplinary research team at the Center designs interview schedules, analyzes data, and prepares policy-oriented research reports.[4]

The longitudinal nature of the surveys makes it possible to compare an individual's attitudes with subsequent actions and to separate the likely causes of labor force behavior from *post hoc* explanations for it. Detailed family, education, and work histories from thousands of respondents make possible reliable estimates of the probable effects of particular lifestyles on work experience. As data from the new youth survey become available, NLS-based research will provide increasingly useful information about the labor force participation of young people. Comparisons among the three youth cohorts will permit description and analysis of the effects of economic change on young people across a 15-year period.

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Young women: expanding opportunities

Because numerous previous studies have shown a strong correlation between educational attainment and labor force success, several recent studies have been concerned with the determinants of high school completion. Several others have investigated the expanding labor force participation of women.

Lois B. Shaw addresses these issues in a report which exploits the unique NLS mother-daughter data[7] to determine whether living in a single-parent family affects young women's chances of completing high school.[8] Although some models suggest this correlation, Shaw found that it occurred only at low income levels. The education gap between daughters in two-parent families and those living with a single parent disappears completely at income levels above $11,000 per year. Although low income itself encourages dropping out, single-parent family status apparently exacerbates the difficulty. Because more than 90 percent of single-parent families are headed by women, Shaw has suggested policies directed toward improving the income adequacy of these mothers, which should in turn lower dropout rates.

Comparing the early work histories of high school dropouts and graduates, Shaw and Frank Mott found that many of the serious adjustment problems faced by young women immediately following high school, and particularly by those who have not completed school, arise from pregnancy and childrearing.[9] Childbearing negatively affects a young woman's chances of entering training and increasing earnings. And child-care costs, they observed, increased the likelihood that a young woman would remain outside the labor force. Based on their findings, Mott and Shaw have suggested improved educational and health-related programs for reducing unwanted fertility among teenagers.

Mott and Shaw also noted that students who dropped out of school had much less employment experience and knowledge about employers, occupations, and job search methods than others. Dropouts and less skilled youth, moreover, are more likely to withdraw from the labor force and to perpetuate a cycle of "early school withdrawal, heavy family responsibilities, limited work opportunities, and even fewer long-term work options."

After studying the NLS data on young women, Richard L. Shortlidge suggested the possibility that a national program of free day-care centers would reduce maternal poverty and consequent school dropout rates.[9] "Among women who were not working outside the home in 1971," he reported, "approximately 1 of every 5 white women and 1 of every 2 black women reported that they would seek work if a free day-care center were available to them." In another study that reflects the movement away from traditional patterns of mothering, Frank Mott and David Shapiro looked at the changes in women's labor force participation before and after the birth of a first child. Traditionally, women have left the labor force at the birth of the first child; however, Mott and Shapiro found that this withdrawal from work was usually temporary. In fact, they found that participation rates rose sharply after the birth, and more so among black women than among white.[10]

A study by Mott and Sylvia Moore investigated the causes of marital disruption among young women.[11] They found certain social-psychological syndromes among both blacks and whites which pass the "tendency to marital disruption" from one generation to another. Early marriages were less likely to stay intact, they found, concluding that "any institutional means of raising the age of marriage could well lead to major declines in marital disruption rates, even if no other characteristics relating to the youth were altered."[12]

Steven Sandell and Rex Johnson investigated the extent of women's post-secondary schooling, an important determinant of labor market success. They found that parental educational attainment and family income were important predictors of college attendance.[13] Family income was a significantly more important influence on young women's college attendance decisions in 1970 than in 1968 or 1969; thus, income-related decisions appear to be affected substantially by aggregate economic conditions. Sandell and Johnson concluded that young women from poor families need special encouragement to seek higher education, particularly during economic downturns.

Differences among college and other women and among black and white women appear in a study of occupational expectations at age 35. Patricia Brito and Carol Jusenius investigated the factors associated with young women's expectations for entering typically male occupations.[14] Although they found that relatively few women aspired to male-dominated occupations in 1973, they also found varying expectations by race and education: "the presence or expectations of children negatively affected the likelihood that white college women would expect to be in a male occupation, but it had no significant effect on either black college women or white noncollege women." The authors recommended expansion of programs to inform young women of the broad range of occupations available to them.

Besides the persistent occupational segregation observed by Brito and Jusenius, another factor that may influence the wage gap between men and women is a difference in the extent of investment in post-school training. David Shapiro and Timothy Carr examined the wage-experience profiles of young men and two groups of young women — those strongly committed and those weakly attached to the labor market.[15] They

expected to find investment in training to be greatest among the men and least among the weakly committed women. Although the expected differences between the two groups of women occurred, there was no evidence of any difference between the strongly committed women and the men. However, these women received markedly lower wages than the men. The authors called for further studies of labor market discrimination to explain these differences.

Traditionally, women have "followed" their husbands' career development, moving to new locations as he is promoted or transferred. Sandell and Peter Koenig found that families' decisions to migrate are affected not only by the husband's job, but also by the wife's labor market attachment and by overall economic conditions.[16] Their analysis also showed that employed married women who migrate earn $500 less per year than married women who do not, but unmarried employed women enjoy a $1,200 earnings advantage from migration.

Young men: differential returns

Conclusions about the causes of labor market success based on the young men's cohort often apply equally to young women. For example, among several NLS-based studies[17] of the influence of individual attitudes on labor force behavior, Brian E. Becker and Stephen M. Hills suggested that "attitudinal and motivational differences among teenagers . . . are an important predictor of subsequent unemployment problems."[18] Those who perceive themselves to be more in control of their destiny as measured by the Rotter scale enjoy higher labor market returns. In general, blacks perceive more external control,[19] and among blacks and whites who demonstrate equal degrees of externality, blacks are more severely penalized by higher rates of unemployment and lower wages. Becker and Hills concluded that black-white differences in levels of externality account for 12 percent of the black-white unemployment differential among young adults.

Recent studies of NLS youth data

The following studies of NLS data discussed in this article have been published by The Ohio State University, Center for Human Resource Research, 5701 N. High St., Worthington, OH 43085, and are available at cost.

Andrisani, Paul and Andrew Kohen, "Unionization and the Labor Market Experiences of Young Blue-Collar Workers," *Career Thresholds V*, 1975;

Becker, Brian E. and Stephen M. Hills, *Teenage Locus of Control and Adult Unemployment*, 1979;

Becker, Brian E. and Stephen M. Hills, *Teenage Unemployment: Some Evidence of the Long-Run Effect on Wages*;

Brito, Patricia and Carol Jusenius, "Occupational Expectations for Age 35," *Years for Decision IV*, 1977;

Grasso, John T., "Dimensions of Youth Unemployment," *Career Thresholds VI*, 1977;

Grasso, John T. and Andrew Kohen, "The Formation and Revision of Goals by Young Men," *Career Thresholds VI*, 1977;

Grasso, John T. and Steven Myers, "The Labor Market Effects of Investment in Human Capital," *Career Thresholds VI*, 1977;

King, Randall H., *The Labor Market Consequences of Dropping Out of High School*, 1978;

Kohen, Andrew, "Antecedents and Consequences of Occupational Mobility," *Career Thresholds VI*, 1977;

Mott, Frank and Sylvia Moore, *The Causes of Marital Disruption Among Young American Women: An Interdisciplinary Perspective*, 1979;

Mott, Frank and David Shapiro, "Work and Motherhood: The Dynamics of Labor Force Participation Surrounding the First Birth," *Years for Decision IV*, 1977;

Mott, Frank and Lois B. Shaw, *Work and Family in the School-Leaving Years*, 1978;

Myers, Steven, *Working in College: Risk or Return?* 1979;

Sandell, Steven and Peter Koenigs "The Geographic Mobility of Young Women and Their Families," *Years for Decision IV*, 1977;

Sandell, Steven and Rex Johnson, "Young Women and Higher Education," *Years for Decision IV*, 1977;

Shapiro, David and Timothy Carr, "Investments in Human Capital and the Earnings of Young Women," *Years for Decision IV*, 1977;

Shaw, Lois B., *Does Living in a Single-Parent Family Affect High School Completion for Young Women?* 1979;

Shields, Patricia and Andrew Kohen, "Determinants and Consequences of Service in the Armed Forces During the Viet Nam Era," *Career Thresholds VI*, 1977;

Shields, Patricia, *The Determinants of Service in the Armed Forces During the Viet Nam Era*, 1977;

Shortlidge, Richard L., *The Hypothetical Labor Market Response of Black and White Women to a National Program of Free Day Care Centers*, 1977.

Another attitudinal study by John Grasso and Andrew Kohen, "The Formation and Revision of Goals by Young Men," indicated that significant numbers of teenagers hold unrealistically high occupational and educational goals, but, across time, individuals typically modify their goals downward in constructive ways.[20] Grasso and Kohen also observed that segregated high schools have an overall constricting effect on goal formation among blacks.

Looking at the returns to young men's investment in education and training, Grasso and Steven Myers found that comparable schooling imparted a lesser labor market advantage to blacks than to whites.[21] Similarly, experience and tenure failed to produce comparable improvements in status and skill level among blacks and whites. Grasso and Myers also observed that a decline in wages of college graduates after 1969 paralleled a decline in wages for high school graduates, reflecting an economic downturn, not a decline *per se* in the labor market value of higher education, as has been suggested.[22]

The war in Southeast Asia complicated most labor market studies of young men in this period. Patricia Shields studied the factors surrounding enlistment, draft, and service in the military during the Vietnam war.[23] She and Kohen looked both at causes and at civilian labor market consequences of military service.[24] They found that Vietnam veterans "paid a substantial cost for their military service in terms of forgone civilian work experience"; they had significantly lower average earnings than nonveterans. Although veterans also experienced more joblessness after discharge than did civilians, over time this disadvantage disappeared. More than half the veterans had positive estimates of the effects of military service on their careers, but these positive attitudes were more common among those who received job training while in the service. The relation between military service and civilian work experience can be more fully investigated when the 1979 youth cohort data become available; 1,300 respondents in this group were serving in the armed forces at the time of the initial interview.

Two recent studies of the 1966 young men point to the potential value of changing jobs. Becker and Hills have found that unemployment can have a positive impact on the future level of wages, especially when joblessness leads to enrollment in a job training program.[25] Kohen has shown that a substantial number of the young men have returned to "what is often characterized as youth's milling around in the labor market."[26] Evidently, youth amass valuable information about the labor market as they move from job to job. Unemployment has costs, however, and Grasso has shown that blacks pay a higher price for joblessness in terms of lost wages than do whites.[27]

Paul Andrisani and Kohen have shown that among young blue-collar workers collective bargaining coverage reduces the likelihood of unemployment. Unionization also contributes to substantial improvement in hourly earnings: "estimates of the relative net earnings advantage of the unionized range from 14 percent among black nonfarm laborers to 52 percent among white nonfarm laborers."[28]

Another example of research on young men for which the conclusions may be equally applicable to young women is a 1979 dissertation by Steven Myers, titled "Working in College: Risk or Return?" Myers concluded that holding a job during the freshman year reduces the probability of finishing the school year and earning higher post-school wages, but holding a job in the last years of college has little or no detrimental effect on completion and a positive impact on later earnings.

Two studies of returns to education are based on data from the youth cohorts of both sexes. Randall H. King found that although dropouts may earn higher initial wages, all those who graduate from high school enjoy a clear long-term wage advantage even if they do not attend college.[29] This advantage develops partly because graduates are more likely to be chosen for training programs. The evidence also suggested that employers may use the high school diploma as a screening device for blacks and women. King omitted college students from his study, thus understating his estimate of the value of high school graduation.

Focusing on college graduates who entered the labor market in the late 1960's and the early 1970's, Herbert S. Parnes and Gilbert Nestel have investigated changes in graduates' labor market status compared with high school graduates and college dropouts.[30] They found that male graduates enjoyed lower unemployment rates, higher occupational status, and substantially higher average hourly earnings; female graduates had less unemployment, but much weaker earnings improvement than did males and virtually no improvement in occupational status. Parnes and Nestel found little evidence of any deterioration in occupational status among graduates between the late 1960's and the early 1970's.

Comparing youth of different eras

Together with the earlier surveys of youth, the data forthcoming from the new 1979 youth cohort will permit many comparative studies across economic climates from the late 1960's to the early 1980's. To facilitate comparisons, the new youth cohort questionnaire was designed to obtain data compatible with that from the original cohorts, but it includes important new measures as well. For example, it includes a series of questions about significant role models, perceived influences, and cultural heritage. Responses in this area will allow a more sophisticated description of attitudinal influences

on labor market behavior than has been possible before. In addition, because the new youth cohort is the first to include respondents serving in the armed forces at the time of the initial interview, labor market effects of military service can be better determined. Oversampling of economically disadvantaged groups and a series of questions about employment and training programs targeted to serve them will permit more accurate evaluation of these programs. Data from the initial interview will be available on computer tapes for public use in the spring of 1980.[9]

A 10-year report on the original young men's cohort is now in preparation and will also be ready early in 1980. Included will be the results of an investigation of the degree to which young men were differentially insulated from the economic adversity of the 1970's as a result of their location in different sectors of the economy. This study will include an analysis of trends in relative opportunities for blacks during the period.

Another study will focus on job search behavior and the relationship between unemployment and migration. A third will describe changes in returns to education and training between 1971 and 1976. This will include an analysis of the extent to which "over-education" may affect labor force behavior. The 10-year report on the young men will also include a further investigation of the long-term effects of teenage unemployment. In addition, the impact of the 1974–75 recession will be examined, including the means of support young men used during the period, the demographic groups that benefited from unemployment insurance, the groups that participated in training programs, and the groups that benefited from food stamps, welfare, and wives' earnings. The effects of the recession on the employed will also be examined to determine if they had lower wages or decreased mobility, or both.

The data to complete the 10-year interview of young women will be available during 1980, and an analytical report will be prepared. Studies of the young women's data will examine changes in family composition, marital status, labor force participation, income adequacy, education, health, and attitudes towards women's roles. Additionally, the mother-daughter data may provide insight into whether maternal work experience and encouragement affect young women's work attitudes, work participation, educational attainment, and fertility.[10]

This brief survey of recent findings offers an idea of the wide range of questions about the labor market experience of youth which can be usefully addressed with NLS data. Researchers from around the country have made use of the NLS data through public-use tapes. Results of their work have been and will continue to be helpful in the formation of public policies affecting young people. □

FOOTNOTES

See Herbert S. Parnes, "The National Longitudinal Surveys: New Vistas for Labor Market Research," *American Economic Review*, May 1975, pp. 244–49. A recent description of the NLS appeared in James I. Peterson, "Work and socioeconomic life cycles: an agenda for longitudinal research," *Monthly Labor Review*, February 1979, pp. 23–27. More detailed information and a list of 372 NLS-based special reports are available in *The NLS Handbook* (Columbus, Ohio, The Ohio State University, Center for Human Resource Research, 1979).

