

Changes in Cigarette Smoking by Women —An Analysis, 1966 and 1970—

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CIGARETTE SMOKING is a major U.S. public health problem. Smokers face an increased risk of disease and death from lung cancer, heart disease, emphysema, and chronic bronchitis. Now that the health danger is recognized, many smokers have expressed a readiness to quit smoking. Therefore it is of interest to examine the success of adults nationwide in giving up cigarettes. It has been shown that women have more difficulty quitting than men; thus, in this paper, we examine in detail the changes in smoking rates of women.

Changes in Smoking Rates

Smoking by both men and women was measured by two national surveys directed by the Public Health Service (1,2). A national probability sample of 5,000 adults, age 21 and over, in the contiguous United States was interviewed in spring 1966; a comparable sample was interviewed in spring 1970. The principal finding of these surveys was a dramatic decline in cigarette smoking.

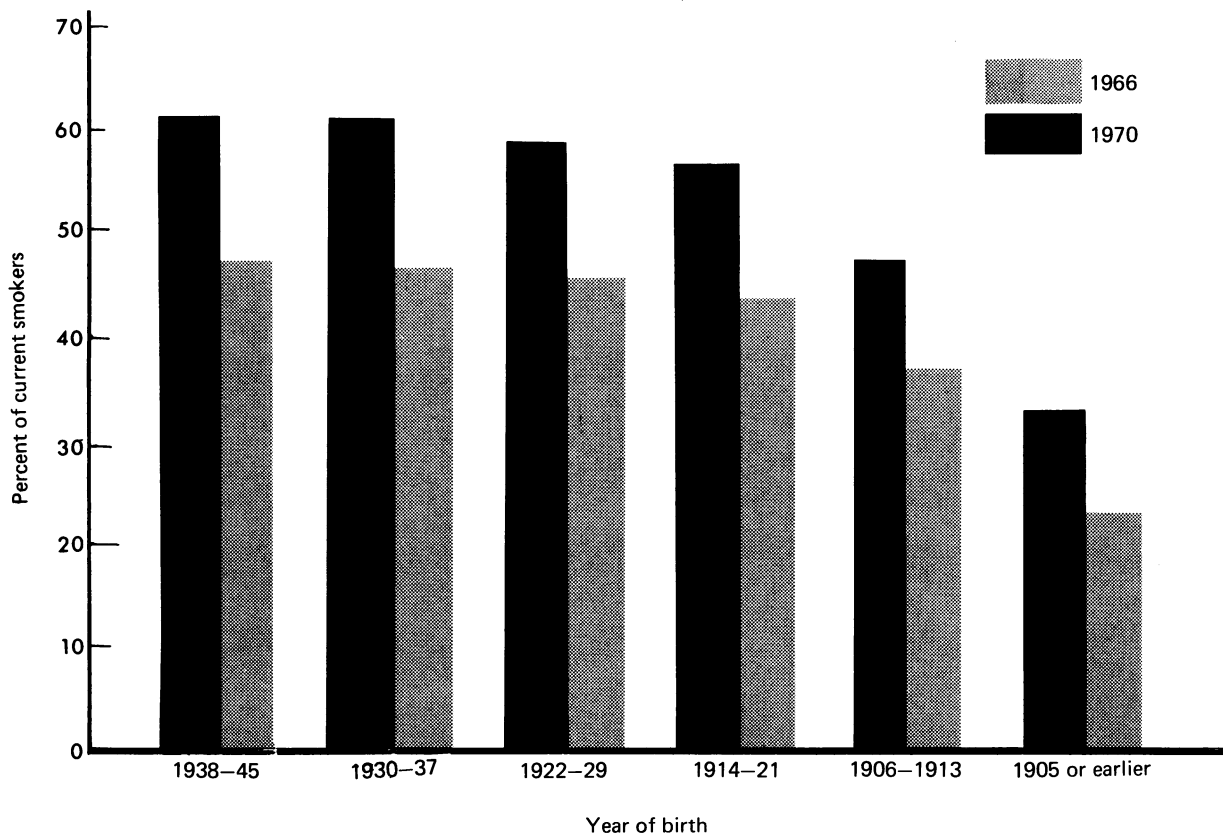
In 1966, half of the men and one-third of the women in the United States were cigarette smokers, a total of some 50 million smokers. Four years later, there were 4½ million fewer smokers—4 million men and ½ million women.