Attrition levels are small. The young women's cohort begun in 1968 now includes 3,923 women, a completion rate of 76 percent. The young men's cohort of 5,000 who were age 14 to 24 in 1966 now has 3,696 respondents, a 70.7 percent completion rate.

Annual interviews are conducted for the first 6 years within each of the young people's cohorts. After 6 years, biennial telephone surveys and personal interviews at 5-year intervals are conducted.

The Bureau of the Census has designed samples and conducted interviews for all cohorts except the new 1979 youth cohort, for which the National Opinion Research Center at the University of Chicago is doing the field work.

The NLS also include two older cohorts—men age 45 to 59 when first interviewed in 1966 and women age 30 to 44 when first interviewed in 1967. Many of the individuals interviewed in the four cohorts begun during the 1960's live in the same households. There are 1,843 mother-daughter pairs and 1,102 father-son pairs.

Lois B. Shaw, *Does Living in a Single-Parent Family Affect High School Completion for Young Women?*

Frank Mott and Lois B. Shaw, *Work and Family in the School-Leaving Years.*

Ibid., p. 12.

Richard I. Shorthidge, *The Hypothetical Labor Market Response of Black and White Women to a National Program of Free Day Care Centers.*

Frank Mott and David Shapiro, "Work and Motherhood," pp. 65–101, and "Labor Supply Behavior of Prospective and New Mothers," *Demography*, May 1979, pp. 199–208.

Frank Mott and Sylvia Moore, "The Causes of Marital Disruption Among Young American Women," *Journal of Marriage and the Family*, May 1979, pp. 355–65.

Ibid., p. 19.

Steven Sandell and Rex Johnson, "Young Women and Higher Education," *Years for Decision IV*, pp. 35–51.

Patricia Brito and Carol Jusenius, "Occupational Expectations for Age 35," pp. 137.

David Shapiro and Timothy Carr, "Investments in Human Capital and the Earnings of Young Women," *Years for Decision IV*, pp. 149–67.

Steven Sandell and Peter Koenig, "The Geographic Mobility of Young Women and Their Families," *Years for Decision IV*, pp. 177–93.

Florence M. Casey, ed., *Work Attitudes and Work Experience*, U.S. Dept. of Labor R&D monograph 60, 1979. See also Paul Andrisani and others, *Work Attitudes and Labor Market Experience*, (Philadelphia, Temple University Center for Labor and Human Resources, 1979).

Brian E. Becker and Stephen M. Hill, *Teenage Locus of Control and Adult Unemployment;* and "Today's teenage unemployed—tomorrow's working poor?" *Monthly Labor Review*, January 1979, pp. 69–71.

It is interesting to note that the Rev. Jesse Jackson's nationwide "PUSH for Excellence" program addresses this problem directly.

[7] John Grasso and Andrew Kohen, "The Formation and Revision of Goals by Young Men," *Career Thresholds VI*, pp. 15–48.

[8] John Grasso and Steven Myers, "The Labor Market Effects of Investment in Human Capital," pp. 53–93.

[9] See, for example, Richard B. Freeman, *The Over-Educated American* (New York, Academic Press, 1976), pp. 201–06.

[10] Patricia Shields, *The Determinants of Service in the Armed Forces During the Viet Nam Era*, pp. 129–38.

[11] Patricia Shields and Andrew Kohen, "Determinants and Consequences of Service in the Armed Forces During the Viet Nam Era," *Career Thresholds VI*, pp. 155–89.

[12] Brian E. Becker and Stephen M. Hills, *Teenage Unemployment: Some Evidence of the Long-Run Effect on wages*.

[13] Andrew Kohen, "Antecedents and Consequences of Occupational Mobility," *Career Thresholds IV*, pp. 93–128.

[14] John E. Grasso, "Dimensions of Youth Unemployment," pp. 129–54.

[15] Paul Andrisani and Andrew Kohen, "Unionization and the Labor Market Experiences of Young Blue-Collar Workers," *Career Thresholds V*, p. 31.

[16] Randall H. King, *The Labor-Market Consequences of Dropping Out of High School*, pp. 61–95.

[17] Herbert S. Parnes and Gilbert Nestel, "The Early Labor Market Experience of College Graduates," paper presented at the 32d National Conference on Higher Education, Chicago, March 22–23, 1977.

[18] Data from the five NLS cohorts are available at cost on computer tapes from the Public Use Office, The Center for Human Resource Research, 5701 North High Street, Worthington, Ohio 43085.

[19] Margaret Mead observed that she was a third generation professional woman in *Blackberry Winter* (New York, Pocket Books, 1975), p. 55. The mother-daughter analyses will appear in a report on the older women's cohort to be published in 1980.

Growing up fast in a factory

Many parents frankly admitted that the influence of factory life on their children was bad and that they learned much from their associates that was to be regretted. Complaints were sometimes made of the rough language, seasoned with profanity, which overseers addressed to them.

On the other hand, places were visited, usually large concerns, where the just and considerate character of the manager raised the tone of the whole establishment. . . . Certain conditions were observed unfavorable to morality. One was the failure to secure in the average factory the proper privacy of the sexes. Closets, though separate, were so placed in relation to each other and the workroom that they were in full view of persons of both sexes working in their vicinity. Women were rarely provided with retiring rooms where they could put on and take off the outer garments they wore in the factory. The idle time of boys whose work was not continuous was usually spent in a way possibly more unfavorable to their moral growth than the labor they performed was to their physical development . . . At a glass factory many of the boys coming from work were observed to have cigarettes or pipes in their mouths. "They pick that up very soon," the overseer remarked. At a brewery, beer was given away not only to the adult employees, but to the boys and girls, the boys receiving 1 pint and the girls half a pint every noon and evening. Children at work often appear older than they really are. Childhood with them seems to end at the beginning of labor. "They are no longer children after they go to work."

HANNAH R. SEWALL,
Child Labor in the United States,
Bulletin 52 (Bureau of Labor, May 1904) p. 516.

The difference a year makes in the Nation's youth work force

Special Labor Force Report shows that employment of students, graduates, and dropouts increased 1.1 million in the year ended October 1978, but jobless rate still exceeded 10 percent

ANNE McDOUGALL YOUNG

The employment situation for youths (age 16 to 24 years) was significantly better in October 1978 than it had been a year earlier. The improved job situation was evident among youths both in school as well as out of school.

Overall, the number of employed youths increased by 1.1 million from October 1977 to October 1978. (See table 1.) The increase appears particularly large in view of the fact that this segment of the population, after rising very rapidly for over a decade, is now beginning to level off: over this 1-year period, it increased by less than 300,000 overall, and the number of youths age 16 to 19 actually declined slightly.

The large increase in youth employment, which matched the previous year's increase, was accompanied by further increases in labor force participation, particularly among young women. The result was only a moderate decline in unemployment, with the number of jobless youths dropping by 250,000. Nearly all of this decline occurred among youths no longer in school, whose unemployment rate declined from 11.9 to 10.0 percent. For youths in school, the unemployment rate declined only marginally over the year.

Data on the family income of youths show that the likelihood of youths being in school and working increased with family income. Youths from lower income families were somewhat less likely to be in the labor force and, if in the labor force, much more likely to be unemployed.

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Recent trends

Most of the increase in the student labor force between 1977 and 1978 was accounted for by high school students. As the college population edged downward, the number of college students in the labor force remained about the same as in 1977, despite a rise in participation rates. The number of unemployed high school and college students and their unemployment rates were essentially unchanged over the year. School schedules impose substantial limitations on the availability of many youths for work. By October 1978, 9 of 10 students who held jobs were working part time or, if unemployed, were looking for part-time work. In contrast, the great majority of their peers no longer in school worked at, or were looking for, full-time jobs. (See table 2.)

Among youths not in school, the number with jobs rose nearly 900,000 from October 1977 to October 1978, substantially more than their increase in the labor force. The expansion in employment was shared by both young men and women, blacks and whites, and school dropouts and high school graduates. The number of employed college graduates showed no significant change over the year, but a higher proportion of college graduates than of persons with less education was employed.

A large difference between the labor force participa-

tion rates of black students and of white students persisted in 1978. The rate for black high school students age 16 to 19 was only half that for white students. Participation by black college students in campus work-study programs may account in part for the narrowing of the difference between the black and the white college student participation rates.

The gap between the labor force participation rates of white teenagers and black teenagers not in school has increased in recent years. Whereas the rate of young white men remained between 87 and 90 percent for the past 20 years, that of young black men was more than 10 percentage points lower in 1978 than in 1960 (76 percent compared with 89 percent). Various hypotheses have been suggested for this decline. One notes that much of the employment growth in recent years in retail trade and service industries, which employ large numbers of young workers, has been in suburban areas rather than in the central cities where the large concentration of black youths lives. Also, many industrial plants have moved to fringe areas that are difficult to reach for city residents. A study conducted in a large metropolitan area indicates that the employment problem in the ghetto is not lack of jobs but lack of all but casual jobs.[2] Others point to a perceived lack of prospects for upward mobility in the jobs that do exist.[3]

Table 1. Employment status of persons age 16 to 24 years, by school enrollment status, educational attainment, sex, and race, 1977 and 1978

(Numbers in thousands)

Characteristics	Civilian noninstitutional population		Civilian labor force						Unemployed			
			Number		Percent of population		Employed		Number		Percent of labor force	
	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978
Total 16 to 24 years old	35,658	35,931	23,454	24,278	65.8	67.6	20,581	21,654	2,871	2,621	12.2	10.8
Enrolled in school	15,551	15,329	7,291	7,475	46.9	48.8	6,343	6,539	947	936	13.0	12.5
16 to 19 years	11,161	11,084	4,875	5,066	43.7	45.7	4,111	4,289	765	775	15.7	15.3
20 to 24 years	4,390	4,245	2,416	2,409	55.0	56.7	2,232	2,250	182	161	7.5	6.7
Men	8,110	7,948	3,920	3,937	48.3	49.5	3,433	3,431	487	506	12.4	12.9
Women	7,441	7,381	3,371	3,538	45.3	47.9	2,906	3,106	460	430	13.6	12.2
Elementary and high school	8,145	8,061	3,525	3,699	43.3	45.9	2,900	3,069	626	626	17.8	16.9
Men	4,288	4,220	1,989	2,023	46.4	47.9	1,660	1,671	330	350	16.6	17.3
Women	3,857	3,841	1,536	1,676	39.8	43.6	1,240	1,398	296	276	19.3	16.5
White	6,697	6,616	3,194	3,318	47.7	50.2	2,702	2,825	492	493	15.4	14.9
Black	1,311	1,291	289	323	22.0	25.0	164	207	125	117	43.3	36.2
Hispanic origin	524	490	176	181	33.6	36.9	131	141	47	39	26.7	21.5
College	7,406	7,269	3,765	3,778	50.8	52.0	3,443	3,467	322	314	8.6	8.3
Men	3,822	3,730	1,932	1,917	50.5	51.4	1,776	1,759	157	157	8.1	8.2
Women	3,584	3,539	1,833	1,861	51.1	52.6	1,667	1,708	165	157	9.0	8.4
Full-time	6,134	6,043	2,635	2,674	43.0	44.2	2,381	2,411	255	260	9.7	9.7
Part time	1,272	1,225	1,130	1,106	88.8	90.3	1,062	1,054	67	54	5.9	4.9
White	6,430	6,305	3,383	3,391	52.6	53.8	3,130	3,162	253	225	7.5	6.6
Black	758	733	278	276	36.7	37.7	219	207	62	70	22.3	25.4
Hispanic origin	290	269	155	174	53.4	64.7	140	168	12	10	7.7	5.7
Not enrolled in school	20,107	20,602	16,163	16,803	80.4	81.6	14,238	15,115	1,924	1,685	11.9	10.0
16 to 19 years	5,317	5,353	4,116	4,200	77.4	78.5	3,400	3,545	714	653	17.3	15.5
20 to 24 years	14,790	15,249	12,047	12,603	81.5	82.6	10,838	11,570	1,210	1,032	10.0	8.2
Men	9,321	9,634	8,693	8,973	93.3	93.1	7,773	8,147	919	823	10.6	9.2
Women	10,786	10,968	7,470	7,830	69.3	71.4	6,467	6,968	1,005	862	13.5	11.0
School dropouts	5,031	5,114	3,340	3,411	66.4	66.7	2,660	2,777	680	634	20.4	18.6
16 to 19 years	2,074	2,087	1,325	1,381	63.9	66.2	995	1,052	330	329	24.9	23.8
20 to 24 years	2,957	3,027	2,015	2,030	68.1	67.1	1,665	1,725	350	305	17.4	15.0
White	4,087	4,101	2,779	2,811	68.3	68.5	2,314	2,350	465	461	16.7	16.4
Black	898	935	522	558	58.1	59.7	318	392	204	166	39.1	29.7
Hispanic origin	701	726	427	499	60.9	68.7	376	419	51	80	11.9	16.0
High school graduates	15,075	15,489	12,821	13,391	85.0	86.5	11,579	12,341	1,242	1,050	9.7	7.8
White	13,270	13,602	11,372	11,865	85.7	87.2	10,443	11,109	929	757	8.2	6.4
Black	1,584	1,664	1,281	1,338	80.9	80.4	980	1,066	301	272	23.5	20.3
Hispanic origin	609	697	485	564	79.6	80.9	419	510	66	54	13.6	9.6
High school, no college	10,797	11,063	9,023	9,383	83.6	84.8	8,077	8,569	946	814	10.5	8.7
College 1 to 3 years	2,859	3,018	2,459	2,652	85.9	87.9	2,268	2,502	189	150	7.7	5.7
College graduates	1,419	1,408	1,341	1,355	94.5	96.2	1,234	1,269	107	86	8.0	6.3

Table 2. Full-time and part-time employment held or sought by youth, 16 to 19 years old, by school enrollment, October 1978

[Numbers in thousands]

Group and type of employment	Men		Women	
	Enrolled	Not enrolled	Enrolled	Not enrolled
Population	5,658	2,514	5,426	2,839
Labor force, total	2,670	2,228	2,396	1,972
Employed[1]	2,057	1,770	2,000	1,607
Percent working full-time	12.8	84.5	8.6	74.6
Percent working part-time	87.2	15.5	91.4	25.4
Unemployed, total	425	315	350	339
Percent looking for full-time work	8.7	91.7	9.4	87.9
Percent looking for part-time work	91.3	8.3	90.6	12.1

[1]Nonagricultural.