Among U.S. adults, 42.2 percent were cigarette smokers in 1966, but only 36.2 percent were cigarette smokers in 1970. Among men, the smoking rate fell sharply, from 51.9 percent to 42.3 percent; among women, it fell from 33.7 percent to 30.5 percent.

Several influences were operating during 1966 to 1970. Following the 1964 Surgeon General's report (3), and with the support of national

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Figure 1. Smoking behavior of men, by year of birth



voluntary health organizations (such as American Cancer Society), men increasingly accepted the fact that smoking increases their risk of disease and death. From the beginning of 1966, every pack of cigarettes sold in the United States carried the label, "Caution, Cigarette Smoking May Be Hazardous to Your Health."

Cigarettes were advertised on television at a total cost of more than \$100 million each year. On the other hand, the Federal Communication Commission ruled in 1967 that cigarette advertising on TV was controversial, and under the fairness doctrine, stations were required by law to broadcast antismoking public service announcements. These were apparently effective in raising public awareness of the health dangers of cigarettes.

The sharp decline in male smoking corresponds to a quitting rate of about one of every five male smokers from 1966 to 1970. Many women also gave up cigarettes, but the trend was less pronounced.

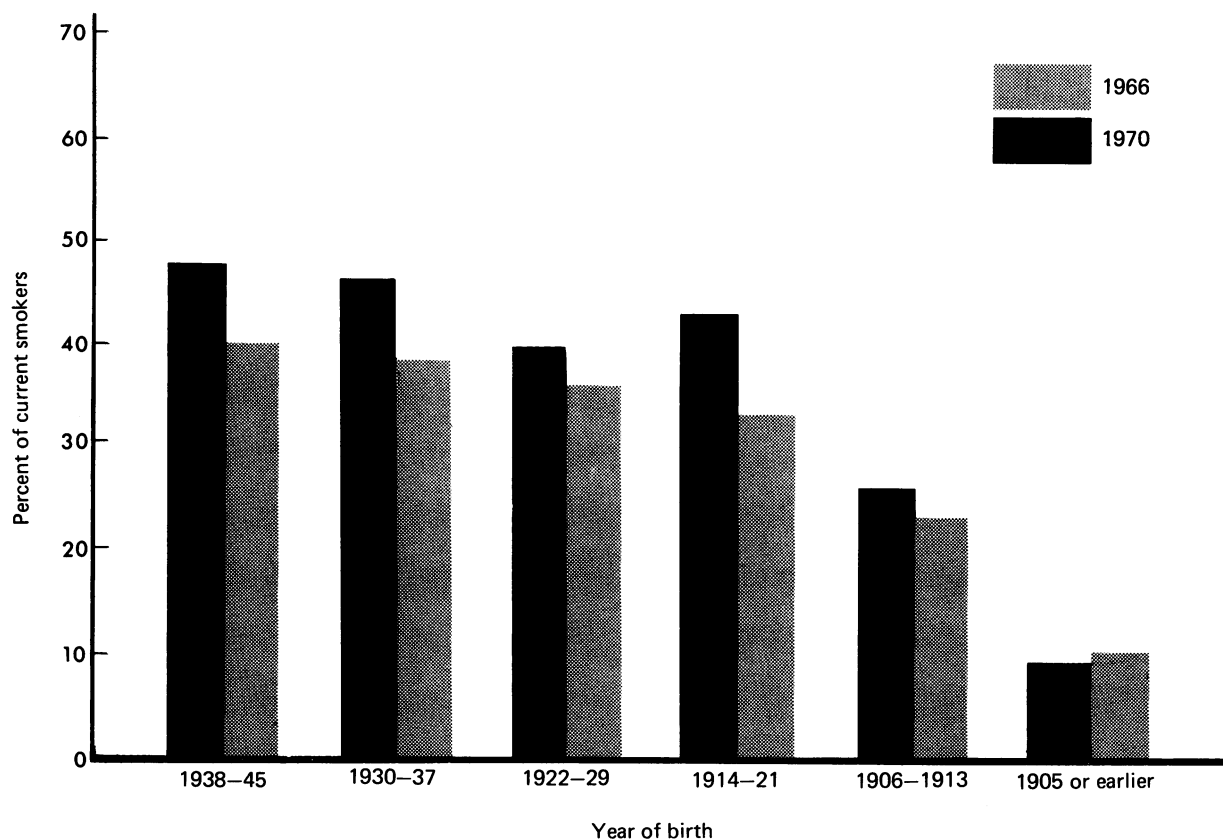
The following table shows that the decrease occurred mainly among the younger age groups.

Age group	Men (percent)		Women (percent)	
	1966	1970	1966	1970
21-34	60.5	48.0	46.3	37.5
35-54	56.3	45.9	41.3	37.4
55 and over	37.3	30.3	13.3	16.7
Total	51.9	42.3	33.7	30.5

The increased smoking rate for women age 55 and over does not mean that women are beginning to smoke at middle age. Rather, the female smokers who were age 51-54 in 1966 had moved into the older age group by 1970.

The real trend for women to give up smoking is stronger than the figures suggest because of a change in the makeup of the adult population. The 1966 population contained proportionately more women born early in the century who never smoked, while the 1970 population included a cohort of young women age 21-24 born into a generation in which one-third of the adult women smoke.

Figure 2. Smoking behavior of women, by year of birth



Figures 1 and 2 compare the smoking rates of men and women in the 1966 and 1970 surveys, according to year of birth; for example, in the first 8-year cohort, those born between 1938 and 1945 were age 21-28 in 1966 and 25-32 in 1970. (The respondents in 1966 and 1970 were not the same people, but were a sample of the same age-cohort group.) The rate of current smoking decreased in every group of men and in virtually every group of women. The exception is the oldest group of women, born in 1905 or earlier, of whom only 10 percent smoke and who constitute almost one-fifth of the adult female population.

Thus, fewer women are smoking. Figure 3 shows further that women who smoke were smoking about the same number of cigarettes per day in 1970 as they did in 1966. On the average, female smokers smoked 17 cigarettes per day, just under one pack a day, in both 1966 and 1970.

The smoking behavior of women shows im-

portant variations according to marital status, occupational status, and educational level. As figure 4 indicates, the smoking rate is highest among divorced or separated women; it is lowest for widows (since widows tend to be in the older age groups, which have lower smoking rates). A comparison of 1966 with 1970 shows that the smoking rate increased among single women and decreased among married women. This contrast may stem from differences in environment.

Many single women are employed in offices, where they may be influenced by the higher smoking rates of men. A woman earning a salary may feel more free to spend it on a form of personal gratification like cigarettes. On the other hand, married women are likely to spend less time with people who smoke; some wives give up smoking during pregnancy to avoid possible damage to the fetus, or mothers may avoid smoking to set a good example for their children.

A comparison by employment status (fig. 5) shows that among women employed outside