Whatever the reasons for the decrease in black labor force participation as measured by the Current Population Survey, the data indicate that most jobs held by teenagers require little training or experience; that is, most are jobs that generally have no direct relation to jobs held later in life.

Dropouts at a disadvantage

Over a million youths who were not in school in October 1978 had left before completing high school. About 23 percent of the white youths not enrolled in school were dropouts, as were 36 percent of the blacks not enrolled and 54 percent of the out-of-school Hispanic youths. Although some of these dropouts will probably earn at least a high school equivalency certificate, the lack of educational credentials places them at

Table 3. School enrollment and labor force status of 1978 high school graduates and labor force status of 1977–78 school dropouts,[1] by sex and race

[Numbers in thousands]

Characteristic	Civilian noninstitutional population	Civilian labor force					Not in labor force
		Number	Percent of population	Employed	Unemployed	Percent of labor force	
Total, 1978 high school graduates	3,161	2,040	64.5	1,759	281	13.8	1,121
Men	1,485	1,010	68.0	897	113	11.2	475
Women	1,676	1,030	61.5	862	168	16.3	646
White	2,747	1,814	66.0	1,628	186	10.3	933
Black	347	197	56.8	118	79	40.1	150
Hispanic origin	133	99	74.4	83	16	16.2	34
Enrolled in college	1,584	682	43.1	593	89	13.0	902
Men	758	343	45.3	304	39	11.4	415
Full time	700	290	41.4	252	38	13.1	410
Part time	58	53	(2)	52	1	(2)	5
White	669	310	46.3	284	26	8.4	359
Black	63	24	(2)	16	8	(2)	39
Hispanic origin	26	18	(2)	16	2	(2)	8
Women	826	339	41.0	289	50	14.7	487
Full time	753	273	36.3	232	41	15.0	480
Part time	73	66	(2)	57	9	(2)	7
White	709	302	42.6	288	34	11.3	407
Black	96	32	32.7	17	15	(2)	66
Hispanic origin	31	18	(2)	14	4	(2)	13
Not enrolled in college	1,577	1,358	86.1	1,166	192	14.1	219
Men	727	667	91.7	593	74	11.1	60
Women	850	691	81.3	573	118	17.1	159
Single	706	600	84.7	500	100	16.7	106
Married and other marital status[3]	142	91	64.1	73	18	19.8	51
White	1,369	1,202	87.8	1,076	126	10.5	167
Black	186	141	75.8	85	56	39.7	45
Hispanic origin	76	63	82.9	53	10	(2)	13
Total 1977–78 school dropouts[4]	822	565	68.7	409	156	27.6	257
Men	474	379	80.0	228	91	24.0	95
Women	348	186	53.4	121	65	34.9	162
Single	230	135	58.7	81	54	40.0	95
Married and other marital status[3]	118	51	43.2	40	11	(2)	67
White	640	460	71.9	333	127	27.6	180
Black	172	102	59.3	69	33	32.4	70
Hispanic origin	80	54	67.5	39	15	(2)	26

[1]16 to 24 years old

[2]Percent not shown where base is less than 75,000

[3]Includes widowed, divorced, and separated women

[4]Persons who dropped out of school between October 1977 and October 1978. In addition, 72,000 persons 14 and 15 years old dropped out of school

a disadvantage in competition with the majority of their peers who hold either a high school or college diploma. Labor force participation is lower for dropouts than for graduates no longer in school, regardless of age. Probably some of the factors that cause students to leave school also keep them out of the work force. The unemployment rate for dropouts in 1978 was more than double that of high school graduates and three times that of college graduates, in part because a disproportionate number of them were teenagers.

Recent graduates

About half of the 3.2 million youths who had graduated from high school in 1978 were in college by October of that year. (See table 3.) There was no statistically significant difference between the proportions of young men and women or of blacks and whites continuing on to college. The college enrollment rate for each of these groups was relatively stable, about 50 percent, for the 1974–78 period. However, because of the higher proportions of blacks and Hispanics who drop out of high school before graduating, the numbers who go on to college become a relatively smaller proportion of their population.

Labor force participation rates for new high school graduates, whether or not enrolled in college, were about the same in October 1978 as a year earlier, when they had reached record levels. Since 1970, the labor force participation rate of new high school graduates attending college full time has increased by 5 percentage points, to 39 percent. The rise in labor force participation by students has been attributed, in part, to inflationary pressures encountered in meeting college-related and other costs. Among newly enrolled students, roughly 20 percent in both 1970 and 1978 came from families with moderate incomes ($7,500 in 1970 and $15,000 in 1978). However, all students, regardless of family income, need cash for a wide range of items, and part-time jobs provide both money and, perhaps, useful work experience. Also, many colleges give credit for, or otherwise encourage, work experience that applies concepts taught in the classroom.

New high school graduates not in college also increased their labor force rate significantly since 1970. The labor force participation rate among female high school graduates rose by more than 10 percentage points, as a growing proportion of young women postponed marriage and childbearing or continued to work after becoming wives.

Family income a factor

A special tabulation of school enrollment and labor force data by family income for persons 16 to 19 years old in October 1977 confirms the hypothesis that the percentage of youth in school tends to rise with family income:[4]

Income	*All*	*Men*	*Women*	*White*	*Black*
Under $10,000	70	67	73	67	77
$10,000 to $14,999	75	72	78	74	84
$15,000 and over	78	79	78	81	84

School enrollment status was the most important determinant of labor force participation for youths at all family income levels. However, whether or not enrolled in school, youths in families with relatively low annual incomes were less likely to be in the labor force than those in higher income families.

As shown in table 4, the labor force participation rate of male teenagers in families with less than $10,000 annual income was more than 10 percentage points lower (both for those in and out of school) than the rate for those in families with incomes of $15,000 or

Table 4. Labor force activity of persons age 16 to 19 years living at home,[1] by school enrollment status, family income level, and sex, October 1977

[Numbers in thousands]

School status and family income	Men						Women					
	Population	Labor force			Unemployed		Population	Labor force			Unemployed	
		Number	Percent of population	Employed	Number	Percent of labor force		Number	Percent of population	Employed	Number	Percent of labor force
Enrolled												
Under $10,000	1,197	425	35.5	316	109	25.6	1,199	367	30.6	271	96	26.2
$10,000 to $14,999	1,025	494	48.2	417	77	15.6	1,013	424	41.9	343	81	19.1
$15,000 to $24,999	1,710	900	52.6	793	107	11.9	1,535	743	48.4	654	89	12.0
$25,000 or more	1,234	570	46.2	496	74	13.0	1,016	453	44.6	396	57	12.6
Not enrolled												
Under $10,000	598	502	83.9	373	129	25.7	444	274	61.7	182	92	33.6
$10,000 to $14,999	399	363	91.0	289	74	20.4	289	245	84.8	201	44	18.0
$15,000 to $24,999	507	470	92.7	418	52	11.1	393	359	91.3	318	41	11.4
$25,000 or more	210	204	97.1	183	21	10.3	164	151	92.1	133	18	11.9

[1] Includes only unmarried persons living at home or away at school. Income level was not reported for about 9 percent of the students and 11 percent of those not in school.

Table 5. Unemployed persons age 16 to 19 years living at home, by school enrollment status, family income,[1] and race, October 1977

(Numbers in thousands)

Family income	All persons			Enrolled in school			Not in school		
	Total	White	Black	Total	White	Black	Total	White	Black
Total unemployed									
Number	1,159	873	274	690	541	140	469	332	134
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under $5,000	15.0	9.6	32.1	10.1	6.7	23.6	22.2	14.5	41.0
$5,000 to $9,999	21.7	17.2	34.7	19.6	14.4	35.7	24.7	21.7	33.6
$10,000 to $14,999	23.7	26.0	16.8	22.9	24.0	20.0	24.9	29.2	13.4
$15,000 to $24,999	25.0	29.2	12.0	28.6	32.3	15.0	19.8	24.1	9.0
$25,000 or more	14.6	18.0	4.4	18.8	22.6	5.7	8.3	10.5	3.0

[1] Includes only persons whose family income was reported.

more. The difference in rates was even greater among young women. The low labor force rates for youths in families with less than $10,000 income partially reflect the low labor force rates for blacks, both in and out of school, who are concentrated in the lowest income group. Over 3 of 5 black teenagers but only 1 of 5 white teenagers were from families with less than $10,000 income.

Unemployment rates among teenagers, regardless of school status, were highest for those in families with less than $10,000 income. Of all unemployed teenagers for whom family income data were available in October 1977, 37 percent were in families with annual incomes below $10,000, and about 15 percent were in families with annual incomes of $25,000 or more. (See table 5.) The remaining unemployed youths were about equally divided between families with incomes of $10,000 to $14,999 and $15,000 to $24,999. A greater proportion of youths not in school than those in school were in families with incomes below $10,000, 47 percent versus 30 percent. Relatively more than twice as many blacks as whites and more of those not in school than in school were in families with less than $10,000 income. □

FOOTNOTES

This report is based primarily on supplementary questions in the October 1978 Current Population Survey, conducted and tabulated for the Bureau of Labor Statistics by the Bureau of the Census. Most data relate to persons 16 to 24 years of age in the civilian noninstitutional population in the calendar week ending Oct. 14, 1978. Data on family income is as of October 1977.

Sampling variability may be relatively large in cases where the numbers are small. Small estimates, or small differences between estimates, should be interpreted with caution.

The most recent report in this series was published in the *Monthly Labor Review* in June 1978 (pp. 44–47) and printed with additional tabular data and explanatory notes as Special Labor Force Report 215.

See Peter B. Doeringer and Michael J. Piore, *Internal Labor Markets and Manpower Analysis* (Lexington, Mass., D.C. Heath, 1971), ch. 8.

Robert E. Hall, "Why is the Unemployment Rate So High at Full Employment?" *Brookings Paper on Economic Activity*, No. 3 (Washington, D.C., The Brookings Institution, 1970).

Family income data used in this report were developed from the CPS control card and are based on the respondent's estimate of total family money income, before deductions, including personal taxes, for the preceding 12 months, coded in broad, fixed income intervals. The money income level of families shown on the control card may be somewhat understated. Use of broad intervals to record money income tends to reduce the rate of nonreporting while increasing the likelihood that the amounts reported will be significantly understated as compared with results from more detailed questions, as are asked in March of each year. In 1977, median family income from the October control card was 21 percent less than the median obtained from the March survey.

Working mothers in the 1970's: a look at the statistics

More mothers entered and reentered the labor force during the 1970's than ever before in U.S. history; the emerging trends were increases in the number of two-earner families with children and families maintained by women

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Two unforeseen developments in the 1970's—the plummeting fertility rate and the increase in the number of working mothers—are bound to affect American family life in the 1980's. Fewer women bore children, and those who did gave birth to one or two, on average, rather than the two-to-three-child norm of the 1960's. The 1970's also saw an upward surge of surprising strength in the labor force participation rate of mothers with children under age 18. Thus, while the number of children in families dropped from 65.8 million in 1970 to 59.7 million in 1978, the number whose mothers worked or looked for work rose from 25.5 million to nearly 30 million.

These trends emerged in a setting marked by many, often turbulent, economic, social, and political changes. Some of the most striking of these changes, shown below, serve to illustrate the climate in which unprecedented numbers of mothers worked at jobs away from their homes.

Some of the more significant economic changes were:

- Two recessions (1969–70, 1973–75).
- Onset of the highest inflation in several decades.
- End of the Nation's longest war.
- An energy crisis becoming more evident by mid-decade.

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Among important changes in social mores were:

- Society's increasing acceptance of working mothers.
- Delay or postponement of having children by married couples in their twenties, fewer children born, smaller family units.
- More single (never married) women choosing to keep and raise their own or adopted children.
- The advent of "househusbands"[1] and divorced fathers with custody of their children.
- Exceedingly high rate of broken marriages, no-fault divorce legislation in some States, payment of "palimony".[2]
- Widespread discussion of formerly taboo subjects, such as living arrangements of unmarried couples.

Changes in laws and legislative initiatives included:

- Equal Employment Opportunity Act of 1972, amending Title VII of the Civil Rights Act of 1964.
- 1972 Amendments to the Equal Pay Act of 1963, to extend occupational coverage.
- Women's Educational Equity Act of 1974, amended in 1978.
- Public Law 95-555, 1978, to ban discrimination based on pregnancy.
- Tax Reform Act of 1976 and Revenue Act of

1978, to establish tax credits for child care.

- Amendments to the Comprehensive Employment and Training Act of 1973, targeting jobs and training for disadvantaged women, single parents, displaced homemakers, and funds for research on flexitime and part-time work.
- Equal Rights Amendment to U.S. Constitution; first proposed in 1923; approved by Congress (House in 1971, Senate in 1972) and ratified by 35 of 38 required States through mid-1979; requires ratification by 3 more States before June 30, 1982.

Against this background, more than a million women per year, on average, joined the labor force; the greatest percentage increase in women's labor force rates occurred for those with children under age 6. The dual-worker family became a more solid part of American life, and the number of women maintaining their own families, very frequently with young children in the home, rose to the highest level ever recorded in this country.

It is appropriate to examine these and other factors in greater detail during the International Year of the Child-1979, for these changes will affect the quality of the lives of millions of children in the 1980's. Family size, employment status and earnings of family members, education of parents and family income are only a few of the characteristics that are reviewed in this article.

I. Numbers of children

By March 1978, 29.7 million children—50 percent of the Nation's 59.7 million children under age 18—had mothers in the labor force. In 1970, comparable figures were 25.5 million and 39 percent (table 1). This astounding growth was accompanied by a dramatic decline in the children's population, due, in part, to disparate trends such as the delay of marriage among today's young women, the steep decline in the birth rate, and the increasing number of broken marriages.

Accelerated work activity among young mothers was more pronounced in the year ended in March 1978 than in most previous years in the 1970's. The labor force participation rate for mothers under age 35 with preschool children increased from 41 to 45 percent. As a result, the number of children under age 6 whose mothers were in the labor force rose by nearly 450,000. This growth accounted for more than half of the total 1977-78 increase in the number of children with working mothers. By March 1978, 4 of 10 children under age 6 had mothers in the labor force, compared with fewer than 3 of 10 in 1970.

At the same time, the number of children living with one parent continued moving upward; in 1978, nearly 11 million were living with either their mother or father, almost 50 percent more than in 1970. This number has been climbing steadily throughout the decade, reflecting the heightened incidence of marital disruption and the growing occurence of parenthood among never-married women. Between 1970 and 1978, the number of children living with their fathers only has increased substantially; yet, most children living with one parent resided with their mothers. Black children were far more likely than white children to be living with one parent (49 and 14 percent).