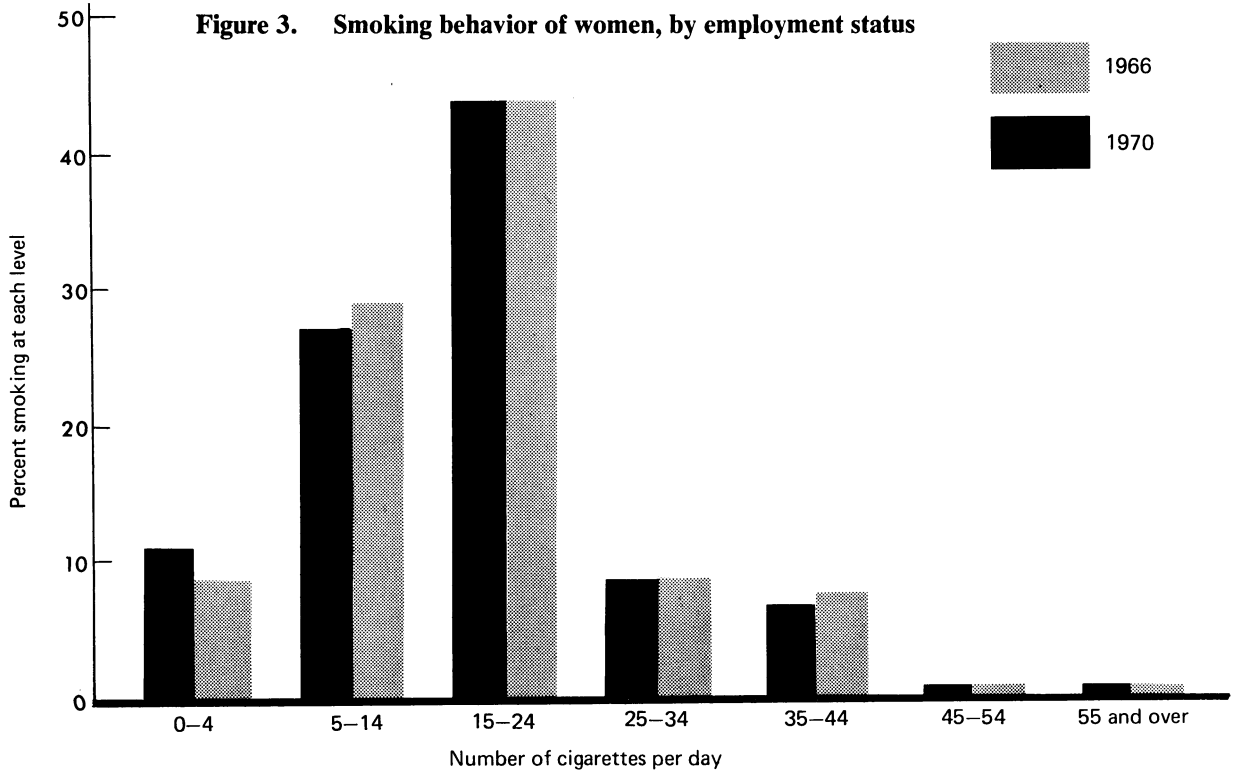
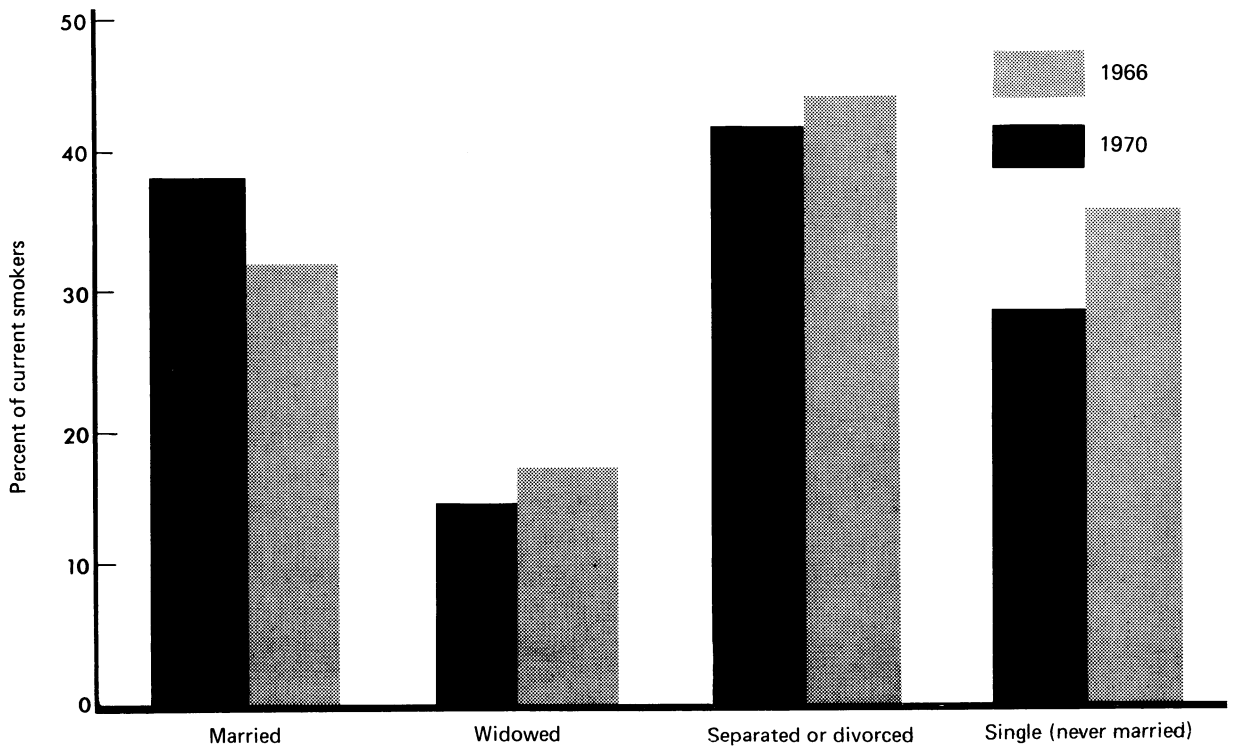


Figure 4. Smoking behavior of women, by marital status



the home, the smoking rate remained unchanged—37 percent for both 1966 and 1970. On the other hand, the smoking rate among women not employed outside the home (primarily housewives) was 32 percent in 1966 and decreased to 27 percent in 1970. In effect, the overall decrease in smoking by women occurred among housewives.

A curious pattern of smoking behavior is revealed in a comparison of educational background (fig. 6). Smoking rates were highest among women who finished their education with some high school or with a high school diploma; however, these are also the groups that showed the greatest drop in smoking rate from 1966 to 1970.

Why did smoking rates fall sharply among men but only slightly among women? The difference may be due to a time lag in the smoking habits of women during the brief history of cigarette smoking in America. The popularity of cigarettes in the United States began after World War I, when American soldiers overseas brought the habit back home. Although the popularity of cigarettes increased during the 1920s and 1930s, few women smoked. The big change occurred during World War II, when many women entered the work force for the first time. They adopted customs that were formerly those of men only, including wearing pants and smoking cigarettes. The image of working women and housewives

Figure 5. Smoking behavior of women, by number of cigarettes per day

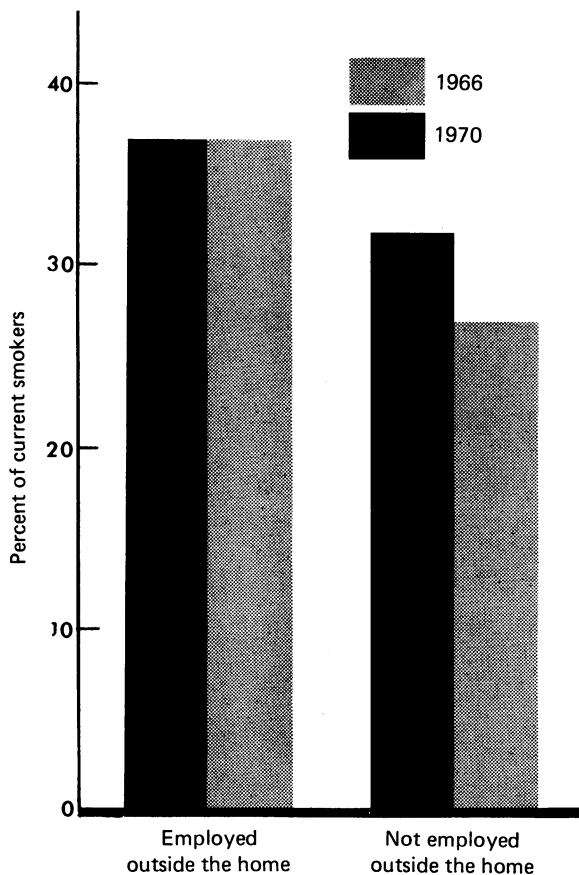
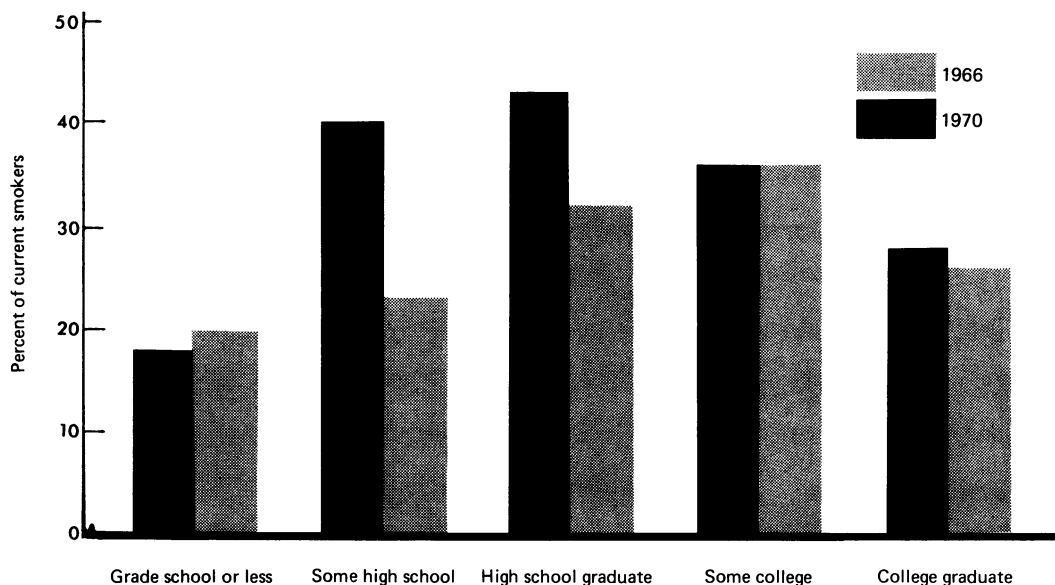