Whether in one- or two-parent families, older children were more likely than preschoolers to have working mothers. For example, 56 percent of all children between the ages of 14 and 17 in two-parent families had mothers in the labor force, compared with 50 percent of the 6-to-13-year-olds and 39 percent of the children under age 6. These proportions were substantially higher for children who lived with their mothers only; however, the same order prevailed (table 2).

Socioeconomic characteristics

Proportionately more black than white children had mothers in the labor force (64 versus 47 percent). At every age level, a greater proportion of black than white children in two-parent families had working mothers. But, in one-parent families the situation was reversed; a larger share of white than black children were living only with a working mother (table 3). Children of Hispanic origin were less apt than either white or black children to have a mother in the labor force.

Regardless of race, ethnic origin, or family type, children whose mothers were in the labor force were in families with considerably higher incomes, on average, than were children whose mothers were neither working nor looking for work. For all two-parent families, median income in 1977 was about $20,000 when the mother worked, compared with more than $17,000 when she did not.

Generally, white children were more likely than black children to be in families with higher incomes. Among white children in two-parent families, median income was $20,400 when the mother worked and $17,600 when she did not. Comparable median incomes for black families were $16,100 and $11,000.

Table 1. Children under 18 years, by age, type of family, and labor force status of mother, March 1970 and March 1978

[Numbers in thousands]

Item	Children under 18 years		Children 6 to 17 years		Children under 6 years	
	1970	1978	1970	1978	1970	1978
Total children	65,755	59,675	46,149	42,702	19,606	16,973
Mother in labor force	27,544	29,741	19,954	22,867	7,590	6,874
Mother not in labor force	38,550	29,058	25,627	19,094	12,923	9,964
Two parent families	58,399	48,770	40,479	34,293	17,920	14,478
Mother in labor force	21,982	23,662	17,035	17,975	4,947	5,686
Mother not in labor force	36,417	25,109	23,444	16,317	12,973	8,792
One parent families Maintained by women	6,695	10,029	5,102	7,668	1,593	2,360
Mother in labor force	3,562	6,079	2,919	4,891	643	1,188
Mother not in labor force	3,133	3,949	2,183	2,777	950	1,173
Maintained by men	661	876	568	741	93	135

Children are defined as "own" children of 2 parent families or of women or men maintaining families. Included are never married sons, daughters, stepchildren, and adopted children. Excluded are other related children such as grandchildren, nieces, nephews, and cousins and unrelated children.

Includes only divorced, separated, widowed, or never married persons.

NOTE: Because of rounding, sums of individual items may not equal totals.

The economic benefits many working mothers are able to provide their children can represent a major share of their offsprings' support. In March 1978, 23 percent (13.8 million) of all children under age 18 were in families in which their fathers were either absent (10.0 million), unemployed (1.8 million) or out of the labor force (2.0 million). As in previous years, more than half of all black children were in one of these circumstances as were nearly one-fifth of all white children. Over the year ended in March 1978, the total number of children in these circumstances remained constant as the increase in the number with absent fathers was offset by the decline in the number with unemployed fathers. In each of these situations, family income was significantly enhanced by a working mother. Following is the median income of families in 1977, by labor force status of the parents in March 1978:

	Mother in labor force	*Mother not in labor force*
Father absent	$ 8,100	$ 4,400
Father unemployed	13,400	10,600
Father not in the labor force	12,500	7,800

Family size

From 1970 to 1978, the average number of children in families dropped from about 2.3 to a little more than 1.9 for married-couple families and for families maintained by women. Regardless of family type, children whose mothers worked were in smaller families than were those whose mothers were not working. When the mother worked, the number of children averaged 1.91 for married-couple families and 1.79 for families maintained by women. Comparable figures for families with mothers outside the labor force were 2.05 and 2.18.

The reduction in average family size is a direct reflection of the lower birth rates of the 1970's. In 1970, there were 18.4 births per 1,000 persons in the population and 87.9 births per 1,000 women 15 to 44 years of age, the prime childbearing ages.[4] Eight years later, these rates had dropped to 15.3 and 66.4. While still among the lowest ever recorded, they have edged upward since the trough of mid-decade.[5] Further increases in the birth rate are expected to some extent, as women now in their late 20's and early 30's are beginning to have the children they delayed bearing at the outset of the decade. In addition, large numbers of women born during the high point of the post-World War II baby

Table 2. Children under 18 years, by age, type of family, and employment status of parents, March 1978

[Numbers in thousands]

Item	Total children under age 18	Under 6 years	6 to 13 years	14 to 17 years
Total children	59,675	16,973	27,231	15,472
Mother in labor force	29,741	6,874	14,180	8,687
Employed	27,504	6,067	13,187	8,250
Unemployed	2,237	807	993	437
Mother not in labor force	29,058	9,964	12,659	6,435
Two parent families	48,770	14,478	22,021	12,272
Mother in labor force	23,662	5,686	11,113	6,862
Employed	22,175	5,102	10,492	6,581
Unemployed	1,487	584	621	281
Mother not in labor force	25,109	8,792	10,907	5,410
Father employed	43,968	12,990	19,956	11,021
Mother in labor force	21,622	5,138	10,177	6,307
Employed	20,410	4,662	9,664	6,084
Unemployed	1,211	476	513	223
Mother not in labor force	22,346	7,852	9,779	4,715
Father in Armed Forces	1,058	501	436	121
Mother in labor force	421	163	200	57
Employed	339	118	178	43
Unemployed	82	46	23	13
Mother not in labor force	638	338	235	65
Father unemployed	1,764	628	762	375
Mother in labor force	864	262	407	196
Employed	743	219	358	166
Unemployed	121	42	49	30
Mother not in labor force	900	366	355	179
Father not in labor force	1,980	359	866	755
Mother in labor force	755	123	329	303
Employed	683	103	293	288
Unemployed	72	20	36	15
Mother not in labor force	1,225	236	537	452
One parent families				
Maintained by women	10,029	2,360	4,819	2,849
Mother in labor force	6,079	1,188	3,067	1,825
Employed	5,329	965	2,694	1,669
Unemployed	750	222	372	156
Mother not in labor force	3,949	1,173	1,752	1,024
Maintained by men	876	135	391	350

Children are defined as "own" children of 2 parent families or of women or men maintaining families. Included are never married sons, daughters, stepchildren and adopted children. Excluded are other related children such as grandchildren, nieces, nephews, cousins and unrelated children.

Includes only divorced, separated, widowed, or never married persons.

NOTE: Due to rounding, sums of individual items may not equal totals.

boom are presently in or about to enter their prime childbearing years.

Even with the projected increase in the number of births, average family size is expected to remain at about 2.1 children per family, as today's young women plan to have fewer children than did women of other generations. In 1977, 74 percent of all wives age 18 to 24 expected to have no more than 2 children[6] compared to 64 percent in 1971 and 45 percent in 1967.[7] Typically, wives who were in the labor force expected to have smaller families and to have their children later than those who were out of the work force. For example, birth expectations for wives age 25 to 29 averaged 2.0 if they were working and 2.4 if they were not.[8]

Costs of children

Many studies show that few parents in today's industrialized societies anticipate any economic benefits from their children; rather, they value them for the emotional and psychological satisfactions they provide.[9] In contrast, in other, more agrarian, societies and in the rural history of the United States, the value of offspring included a large monetary component. Parents depended on their children to help with the family farm or business and for support when they reached old age. Offspring were so highly valued that some families had up to 20 children. Adam Smith noted this in reference to the inhabitants of North America in the mid-1700's:[10]

> Labour is there so well rewarded that a numerous family of children, instead of being a burthen is a source of opulence and prosperity to the parents. The labour of each child, before it can leave their house, is computed to be worth a hundred pounds clear gain to them.

Today, however, children represent a clear economic cost to parents. These costs include the actual monetary outlays required to supply the child's needs and the opportunity costs of the mother's time devoted to child care. The Commission on Population Growth and the American Future estimated that, in 1977, the total direct cost of raising a child from birth through college ranged from $44,200 for those families whose after-tax income was between $10,500 and $13,500, to $64,200 for those whose disposable income was between $16,500 and $20,000.[11] When the earnings forgone by the mother were included, the estimated costs of raising children skyrocketed.

The Commission contended that by staying out of the labor force until her child was 14 years old, a mother, on average, would forgo an estimated $100,000 in earnings, depending on her educational level. Earnings lost to a woman with an elementary education were calculated to be about $75,000, while earnings lost to one with a post-graduate college education would be $155,000. In any event, the estimates of earnings forgone far outweighed what were considered the direct costs. Moreover, the marginal costs of any additional children represent substantial outlays. Consequently, the combination of forgone career opportunities and extensive costs may be among the prominent reasons young women are planning smaller families.

The future. Although average family size in the late 20th century will be smaller than in the past, greater numbers of children are projected to have working mothers. This growth will be especially pronounced among children under age 6 because of the expected increase in the total number of children and because more of their mothers are projected to be employed.[12] In fact, if current forecasts are accurate, the number of children under age 6 with working mothers will rise a great deal faster than the total number of children. By 1990, the preschool-age population is expected to be about 23.3 million, or roughly 37 percent more than in 1978. Nearly 10.5 million of these children are projected to have mothers in the labor force, an increase of more than 50 percent over 1978.

Table 3. Children under 18 years and median family income, by age of children, type of family, labor force status of mother, and race

Item	Two-parent families		One-parent[1] families maintained by women	
	White	Black	White	Black
	Numbers (in thousands)[2]			
Children under age 18[3]	43,692	4,054	6,223	3,665
Mother in labor force	20,479	2,608	4,001	1,982
Mother not in labor force	23,213	1,446	2,222	1,683
Children under age 6	13,027	1,118	1,311	1,017
Mother in labor force	4,864	657	694	475
Mother not in labor force	8,162	461	617	541
Children age 6 to 13	19,671	1,869	3,025	1,720
Mother in labor force	9,579	1,261	2,006	1,008
Mother not in labor force	10,092	608	1,019	712
Children age 14 to 17	10,995	1,067	1,887	928
Mother in labor force	6,036	691	1,300	498
Mother not in labor force	4,959	376	587	430
	Median family income[4]			
Children under age 18[3]	$18,869	$14,194	$6,981	$5,357
Mother in labor force	20,357	16,102	8,856	6,541
Mother not in labor force	17,620	11,017	4,614	4,029
Children under age 6	16,287	12,592	4,429	3,619
Mother in labor force	17,044	14,193	6,191	4,732
Mother not in labor force	15,798	9,777	3,480	3,237
Children age 6 to 13	19,224	14,605	7,137	5,725
Mother in labor force	20,409	16,327	8,726	6,691
Mother not in labor force	18,140	11,280	4,746	4,309
Children age 14 to 17	22,152	15,599	9,201	6,429
Mother in labor force	23,520	18,003	10,678	8,062
Mother not in labor force	20,038	11,699	5,702	5,189

[1] Includes only divorced, separated, widowed or never married parents.
[2] Data are for March 1978.
[3] Children are defined as "own" children of 2-parent families or of women or men maintaining families. Included are never-married sons, daughters, stepchildren, and adopted children. Excluded are other related children such as grandchildren, nieces, nephews, cousins, and unrelated children.
[4] Data are for 1977.

NOTE: Because of rounding, sums of individual items may not equal totals.

II. Mothers in two-parent families

During the 1970's, increasing numbers of wives with children under age 18 performed the dual role of worker and mother. In March 1978, more than half (12.5 million) of all working wives had children under 18 years. Since 1970, the number of married mothers in the labor force has increased by about 20 percent, as wives with children entered or reentered the labor force and those already working started having children.

The demographic factors discussed earlier—later marriage, postponement of child bearing, smaller family size—were major factors in relation to the increased labor force participation of wives with children. Many mothers now are better able than in the past either to maintain their labor force participation during their childrearing years or to reenter the labor force sooner than in past decades.

Another factor has been the increase in the educational levels of mothers. The higher the educational level achieved (all other things being equal), the more likely a person is to be in the labor force. In March 1978, the labor force participation rate of married mothers with some college was 52 percent, compared with about 43 percent for those who did not finish high school. Since 1970, the proportion of married mothers with some college has increased while the proportion who have not completed high school has declined, contributing to the increase in mothers' participation rate. In addition, intangible factors such as societal acceptance of working mothers and changes in wives' views of their family roles also have contributed to the increasing labor force commitment of married mothers.

Labor force activities

Participation. In March 1978, there were 2.1 million more wives with children under age 18 in the labor force than there had been just 8 years earlier (table 4). This growth in the number of working married mothers—almost all of which was among white women—took place despite the fact that the total population of wives with children declined by nearly a million over the period. The combination of the decline in the number with children and the increase in the number working or looking for work resulted in a steep rise in the labor force participation rate, from about 40 percent in 1970 to 50 percent 8 years later. This increase, however, reflected more the growing likelihood of wives to work rather than the change in population; only about 2 percentage points of the increase in the labor force participation rate can be attributed to the decline in the number of married mothers in the population.

The labor force participation rates increased for both black mothers and white mothers—for black women, from 56 percent in March 1970 to 66 percent in March 1978 and, for white women, from 38 to 48 percent. But, for the black mothers, about 6 percentage points of the increase was due to a decline in their population, rather than to an increase in labor force participation.

Most (72 percent) of the 1970–78 labor force growth of married mothers occurred among those age 25 to 34, as their proportion in the labor force grew from 36 percent to 49 percent. These mothers were about equally distributed between those whose youngest child was under age 6 and those whose youngest was 6 or over.

Attachment. The labor force participation rate of a particular group of individuals shows what proportion of that group is working or looking for work at a specific time. What it does not show is the job attachment of persons in the labor force; some could be preparing to retire, others could be students looking for temporary jobs or working just long enough to get money for some specific purpose, and others could be just "looking around" to see if there is any work that strikes their fancy. One way of determining how strongly attached a group is to market work is to get data on the number of weeks the persons in that group worked during an entire calendar year (work experience).