Figure 6. Smoking behavior of women, by education



smoking was reinforced by movies and television. It became fashionable for women to smoke, although they had begun to smoke decades after the men and tended to smoke less than the men.

Public awareness of the health hazards of smoking developed in the 1950s, with the publication of four separate studies reporting a link between cigarette smoking and lung cancer (4-7). Since these were studies of male smokers, the dangers did not seem to apply to the ever-growing population of female smokers. In 1964, the Surgeon General's report concluded that "Cigarette smoking is causally related to lung cancer in men. . . . The data for women, though less extensive, point in the same direction."

By 1970, many women had smoked cigarettes for 20 years or more and were dying prematurely (8). New research found that the health dangers are as real for women as for men. As these dangers became known, cigarette smoking by women began to decline, accompanying the dramatic decline in smoking by men.

Discussion

Research on smoking behavior has shown that people smoke for a variety of reasons, such as to relax, to keep alert, and for oral and tactile stimulation. Some are psychologically addicted—they feel a growing agony if they are not smoking for a period of time. Thus, smokers who decide to quit must deal with their particular needs that cigarettes have satisfied.

Once the pattern of smoking is learned, it is difficult to "unlearn." Generally, persons who start smoking at an early age, and progressively smoke more cigarettes per day, find it harder to quit than those who start later in life.

Women smoke fewer cigarettes per day than men; the mean consumption per day is 17 cigarettes for women and 22 cigarettes for men. Women, however, do not find it easier to quit than men do. One possible explanation is that, on the average, men weigh about one-third more than women and also smoke about one-third more cigarettes than women. Yet the number of cigarettes per day per 100 pounds of body weight is distributed identically for men and women.

Finally, a followup study of survey respondents (unpublished data from the National Clearinghouse for Smoking and Health) provides new insights into a matter of concern for both male and female smokers: Will stopping smoking cause a gain in weight? Not necessarily. People generally

gain weight as they grow older, whether they smoke or not. The average weight of each age group of Americans is greater than that of the just younger age group, up to age 75 for women. But, the process of quitting smoking, which brings better health, appetite, and self-image, may make weight gain more likely.

In this longitudinal study of adult cigarette smokers, 2,100 current smokers in 1966 were reinterviewed in 1970. Those who quit smoking in the 1966-70 period were more likely to gain weight than those who did not quit, although the differences were small for some age groups and large for others.

Thus, male smokers 35 to 54 years old who stopped smoking in the 4-year period were more likely to gain weight than those who continued to smoke. The same is true for female smokers in the age group 35 to 44. Differences for all other age groups were minimal.

Weight gain is not inevitable when a smoker of any age quits. In fact, about one in four who quits smoking loses weight. It may be that when people change one habit to improve their health, they also have more confidence to conquer other habits.

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