Data on work experience in 1977 show that married mothers have a strong labor force attachment. In that year, 58 percent of the mothers had worked at some time, up from 51 percent in 1970. Moreover, half the mothers with preschool children worked, compared with 44 percent 7 years before (table 5). As might be

Table 4. Labor force status of mothers in two-parent families, by age of youngest child and race, March 1970 and 1978

Age of youngest child and race	Labor force[1] (in thousands)		Participation rate	
	1970[1]	1978	1970[1]	1978
Total with own children under 18 years[2]	10,302	12,469	39.9	50.2
White	9,028	10,914	38.4	48.8
Black	1,154	1,241	55.7	66.1
Own children 6 to 17 years, total	6,366	7,829	49.3	57.2
White	5,744	6,963	48.1	56.1
Black	551	734	64.5	68.8
Own children under 6 years only	3,936	4,640	30.5	41.6
White	3,284	3,962	28.5	39.7
Black	603	507	49.5	62.5
Own children 3 to 5 years, none younger	1,948	2,082	37.3	47.9
White	1,626	1,767	34.9	45.8
Black	304	233	59.6	67.5
Own children under 3 years	1,988	2,558	25.9	37.6
White	1,658	2,194	24.1	35.8
Black	299	274	42.2	58.8

[1] Data have been revised and may differ from that previously published.

[2] Children are defined as "own" children of 2-parent families. Included are never-married sons, daughters, stepchildren and adopted children. Excluded are other related children such as grandchildren, nieces, nephews, cousins, and unrelated children.

NOTE: Because of rounding, sums of individual items may not equal totals.

expected, given the historical difference in their labor force participation rates, black married mothers remained more likely than their white counterparts to have worked during the year — 70 and 57 percent.

The depth of mothers' commitment to the labor force can be gauged by the proportion who worked all year at full-time jobs. Between 1970 and 1977, the proportion of working mothers who were employed full time, all year increased from 32 percent to nearly 35 percent, as mothers with preschool children became more firmly committed to the labor market. By 1977, 25 percent of the mothers of preschool children who worked during the year were doing so on a full-time, year-round basis, combining a full worklife with household and child-care responsibilities.

Contribution to family income

Even without counting their unpaid labor at home, working mothers make significant contributions to family income. The 1977 median income of two-parent families with both spouses in the labor force in March 1978 was $20,620, compared with $17,840 when just the father was in the labor force (table 6). As an indication of the wife's contribution, however, this $2,800 difference is much too low, because working mothers earned an average of $4,310 in 1977 — $8,380 if they worked year round, full time.

Not surprisingly, median family income is lower when the youngest child is a preschooler ($16,630) than when the youngest is in school ($21,790). To some extent, this is due to the fact that mothers of preschoolers were less likely to work year round, full time than mothers of school-age children. Also, parents of preschool children are likely to be somewhat younger than parents of older children and consequently are less likely to have acquired the seniority or the same number of promotions (and the concomitant extra earnings) that their older counterparts may have.

Table 5. Work experience in 1970 and 1977 of mothers in two-parent families, by age of child

(Numbers in thousands)

Weeks worked	Total with own children under 18 years[1]		6 to 17 years only		Under 6 years	
	1970[2]	1977	1970[2]	1977	1970[2]	1977
Total civilian noninstitutional population	25,829	24,841	12,925	13,694	12,904	11,147
Worked during year	13,242	14,464	7,461	8,707	5,722	5,757
Percent of population	51.3	58.2	57.7	63.6	44.3	51.6
Worked (percent)	100.0	100.0	100.0	100.0	100.0	100.0
Full time,[3] total	62.9	62.0	62.9	61.6	62.8	62.7
50 to 52 weeks	32.0	34.9	39.5	41.3	21.6	25.2
1 to 49 weeks	30.9	27.1	23.4	20.3	41.2	37.5
Part time[4]	37.1	38.0	37.1	38.4	37.2	37.3
Did not work during year	12,587	10,377	5,464	4,987	7,182	5,390

[1] Children are defined as "own" children of 2-parent families included are never married sons, daughters, stepchildren, and adopted children. Excluded are other related children such as grandchildren, nieces, nephews, cousins, and unrelated children.
[2] Data have been revised and may differ from that previously published.
[3] Usually worked 35 hours or more in a majority of weeks worked.
[4] Usually worked 1 - 34 hours in a majority of weeks worked.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 6. Median income of two-parent families in 1970 and 1977 by labor force status of parents in March 1971 and 1978

Item	Husband in labor force			Husband not in labor force		
	Total	Wife in labor force	Wife not in labor force	Total	Wife in labor force	Wife not in labor force
1970 (in 1977 dollars)						
Total with own children[1]	$17,928	$19,551	$16,719	$9,773	$13,265	$7,581
6 to 17 years only	20,166	21,156	19,102	10,909	14,152	8,377
Under 6 years	15,544	16,791	15,130	7,783	10,751	6,762
1977						
Total with own children[1]	$19,191	$20,621	$17,839	$9,966	$13,202	$8,062
6 to 17 years only	21,791	22,822	20,150	10,600	13,766	8,571
Under 6 years	16,628	17,401	16,031	8,113	11,140	6,963

[1] Children are defined as "own" children of 2-parent families. Included are never married sons, daughters, stepchildren, and adopted children. Excluded are other related children such as grandchildren, nieces, nephews, cousins, and unrelated children.

NOTE: Because of rounding, sums of individual items may not equal totals.

Real income. Like other families, the real income (income adjusted for price changes) of two-parent families with children has not risen very much in the years since 1970. When both spouses worked, their real median income increased by only about 4 percent over the period 1970–77, just barely exceeding the rate of inflation. This period has included not only the sharpest price increases in decades, but also two recessions — one of which was the worst since the 1930's. Thus, family income growth was sharply constrained relative to the 1960's when the real income of two-parent families rose by 38 percent.

Wives without children — a comparison

The patterns of labor force participation of married mothers differ in many respects from the patterns of wives with no children under 18. Factors such as the ages of these wives and the effects of child-care responsibilities account for many of the differences.

Wives without children under 18 are, on the whole, older than those with children. About 80 percent of the wives without children were 35 years or over (including more than 50 percent who were over age 55), compared with less than half the married mothers. Thus, overall, 50 percent of married mothers were working or looking for work in March 1978 compared with 45 percent of the wives without children (table 7).

However, when age-specific labor force participation rates are compared, the impact of child-care responsibilities becomes evident; 76 percent of the 16-to-24-year-old wives without children and 81 percent of those 24

to 34 were in the labor force, compared with 40 and 49 percent of the mothers.

The effect of child-care responsibilities is also reflected in differences in unemployment; married mothers are considerably more likely than wives without children to be unemployed. In March 1978, the unemployment rate for married mothers was 6.2 percent, while that for wives without children was just 3.9 percent. Also, mothers of very young children were more likely than mothers of teenagers to be unemployed: the unemployment rate of mothers whose youngest child was under 3 years was 11.4 percent, while the rate for those whose youngest was 14 to 17 years was only 3.4 percent.

Other differences in the labor force participation of these two groups of wives reflect economic necessity as well as age and child-care factors. For instance, among wives with less than a high school diploma, the labor force participation rate was higher for mothers (43 percent) than for those without children (27 percent). This may be partly because wives with relatively little formal schooling are likely to have husbands with similar educational backgrounds and who, consequently, would have lower earnings. Also, where the husband's income level was low (under $10,000), wives with children were far more likely to work than those without children under age 18, reflecting both the financial burden of children and the fact that more than 3 of 4 wives without children whose husband's incomes were below $10,000 were over age 45.

Table 7. Selected characteristics of wives, by presence of own children under 18 years, March 1978

Selected characteristics	With own children[1] under 18 years			With no own children under 18 years		
	In labor force	Participation rate	Not in labor force	In labor force	Participation rate	Not in labor force
Total						
In thousands	12,469	50.2	12,371	10,320	44.7	12,746
In percent	100.0	100.0	100.0	100.0	100.0	100.0
Age of wife						
16 to 24 years	9.4	40.4	13.9	17.3	76.3	4.4
25 to 34 years	39.1	49.4	40.3	17.3	61.2	3.2
35 years and over	51.6	53.2	45.8	65.4	36.4	92.4
Years of school completed						
Less than 12 years	20.4	43.4	26.9	20.7	26.8	45.9
12 years only	49.0	50.8	47.9	47.4	51.4	36.3
13 to 15 years	16.1	52.3	14.8	15.5	53.8	10.8
16 years or more	14.5	58.2	10.5	16.4	65.3	7.0
Husbands' income						
Less than $5,000	7.9	50.0	8.0	14.2	32.2	24.2
$5,000 to 9,999	18.5	53.5	16.2	23.4	40.1	28.3
$10,000 to 14,999	28.1	55.8	22.4	25.3	54.7	17.0
$15,000 to 19,999	23.1	51.3	22.1	19.3	56.7	11.9
$20,000 to 24,999	12.2	46.0	14.3	8.7	48.3	7.6
$25,000 and over	10.2	37.7	16.9	9.1	40.0	11.1

[1] Children are defined as "own" children of 2-parent families included are never-married sons, daughters, stepchildren, and adopted children. Excluded are other related children such as grandchildren, nieces, nephews, cousins, and unrelated children.

NOTE: Sums of individual items may not equal totals due to rounding.

These findings clearly show mothers' labor force attachment is strong and that their contribution to family income is quite significant. But, it is equally evident that child-care responsibilities do restrict their labor force activities. Nonetheless ". . . families in which both wives and husbands work are commonplace. Thus, dual-worker families are now a modal pattern at least for a portion of most families' cycle."[13]

III. Mothers in one-parent families

One of the most dramatic changes in family structure during the 1970's has been the increase in the number of one-parent families. In March 1978, nearly 1 of 5 families with children under age 18 was maintained by a parent who was either divorced, separated, widowed or never married; 8 years earlier, 1 of 9 families was maintained by a single parent. This accelerated growth in the number of one-parent families — a 2½ million increase — was far greater than that registered during the preceding two decades (table 8).[14] These 5.7 million single-parent families are of special concern because 2 of 5 are living below the poverty level, compared with 1 of 16 two-parent families.[15]

For the most part, one-parent families were maintained by mothers; only 540,000 were maintained by fathers, and they rarely faced the economic difficulties encountered in families with a mother only. The wide economic disparity between these two types of families is illustrated by the fact that 42 of 100 families maintained only by a mother had incomes below the poverty level, compared with 15 of 100 of those maintained by the father only. Thus, children in one-parent families maintained by the mother are far more likely to live in poverty, have inadequate housing, receive inadequate health care, obtain insufficient education and training, and experience fewer job opportunities. Often these experiences in their childhood and youth affect them throughout their adult lives.[16]

The unprecedented increase during the 1970's in the number of one-parent families occurred mainly among those maintained by women. The most prominent factor influencing this tremendous increase was the rising incidence of marital breakup.[17] Since 1970, the divorce rate in this country has grown from 3.5 per thousand population to 5.1 per thousand.[18] (From 1950 to 1970, the rate of divorce rose from 2.6 to 3.5 per thousand.) Another, less important factor, has been the rising proportion of births outside of marriage. By 1975, 14 percent of all babies were born to unmarried women, compared with 4 percent in 1950. In part this reflected 'child-

Table 8. Families with own children under 18 years old, selected years, 1950–78

[Numbers in thousands]

Year	All families with own children [1]	Two-parent families [2]	One-parent [3] families			
			Total	As percent of all families	Maintained by men [2]	Maintained by women
1950	19,847	18,316	1,531	7.7	275	1,256
1960	25,602	23,333	2,329	9.1	232	2,097
1970	28,669	25,412	3,257	11.4	333	2,924
1971	28,796	25,096	3,700	12.8	332	3,368
1972	29,461	25,492	3,969	13.5	368	3,601
1973	29,575	25,396	4,180	14.1	385	3,795
1974	29,763	25,289	4,474	15.0	394	4,080
1975	30,060	25,236	4,824	16.0	424	4,400
1976	30,172	25,110	5,062	16.8	446	4,621
1977	30,145	24,875	5,270	17.5	486	4,784
1978	30,369	24,625	5,745	18.9	539	5,206

Children are defined as "own" children of 1 parent families. Included are never married sons, daughters, stepchildren, and adopted children. Excluded are other related children such as grandchildren, nieces, nephews, cousins, and unrelated children.

[1] Includes men in Armed Forces living off post or with their families on post.

[2] Includes divorced, separated, widowed, or never married parents.

NOTE: Sums of individual items may not equal totals due to rounding.

bearing among teenagers, which increased from 12 to 19 percent during the same period.[19]

There is no hard evidence that teenage mothers, whether married or never married, will eventually maintain their own family households. However, a recent study found that early childbearing, whether of a teenage marriage or of a premarital birth is a good predictor of a woman later becoming "the head of her family."[20]

Labor force participation and income

Accompanying the large increases in the numbers of mothers heading their own families during this decade have been large gains in the numbers who are working. In March 1978, the labor force participation rate of mothers maintaining families was 65.2 percent, up from 59.4 percent in March 1970 (table 9). Mothers who maintained their families were far more likely to be in the labor force than mothers in two-parent families (65 and 50 percent) and their unemployment rate (11.1 percent) was much greater than that of married mothers, (6.2 percent). As might be expected, the labor force rates of mothers maintaining families varied by the age of the youngest child. About 54 percent of such mothers with children under 6 years were working or looking for work, compared with 71 percent of those whose children were 6 to 17 years.

Family income. In 1977, median income for one-parent families averaged about $6,900 or 37 percent that of two-parent families, largely because families maintained by mothers had extremely low incomes. While the median income for one-parent families maintained by the father was about 74 percent that of two-parent families, the average income of families maintained by the mother was only 35 percent that of two-parent families.

Several factors contributed to these differences. Families maintained by mothers were less likely than the other families with children to have more than one earner. In 1977, just 19 percent of such families had two or more earners, compared with 28 percent of the one-parent families maintained by fathers and 64 percent of the two-parent families. Furthermore, families maintained by mothers were more likely than other families to have preschool children, and the heavier child-care responsibilities associated with very young children restricted the mothers' labor force activity. Also, a very high proportion of mothers in one-parent families had not completed high school—4 of 10 in 1978—and low educational levels are usually associated with low labor force participation, high unemployment, and low pay.

Even when the mother was in the labor force, one-parent family income was likely to be considerably lower than that of either two-parent families or families maintained by fathers. Average income in 1977 of one-parent families with working mothers ($8,400) was 56 percent that of comparable families with fathers in the labor force ($14,900) and only 41 percent that of two-parent families with working mothers ($20,200).

An exceedingly high proportion of one-parent families maintained by mothers had incomes below the poverty level, not a surprising fact, in view of their lower average income.[21] Following are the percents of families (with children under age 18) with incomes below the poverty level in 1977 (data are not available for Hispanic fathers in one-parent families):

	Total	*White*	*Black*	*Hispanic*
Two-parent families	6.3	5.5	14.1	14.8
One-parent families:				
Father only	14.8	11.3	21.4	-
Mother only	41.8	33.8	57.6	60.3

AFDC mothers. Many of the poor one-parent families maintained by a mother relied on public assistance to help support the daily needs of their members.

Aid to Families with Dependent Children is the largest public assistance program helping needy, dependent children who live with either one or both parents or with relatives. Of the 3.2 million mothers receiving AFDC assistance in 1977, more than 80 percent of them had no husband present in the home.[22] Their participation in the labor force was generally low and unemployment high. Of every 100 AFDC mothers, 41 were full-time homemakers, 7 were "incapacitated for employment," 3 were receiving schooling or training, and 24 were not actively seeking work. Of the remaining 25 who were in the labor force, 11 were unem-

Table 8. Labor force status of one-parent families, by age of own children under 18 years, March 1970 and 1978

[Numbers in thousands]

Labor force status	1970			1978			Median income in 1977 of families with own children under 18 years
	With own children under 18 years	Children 6 to 17 years, only	Children under 6 years	With own children under 18 years	Children 6 to 17 years, only	Children under 6 years	
All one-parent[2] families	3,257	2,075	1,182	5,745	3,782	1,962	$6,923
Maintained by women	2,924	1,813	1,111	5,206	3,360	1,845	6,502
Mother in civilian labor force	1,736	1,215	521	3,392	2,395	997	8,360
Labor force participation rate	59.4	67.0	46.9	65.2	71.3	54.0	
Employed	1,611	1,143	468	3,014	2,188	826	8,839
Unemployed	125	72	53	378	207	171	4,242
Unemployment rate	7.2	5.9	10.2	11.1	8.6	17.2	
Mother not in labor force	1,188	598	590	1,814	965	848	4,050
Maintained by men	333	262	71	539	422	117	$13,900
Father in civilian labor force	304	237	67	455	357	99	14,871
Labor force participation rate	91.3	90.5	(1)	84.4	84.6	84.6	
Employed	297	230	67	422	338	83	15,440
Unemployed	7	7		34	18	15	(1)
Unemployment rate	2.3	3.0		7.5	5.0	15.2	
Father in the Armed Forces	(1)	(1)	(1)	13	5	8	(1)
Father not in the labor force	29	25	4	71	60	10	(1)
WHITE							
All one-parent[2] families	2,266	1,551	715	3,918	2,733	1,185	$7,971
Maintained by women	2,007	1,339	668	3,485	2,380	1,105	7,335
Mother in civilian labor force	1,254	927	327	2,356	1,735	621	8,942
Labor force participation rate	62.5	69.2	48.9	67.6	72.9	56.2	
Unemployment rate	6.1	5.8	7.0	7.8	5.9	13.0	
Mother not in labor force	753	412	341	1,129	645	484	4,362
Maintained by men	259	212	47	433	353	80	14,704
Father in civilian labor force	240	194	46	375	306	69	15,485
Labor force participation rate	92.7	91.5	(1)	86.6	86.7	86.3	
Unemployment rate	2.5	3.1	(1)	6.4	5.5	(1)	
Father not in labor force	19	18	1	58	47	11	5,872
BLACK							
All one-parent[2] families	970	513	458	1,740	994	746	5,414
Maintained by women	896	464	433	1,641	932	709	5,241
Mother in civilian labor force	472	281	191	979	626	354	6,719
Labor force participation rate	52.7	60.6	44.1	59.7	67.2	49.9	
Unemployment rate	9.7	6.0	15.2	18.6	16.1	23.4	
Mother not in labor force	424	183	242	662	306	355	3,567
Maintained by men	74	49	22	99	62	37	9,929
Father in civilian labor force	64	42	(1)	75	46	30	11,816
Labor force participation rate	(1)	(1)		75.6	(1)	(1)	
Unemployment rate		(1)	3	10.7		(1)	
Father not in labor force	10	7	25	24	16	7	4,689
HISPANIC[4]							
All one-parent[2] families				468	259	210	5,271
Maintained by women				432	232	200	5,013
Mother in civilian labor force				166	105	62	7,098
Labor force participation rate				38.4	45.3	31.0	
Unemployment rate				10.2	12.4	(1)	
Mother not in labor force				266	127	138	4,361
Maintained by men				36	27	10	(1)
Father in civilian labor force				33	24	9	(1)
Labor force participation rate				(1)	(1)	(1)	
Unemployment rate				(1)	(1)	(1)	
Father not in labor force				3	3	1	7,626

[1] Children are defined as "own" children of 1-parent families. Included are never-married sons daughters, stepchildren, and adopted children. Excluded are other related children such as grandchildren, nieces, nephews, cousins, and unrelated children

[2] Includes divorced, separated, widowed, or never-married parents

[3] Rate or median not shown where base is less than 75,000

[4] Current Population Survey data not available in 1970

NOTE: Sums of individual items may not equal totals due to rounding

ployed, and only 14 were employed (the majority at full-time jobs). The predominant occupations of the AFDC mothers who reported their employment were service and clerical jobs. Only a small proportion were in professional and managerial jobs, a situation largely attributable to the fact that a high proportion (60 percent) of the AFDC mothers reporting their levels of education in 1977 had not completed high school.

Race and Hispanic origin

An examination of one-parent families would be incomplete if it did not look at some of the differences in

labor force participation and income among white families, black families, and those of Hispanic origin. In March 1978, nearly half of all black families with children, compared with one-fourth of all Hispanic, and one-seventh of all white families were maintained by one parent. Black families represented a disproportionate share of the total one-parent families 30 of 100 one-parent families were black, compared with only 8 of 100 two-parent families. Black and Hispanic one-parent families have lower average incomes than their white counterparts and are far more likely to be living below the poverty level. In addition, the parent in black or Hispanic families was less likely to be in the labor force and more likely to be unemployed than the white parent maintaining a family.

Whether black, white, or Hispanic, one-parent families were predominantly maintained by mothers. White mothers were considerably more likely than their black or Hispanic counterparts to be in the labor force: nearly 68 percent of the white, compared with 60 percent of the black and just 38 percent of the Hispanic mothers maintaining families either worked or looked for work in March 1978 (table 8).

Several factors underlie this difference in labor force participation. First, white mothers are more likely to be divorced (in 1978, 50 percent, compared with 24 and 30 percent for black and Hispanic mothers), and divorced women have higher labor force participation rates than other women. Second, black and Hispanic mothers tend to be younger than the white mothers who maintain families and, also, their children tend to be younger and require more care. Third, black and Hispanic mothers in one-parent families have more children per family than the white mothers. Finally, the Hispanic mothers tend to have considerably fewer years of schooling than whites or blacks; and of course, education is a strong predictor of labor force participation. In March 1978, 3 of 7 Hispanic mothers maintaining families had 8 years or less of school, compared with about 1 of 7 black mothers and white mothers.

Unemployment was lower among white mothers maintaining families, for much the same reasons that their labor force participation was higher. In March 1978, the unemployment rate for white mothers who maintained families was about 7.8 percent, compared with 18.8 percent for black and 10.2 percent for Hispanic mothers.

As might be expected in view of the differences in labor force and unemployment rates, white one-parent families maintained by mothers had higher incomes than either black or Hispanic families. Nevertheless, whether white, black, or Hispanic, the median income of families maintained by mothers was drastically below that of either one-parent families maintained by fathers or two-parent families. And, even when the mothers were in the labor force, the differences were acute.

In 1977, the median income of white families maintained by working mothers ($8,900) was only 58 percent that of one-parent white families with employed fathers and only 46 percent that of two-parent families with employed mothers. Among black families maintained by working mothers, average income ($6,700) was 57 percent that of one-parent families with working fathers and just 39 percent that of two-parent families with working mothers. For Hispanic families, those maintained by working mothers had a median family income of $7,100, or 43 percent that of two-parent families when the mothers worked.

AS THE DECADE ENDS, there are fewer children in the population, yet, more of these children than ever before (about half of all children under 18) have working mothers. These developments create an opportunity for new policy initiatives in such fields as child care support for working parents and education and health services. The International Year of the Child is providing us with a period in which to review the facts and figures that constitute a foundation for the policies of the 1980's. □

FOOTNOTES

[1] See "When Dad becomes a househusband," *Parents' Magazine*, July 1978, p. 48.

[2] See "Man against woman," *Time*, Apr. 30, 1979, p. 25.

[3] Unless otherwise indicated, the data in this report are from information collected by the March supplement to the Current Population Survey conducted and tabulated for the Bureau of Labor Statistics by the Bureau of the Census. Since 1970, several modifications made to the survey have affected comparability of estimates: the incorporation of 1970 census data into the estimating procedures in 1972; changes in the computer editing of questionnaires; the weighting of sample results and the allocation of nonresponses in 1976; and the expansion of the sample in 1978. Estimates based on a sample, such as those shown in the tables, may vary considerably from results obtained by a complete count in cases where the numbers are small. Therefore, differences between small numbers or the percents based on them may not be significant. For more information on the interpretation of such differences, see *Marital and family characteristics of workers, March 1978*, Special Labor Force Report 219 (Bureau of Labor Statistics, 1979).

[4] "Advance Report, Final Natality Statistics, 1977," *Monthly Vital Statistics Report*, PHS 79-1120 (Department of Health, Education, and Welfare, National Center for Health Statistics, 1979), p. 9.

[5] "Births, Marriages, Divorces, and Deaths for 1978," *Monthly Vital Statistics Report*, PHS 79-1120 (Department of Health, Education, and Welfare, National Center for Health Statistics, 1979), p. 1.

[6] "Fertility of American Women: June 1977," *Current Population Reports*, Series P-20, No. 325 (Bureau of the Census, 1978), p. 25.

[7] "Fertility of American Women: June 1974," *Current Population Reports*, Series P-20, No. 277 (Bureau of the Census, 1975), p. 2.

[8] "Fertility of American Women: June 1977," p. 15.

[7] See Thomas J. Espenshade, "The Value and Costs of Children," *Population Bulletin*, Vol. 32, No. 1 (Washington, Population Reference Bureau, Inc., 1977), pp. 19–20 and Donella H. Meadows, Dennis L. Meadows, Jorgen Randers, and William W. Behrens III, *The Limits to Growth* (New York, Universe Books, 1972), p. 116.

[8] Adam Smith, *The Wealth of Nations* (New York, Random House, Inc., 1937), pp. 70–71.

[9] See Ritchie H. Reed and Susan McIntosh in Elliot R. Morse and Ritchie H. Reed, eds., "Costs of Children," *Economic Aspects of Population Change*, Vol. 2 (Washington, Commission on Population Growth and the American Future, 1971) and Espenshade, "Value and costs," pp. 24–27.

[10] Sandra L. Hofferth, "Day Care in the Next Decade 1980–1990," *Journal of Marriage and the Family*, August 1979.

[11] Rhona and Robert Rapoport, *Dual-Career Families Re-examined*, (New York, Harper and Row, 1977), p. 15.

[12] The term "one-parent" refers to a person who is never-married, widowed, divorced, or separated and maintaining a primary or secondary family and residing with one or more own children under 18 years who are related by blood, marriage or adoption. For more information, see Beverly L. Johnson, "Women who head families: A Socioeconomic Analysis," *Monthly Labor Review*, February 1978, reprinted as Special Labor Force Report 213 (Bureau of Labor Statistics, 1979).

[13] Families are classified as being above or below the low income level according to the poverty index adopted by a Federal Interagency Committee in 1969. The poverty thresholds are updated every year to reflect changes in the Consumer Price Index. Thus, the poverty threshold for a nonfarm family of four headed by a woman was nearly $6,162 in 1977, about 6 percent higher than the 1976 cutoff of almost $5,800. For further details, see "Characteristics of the Population below the Poverty Level: 1977," *Current Population Reports, Consumer Income*, Series P-60, No. 119 (Bureau of the Census, 1979), p. 206.

[14] See Sandra Stencel, "Single-Parent Families," *Editorial Research Reports*, Vol. 11, Sept. 10, 1976, pp. 666–69.

[15] For detailed discussion on divorce, see Johnson, "Women who head families." See also Allyson Sherman Grossman, "Divorced and separated women in the labor force—an update," *Monthly Labor Review*, October 1978, pp. 43–45.

[16] See *Monthly Vital Statistics*, Vol. 23, No. 11; Vol. 27, No. 5, and Vol. 27, No. 12 (Rockville, Md., U.S. Public Health Service, 1978).

[17] See Kristin A. Moore, Sandra L. Hofferth, Steven B. Caldwell, and Linda J. Waite, *Teenage Motherhood, Social and Economic Consequences, An Urban Institute Paper on Women and Family Policy* (The Urban Institute, 1979). Also see *Monthly Vital Statistics Report*, Vol. 26, No. 5 (Rockville, Md., U.S. Public Health Service, 1979).

[18] See "Fertility of women" and Moore and others, *Teenage Motherhood*.

[19] *Characteristics of the Population below the Poverty Level: 1977*, Current Population Report, Series P-60, No. 119 (Bureau of the Census, 1979), pp. 83–86.

[20] See Howard D. Oberhu, *Aid to Families with Dependent Children, 1975, Recipient Characteristics Study, Part I, Demographic and Program Statistics*, Publication No. 77-11777 (Social Security Administration, 1979).

The minimum age is raised . . . from 10 to 12

. . . By 1902 it was becoming apparent that public opinion demanded a child-labor law, and the opposition devoted itself not to preventing but to weakening such legislation. The law as finally passed graduated the age limit of employment from 10 years in 1903 to 12 years in 1905.

Night work for children under 12 years of age between 8 p.m. and 6 a.m. was forbidden . . . Children under the legal age could work during the summer months provided they had attended school four months during the current year and could read and write. . . . Penalties were attached to parents for permitting disqualified children to work. Employers were practically exempt by making only those who "knowingly" employed children contrary to the law subject to a fine.

No means of enforcement were provided.

Summary of the Report on Condition of Woman and Child Wage Earners in the United States, Bulletin 175 (U.S. Bureau of Labor Statistics, 1916), pp. 244–45.

Child-care arrangements of working parents

Even when the mothers worked, parents usually reported themselves and public schools as major caretakers of their children; for the mother, such arrangements may have hidden costs in forgone earnings or missed career opportunities

MARY JO BANE, LAURA LEIN, LYDIA O'DONNELL, C. ANN STUEVE, AND BARBARA WELLS

Because of the increase in working mothers, child care has become an important topic for public debate. There are claims and counterclaims about whether government should provide more or fewer day-care facilities for children of working mothers.

The day-care debate assumes that mothers' participation in the labor force necessarily requires substantial out-of-home care for children, that day-care centers and family day-care homes are the major institutions that are replacing parents in caring for children, and that government support for day care would be a major new direction signaling a dramatic change in the ways children are taken care of.

A look at the institutions that care for children under age 14 reveals, however, that these assumptions are not true. Now as in the past, the most important caretakers of children are nuclear families and public schools. They are supplemented by a rich and diverse array of extended family, community, and market arrangements which families use according to their differing needs and preferences. Labor force participation by mothers makes some differences in how families manage child care, but not as much as is sometimes assumed.

Moreover, the responsibility for the cost of caring for children has long been shared between parents and society. Therefore, the policy question is not whether government should begin to interfere in child-rearing, but whether government should extend or otherwise change its participation.

This article is based on data from published national surveys and intensive studies of families. Data sources and limitations are described in the appendix.

Choices of child care

The major caretakers of children under age 14 in the United States are nuclear families and public schools. The time and responsibility for children shift between these two institutions with the age of the children. Within age groups, child-care arrangements reflect family circumstances such as the work commitments of the parents and their notions of appropriate settings for children.

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Nuclear families The major caretakers of young children age 3–13 appear to be nuclear families, despite the current high proportions of mothers in the labor force. Findings from a 1975 study[1] show the proportion of children who spent time in various child-care arrangements. (See table 1.) No more than 13 percent of children from birth to 2 years spent 30 hours a week or more in the care of someone other than a parent. In fact, no more than 28 percent of the children in this age group spent even 10 hours a week in such care—this despite the fact that 35 percent of mothers with children under 3 years worked or looked for work away from home.[2]

In 1974 and 1975, the Census Bureau asked parents, "Who cares for (the child) during the day when (he or she) is not in school?" Eighty percent of 3-to-6-year-olds had parents who reported themselves as main caretakers; even among preschoolers whose mothers worked full time, more than 40 percent were cared for by their parents.[3] (See table 2.)

How do parents do it? Many use school and other arrangements for short periods of time and some arrange their work hours so that one parent is available to take care of the children most of the time. In a 1977 study,[4] 11.6 percent of all dual-earner couples included spouses working different shifts and about one-fifth of them had preschool-age children.

The Working Family Project, a study of lower middle-income dual-earner couples with preschoolers in the Boston area, reported that parents in one-third of the families worked staggered hours. With these and part-time work schedules, relatively small amounts of non-

Table 1. Percent of children cared for by someone other than their parents, by age of children and type of arrangement, 1975

Age and arrangement	Fewer than 10 hours a week	10–29 hours	30 hours or more
Birth to 2 years			
At home by relative	25	3	3
At home by nonrelative	23	3	1
At relative's home	27	4	3
At nonrelative's home	14	3	4
Nursery school	1	1	1
Day care center	1	1	1
3 to 5 years			
At home by relative	23	3	2
At home by nonrelative	26	3	1
At relative's home	29	4	3
At nonrelative's home	15	3	4
Nursery school	7	4	3
Day care center	1	1	3
6 to 13 years			
At home by relative	15	2	2
At home by nonrelative	15	2	1
At relative's home	15	3	2
At nonrelatives home	11	2	1
Nursery school	1	1	1
Day care center	1	1	1

NOTE: Nonadditive across child care modes because some children use two or more arrangements.

SOURCE: National Childcare Consumer Study, 1975.

Table 2. Percent of 3-to-6-year-olds cared for by their parents, by labor force status of the mother, February 1975

Labor status of mother	Percent cared for by parents		
	Total	Mother	Father
Children age 3 to 6	81.2	78.4	2.8
Mothers employed full time	41.4	32.6	8.8
Mothers employed part time	75.0	70.5	4.5
Mothers not working	95.4	95.0	.4

SOURCE: Daytime Care of Children: October 1974 and February 1975, *Current Population Reports*, Series P-20, No. 298 (Bureau of the Census, 1976).

parental care are all that is necessary to complete the families' child-care needs. Case studies of the families provide a flavor of how such arrangements work:[5]

> *Mr. Henry works from 8 a.m. to 4 p.m., except for two evenings a week when he is on call to work through the evening until 8 p.m. Mrs. Henry works a 4 p.m. to 11 p.m. shift. Because of their commuting time, there is an hour each day when they must use a child-care arrangement; also there is an occasional evening to be covered when Mr. Henry works overtime. To cover these hours, the Henry's exchange child care with one of their neighbors.*

Some families are reluctant to consider day care or nursery school as a means of allowing both adults to work the same hours, even though their children may attend child-care programs outside the home:

> *For socializing experiences, the Hunts' youngest son goes to a day-care center one morning each week and their older son attends public kindergarten every morning. Mr. Hunt works a 9-to-5 schedule and Mrs. Hunt, from 3 to 11. They need a babysitter for 2 hours (from 3 to 5) each day. Otherwise their children are in the care of a parent.*

In some families the mothers become paid day-care providers during their own children's preschool years:

> *Mrs. Den did not return to her job after the birth of her daughter. In part because she enjoyed children, and in part to supplement the family income, she became a family day-care provider. However, when their daughter reached age 3, Mr. and Mrs. Den decided that she needed some time away from home and her mother. Thus, the daughter attended nursery school during the mornings, while her mother remained at home, providing child care for others.*

The Working Family Project respondents felt that parental care was important for young children. Nearly all felt that parents best were able to provide reliable, continuous, loving care; that they best were able to protect their children from values and standards which con-

flicted with the parents own.[6] Parental care is cheap in terms of money paid out; for many families, costs in inconvenience, energy, and lack of shared time are outweighed by the benefits.

Schools. Of course, schools have long been the most important nonparental caretakers of children over age 5. In recent years, schools (kindergartens, preschools, and nursery schools) increasingly have become prominent in the care of those age 3 to 5. As shown in the following tabulation (in percent) there was dramatic growth in the percent of 3-to-5-year-old children enrolled in preschool between 1967 and 1976:[7]

	1967	1976	Percent change, 1967–76
Age 3	6.8	20.0	194.1
Age 4	21.3	41.9	96.2
Age 5	65.4	81.4	24.5

For some working parents, schools of all types play an important role in the total day-care package:[8]

Mr. Wyatt is due at work at 7 a.m., his wife at 8 a.m. Thus, Mrs. Wyatt is responsible for preparing Oliver for nursery school and Chris for first grade. Oliver is picked up by Mrs. Gray who cares for him along with her own child until both can be dropped off at nursery school. Chris walks to a friend's house and waits there until school time. At noon, Oliver returns to the Gray's house, where he plays until Chris picks him up at 2:30 p.m. Chris and Oliver then walk to another neighbor's home where they are cared for until 5 p.m., when their mother returns from work. For the Wyatts, this care is relatively expensive since both nursery school and neighborhood babysitters must be paid.

Many parents view nursery schools as an experience of great significance for children. The National Child-care Consumer Study reported that parents whose children were in nursery schools were more satisfied with their child-care arrangements than any other group. When the parents were asked if they would prefer a different arrangement than the one they were using, more expressed a preference for nursery school than for any other arrangement.

Day-care centers. The distribution between day-care centers and nursery schools most often depends on the presence of an educational program and on whether the children stay for a full or part day. As shown earlier, only about 3 percent of the children from birth to 2 years and 5 percent of those age 3 to 5 were cared for in day-care centers. Most parents whose children were in day-care centers were very satisfied. Also, the child care study attitude questions suggest that as with nursery schools, more parents in the study would prefer to use center care than were doing so—especially the parents of preschoolers.[9]

Other care. About 9 of 10 families with children under age 14 surveyed by the child care study reported using some form of nonparental, nonschool care for their children; two-thirds used more than one of the forms of care assessed by the survey.

Most nonparental care was casual (used for less than 10 hours a week). Relatives were used slightly more than nonrelatives for such care; care in the home was somewhat more popular than care outside the home.

Children who were cared for 30 hours or more a week were more likely to be cared for outside their homes. These arrangements, often called family day-care, cared for about 7 percent of both the newborns to age 2 and the 3 to 5 year-olds.

Summary. The data available on child-care arrangements in the United States demonstrate the importance of families and schools as caretakers. They also show that the overwhelming majority of families supplement parental and school care with at least one, and usually more than one, regular nonparental care arrangement. Surprisingly small proportions of children spend 30 hours or more a week in nonparental, nonschool care arrangements.

Nonparental care for children under age 3 is most likely to be home care, provided partly by relatives and partly by nonrelatives. Among 3-to-5-year-olds, the balance has shifted to formal care—nursery school and kindergarten, day-care centers, and family day care. For 6-to-13-year-olds, public school is the major caretaker, supplemented by parents and other arrangements. These patterns vary little by race or economic status of parents.[10] They suggest that age of child and idiosyncratic decisions of families are the most important determining factors. In addition, the weighing of costs and benefits also contributes heavily to child-care decisions.

Weighing costs and benefits

Child care is a costly enterprise, not merely in terms of money. The case studies of families in the previous section illustrate the time, energy, and concern—as well as money and forgone consumer goods—that many families invest in their children. Less well illustrated in these cases are the costs borne by society as a whole. This section examines the cost of child care to families.

Private costs. Some families pay for their child care in the forgone earnings and missed career opportunities of a parent, usually of the mother who stays home to care

for children. Some pay in complicated work schedules or nightwork. Others pay in money, energy, time and consistency of parenting styles. But for all families, the costs are high.

The cost to families in which one parent remains at home to care for children most often is ignored in child-care discussions. Only about 30 percent of mothers with children under age 14 were working full time in 1976.[1] For the remaining 70 percent, the forgone earnings of the mother constituted the major cost of child care for the family. These costs vary among families because women have different potential earnings.

The National Childcare Consumer Study provides some data on the more straightforward costs of child care. Study respondents who used nonparental child care at least 1 hour a week were asked if they paid for it, either in cash, or in exchanged services or favors. (See table 3.) More than 10 percent did not pay, 55 percent paid cash, and 54 percent exchanged services or favors (some paid both cash and exchanged favors). The total national cost of nonparental child care was estimated at over $6 billion dollars.

Many families weigh cash costs against the nonmonetary costs of exchanging child care. For example, one recently employed mother in the Family and Communities Project reported that she used to be involved in "all kinds of trading when the kids were smaller," but now wanted to "spend any free time with my children and not babysitting for someone else's child." This suggests that informal babysitting exchanges work best when the mothers do not work or work short hours. When they work long hours, the mothers find it difficult and onerous to contribute their share to cooperative arrangements; rather than being "in debt," they prefer to pay in cash.

Other costs are even more subtle. Some families pay in privacy when they enroll their children in formal, particularly government-subsidized, programs. For example, a family from the Working Family Project complained that the parent involvement for one day-care center demanded detailed discussions with other parents concerning child-care strategies which they felt should remain a private family matter. (Of course, other parents may value such opportunities for discussion.)

Child-care arrangements can come at the expense of other aspects of family life. The use of outside care can lead to family schedules where children spend relatively little time with their parents, with such time occurring at the end of long, active days, when both children and parents are tired. Some parents counter this by spending most of their leisure time (weekends, holidays, early evenings) with their children, rather than socializing with other adults. Another cost for parents is in the consistency of care and discipline received by their children across settings. This is not just an issue of inside-the-home care versus outside-the-home care. Parents who work staggered hours often spend little time together with their children, and the style of parenting between the husband and wife becomes more divergent. Parents who use outside-the-home care or even in-home babysitters or relatives may feel that consistency remains an issue for them and their child, and a price they most often pay for child-care arrangements.

Table 3. Costs of child care, by arrangement and type of payment, 1975

Arrangement	Percent not paying	Percent paying in		Estimated consumer cost (in millions)	Average cost per hour	Average cost per week
		Cash	Services			
Total	10 6	55 2	54 5	$6,321 6		$14 73
At home by relative	22 7	16 1	61 2	464 7	$ 35	10 52
At home by nonrelative	6 7	80 4	12 9	1679 4	53	7 76
At relative's home	22 4	12 4	65 2	674 1	39	14 24
At nonrelative's home	8 2	43 7	48 1	1790 4	54	16 07
Nursery school	15 8	80 3	3 9	1044 6	66	14 59
Day care center	12 7	77 5	9 7	547 1	57	19 56
Parent cooperative	14 7	17 1	68 2	17 1		
Before and after school care	57 7	28 3	14 0	101 5		
Headstart program	79 8	2 8	17 3			

SOURCE: National Childcare Consumer Study, 1975.

The variations in what parents pay for child care in money, time, energy, consistency, and forgone opportunities suggest that the cost/benefit calculus is extremely complicated. There is no low-cost child care; the question for parents is how much they will pay.

Notions of child development clearly enter the calculations, and many parents make substantial sacrifices to provide the kind of care they consider the most appropriate. Families differ in what they think is best for children. These differences do not follow neat class lines, but instead reflect the different values of individuals in society. Nationally, 22.7 percent agreed and 28.4 percent were neutral in response to the National Childcare Consumer Study statement, "There is too much stress placed on trying to teach children things in most places where children are taken care of."

Parents also differ in the extent to which they want their young children to be involved with a group of peers. For some families, it seems important to give preschoolers, particularly those who either are only children or the only preschool-age children in the family, experience with peers of the same age. For this reason, many parents arrange play groups or enroll their children in some organized program. For other parents, however, the peer group is a societal force feared and put off for as long as possible. These parents feel that as children enter a peer group, parental influence diminishes, and children are exposed to behavior and values that are certainly different from, and perhaps unacceptable to, the family.

Perceptions of parental career lines also affect decisions. In the Working Family Project and the Families and Communities Project surveys, the wives most often were responsible for seeing that the children were being properly supervised they located the care, they worked odd hours or interrupted careers if necessary, and they stayed home with a sick child and answered emergency calls from day-care providers. Because these women supported the care their children received, the financial cost and benefit decisions about child care were usually weighed against the estimated value of their employment.

For mothers working toward a career, it may be reasonable to make a heavy investment in child care in money or energy and emotional strain, or both. For women who are in a more static employment situation, there is less impetus to enter into complex employment and child-care arrangements. Many women enter the labor force because their families need additional earnings. For these women, it makes little sense to pay a large amount for child care.

The well-being of the family seemed to be the main goal of parents in making decisions about child care. The costs were high, but so were the benefits.

Extent of government involvement

Not all of the costs of child care are borne by families; some are paid by government. The most substantial government costs arise from completely subsidized public schooling. Society also bears, however, a share of the cost of caring for children under school age by subsidizing parental and other kinds of care, through spending programs and the tax system. Various levels of government are also heavily involved in regulating, and for older children, providing child care.

The major public subsidy for child care that goes to parents is the Federal tax exemption for dependents, a tax expenditure worth about $200 per child in 1977. The money saved in taxes can, of course, be spent however families wish. Another provision of the tax code, which allows income splitting by married couples, more directly encourages parental care. The provision provides a tax advantage to one earner (or two grossly disparate earners) vis-a-vis two-earner families, thus partly mitigating the financial cost of forgone earnings. Not all families who take advantage of the income-splitting provisions have children, of course. These provisions are a very indirect and loose subsidy for parental care, but because they are so large a tax expenditure they deserve consideration.

Federal, State, and local governments directly spent about 72.9 billion dollars on public elementary and secondary education in 1977. School budgets usually include kindergartens, and, in some districts prekindergarten as well. The Federal Government subsidizes Head Start, for prekindergarten children, some preschool programs for disadvantaged children under Title I, and some preschool education for handicapped children.

The more important Federal programs that provide funds for child care or preschool education are shown in table 4. The largest expenses are for Head Start, Title XX Grants to States for Social Services (a program that provides child-care services for recipients of Aid to Families with Dependent Children under the Social Security Act), and the tax expenditure generated by the Credit for Dependent Care. Overall, about 20 percent of all nonschool child-care cash costs are paid by the Federal Government.[12]

Government involvement in child care is not limited strictly to financial concerns, but safety and health as well. All 50 States require licensing of day-care centers (defined in varying ways, by some minimum number of children). Most States also purport to require licensing of family day-care homes, but it is not clear that these requirements are enforced. State licensing requirements generally cover physical space, health, and safety. All States, except Mississippi, also set minimum ratios of adult staff to children that centers must adhere to. The required child-staff ratios generally vary by age of the children and from State to State. For example, Rhode Island requires one adult for every five 3-year-olds, while Ohio allows a ratio of 1 to 15.[13]

In addition, centers that receive Federal funding are expected to comply with the Federal Interagency Day

Table 4. Federal funds for child care, fiscal year 1977

Program	Estimated number of children served (in thousands)	Estimated cost (in millions)
Title XX Social Services Grants to States—child care for low and moderate income families	799	$809
Head Start program—comprehensive preschool for low income children	349	448
Elementary and Secondary Education Act Title I compensatory preschool and kindergarten for disadvantaged children	367	136
Child Care Food Service Program	580	120
Aid to Families with Dependent Children—welfare benefit increases to subsidize work-related child-care costs	145	84
Aid to Families with Dependent Children/Work Incentive program—child-care services for welfare recipients participating in WIN	85	57
Other programs	466	99
Child Care Tax Credit—20 percent of work related expenses	4,000	500

NOTE: Components do not add to total due to rounding.

SOURCE: Department of Health, Education, and Welfare and Congressional Budget Office estimates.

Care Requirements. These regulations cover staff-child ratios, maximum group size, nutrition (provision of meals), required health exams, social services, counseling on child development, and parent participation. A 1977 study reported that 44 percent of day-care centers receive some Federal funding, and should, therefore, comply with the regulations.[14]

Issues for the future

The extent of government assumption of the costs of child care is the most important issue in discussions concerning child-care policy. The current variety of child-care arrangements and the sharing of costs and responsibilities between the public and private sector have evolved over time. Historically, Americans have paid for the education of 5-to-16-year-olds out of public funds. The 1970's, however, saw substantial increases in government funding and provision of child care. Kindergarten attendance has grown dramatically, implying that more local communities are providing such services. Head Start has grown. The child-care tax credit has been written into law.

The major issues revolve as much around the direction of public involvement in child care as around the extent of public funding. Any changes in the direction of public involvement will affect the balance among public, parental, and nonparental arrangements that have developed in recent years.

One area of change in public involvement may arise in preschool education. Here, there appear to be two major issues: how new programs will be sponsored and financed and whether they will be perceived as voluntary or compulsory. Will they be run like kindergartens, almost entirely by public school systems, or will they resemble Head Start, sponsored by a wide range of governmental, community, and private groups? It is striking that nearly all eligible children attend kindergarten even though it is nowhere compulsory. While a State requirement that 3 and 4 year-olds attend school would certainly be opposed by most Americans as unwarranted intervention in parental rights, a *de facto* requirement, perceived as such by parents, might become quietly established. The effect of such a change, would, of course, be increased public involvement in child care. The balance of responsibility and cost might also be affected by other changes such as in welfare policy and tax credit legislation. □

FOOTNOTES

[1] W. Rodes and J. C. Moore, *National Childcare Consumer Study, 1975*, Vol. 3 (Arlington, Va., Unco, Inc.), Tables II-2 and III-60.

[2] Howard Hayghe, "Marital and family characteristics of workers, March 1977," *Monthly Labor Review*, February 1978, pp. 51-54.

[3] Data are from "Daytime Care of Children: October 1974 and February 1975," *Current Population Reports*, Series P-20, No. 298 (Bureau of the Census, 1976).

[4] Joseph Pleck and Michael Rustad, "Work's Impact on the Family: Study Preliminary Results on Two-Earner Couples, Joint Distribution of Job Schedules," unpublished manuscript, 1979.

[5] These cases are from data collected by the Working Family Project and the Families and Communities Project.

[6] See Laura Lein, "Parental Evaluation of Child Care Alternatives," *The Urban and Social Change Review*, Vol. 12, 1979, pp. 11-16.

[7] "Nursery School and Kindergarten Enrollment of Children and Labor Force Status of Their Mothers: October 1967 to October 1976," *Current Population Reports*, Series P-20, No. 318 (Bureau of the Census, 1978).

[8] Data are from the Working Family Project.

[9] Rodes and Moore, *National Childcare*. See also Shelia B. Kamerman and Alfred J. Kahn, *The Day Care Debate: A Wider View* (New York, Columbia University School of Social Work, 1978).

[10] Rodes and Moore, *National Childcare*.

[11] Beverly L. Johnson and Howard Hayghe, *Marital and Family Characteristics of the Labor Force in March 1976*, Special Labor Force Report 206 (Bureau of Labor Statistics, 1977).

[12] Calculated using NCCS's estimated national consumer costs of child care of $6.32 billion and estimated total nonschool Federal spending, excluding tax credits.

[13] Data on licensing requirements and on center compliance are from Craig Coelen, Frederic Glantz, and Daniel Calore, *Day Care Centers in the U.S.: A National Profile, 1976-77* (Cambridge, Mass., Abt Associates, 1978).

[14] Coelen, and others, *Day Care Centers*.

APPENDIX: Four surveys on child care

In this article "child care" refers to all the arrangements made for the care of children under age 14—in-home and out-of-home, parental and nonparental, formal and informal, public and private. The data are from four surveys:

Current Population Surveys (CPS). The Bureau of the Census, as part of its regular Current Population Survey, collects data each October on the school enrollment of the population 14 years and over. At the same time, information is also collected on a variety of other characteristics of families and persons. In the October 1974 survey, the Census Bureau asked questions about the day care of children age 7 to 13 and in February 1975, about the daytime care of children age 3 to 6. (At that time, the CPS sample included about 47,000 households.) These data were reported in "Daytime Care of Children: October 1974 and Febru-

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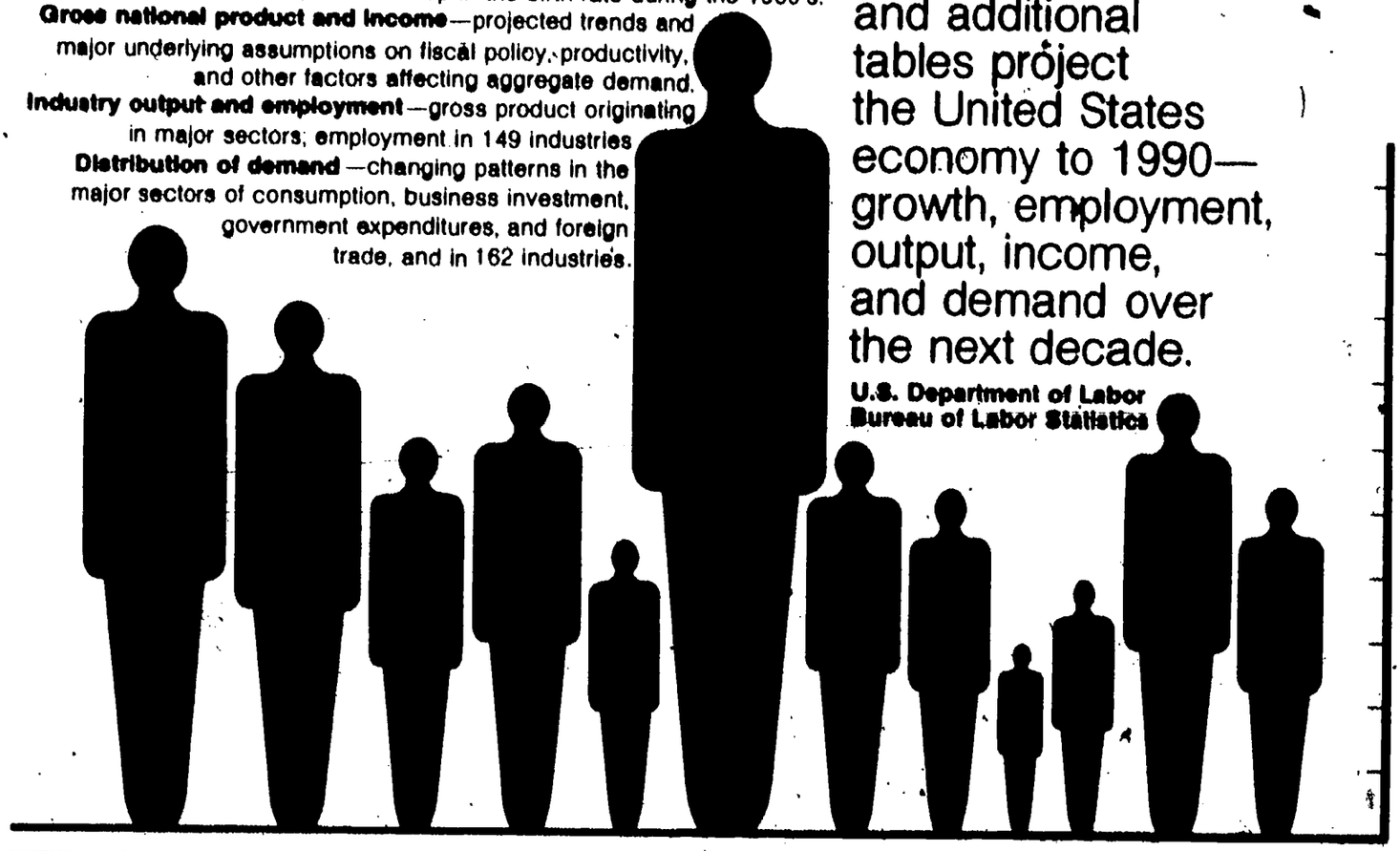

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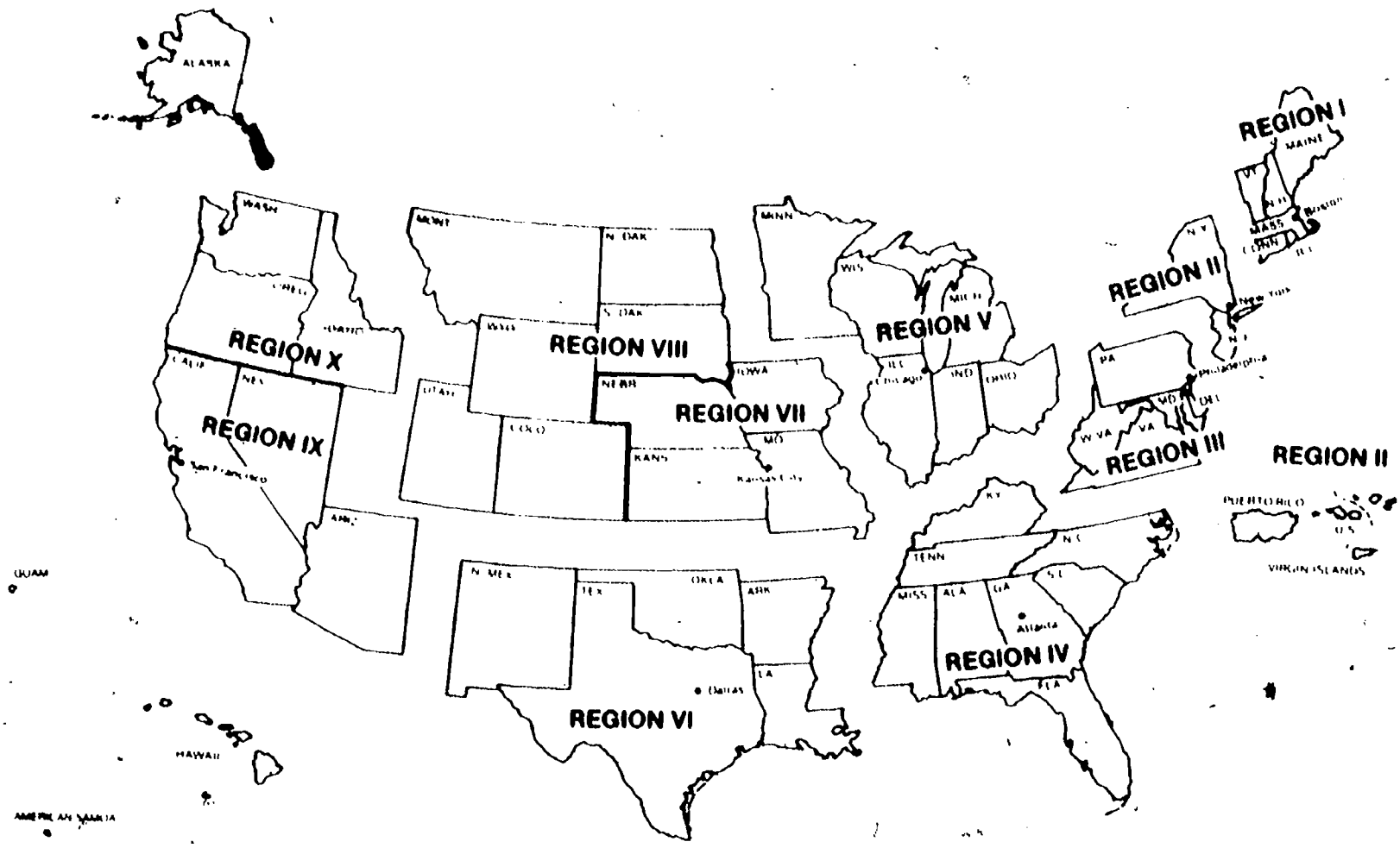

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