

## **WISCONSIN'S CLASS OF 1957 AND THEIR FAMILIES IN THE 1990s**

The popular television series, "Happy Days," celebrated the idealized teen-age years of Milwaukee's high school "Class of '57." The Wisconsin Longitudinal Study (WLS) offers an extended view of the real life-histories of Wisconsin's "Class of '57." The WLS began with a randomly chosen sample of 10,300 men and women who graduated from Wisconsin high schools in 1957. This is about 1 in 3 members of the class, so most classmates are not in the study. However, the sample is very large, and our findings are highly representative of Wisconsin's class of '57.

This is a report about and for members of the class of '57 and their brothers or sisters. It is by no means a complete report, for we expect scientific studies of the WLS data to continue for many years to come. Most of the report is about the class of '57. Brothers and sisters of the graduates are, statistically speaking, very much like the class of '57, so we have not described our findings about them in the same detail. The biggest difference between WLS graduates and their brothers or sisters is their ages. Members of the class of '57 were almost all born in 1939, while their brothers and sisters vary widely in age. However, the great majority of brothers and sisters were born between 1931 and 1947. Toward the end of this report, we have described some important similarities and differences between the members of the class of '57 and their brothers or sisters.

### **NEW FINDINGS FROM THE WLS**

- **Education**
- **Families**
- **Occupations and Benefits**
- **Employment and Retirement**
- **Work Values and Attitudes**
- **Economic Well-Being**
- **Health**
- **Menopause**
- **Depression**
- **Caregiving**
- **Religion**
- **Death**
- **Brothers and Sisters**

Over the years, the Wisconsin Longitudinal Study has been supported by several government agencies and by private foundations, as well as by the University of Wisconsin. In the early 1990s, the WLS has been supported mainly by the National Institute on Aging, which is part of the National Institutes of Health, and also by the National Science Foundation, the MacArthur Foundation, the Spencer Foundation. We are grateful for their financial support, but we owe even more thanks to you -- the members of Wisconsin's class of 1957 and their brothers and sisters -- for sharing your lives with us. We see this report as a way of thanking you for your time and trust.

During the 1950s to 1970s, the WLS collected survey data from graduates, from parents, or from schools. The main surveys were in 1957, 1964, and 1975, and these data provided a rich picture of social background, youthful aspirations, schooling, military service, family formation, early labor market experiences, and social participation. In 1977 the study was expanded with a survey of a carefully selected sample of 2000 brothers or sisters. In the early 1990s, we again surveyed the class of '57. The 1992-94 wave of the WLS was expanded to include a randomly selected brother or sister of most graduates, and the survey content was expanded as well. In our 1992-94 interviews, we updated measurements of marital status, child-rearing, education, labor force participation, jobs and occupations, social participation, and future aspirations and plans among the graduates and their brothers or sisters. In addition, we expanded the content of the study to cover psychological well-being, mental and physical health, wealth, and social and exchange relationships with parents, children, and brothers or sisters. This report is a summary of some of the information that you gave us in 1992 to 1994.

### **Background of the WLS**

The WLS began as a study of students' plans for higher education in Wisconsin. At that time, there was no University of Wisconsin System, and the U.S. was engaged in both a political and scientific contest with the Soviet Union. Because the WLS helped to identify many of the reasons why high school graduates did or did not continue their education, it became the model for national longitudinal surveys of high school students, which began in the 1970s. However, none of those national studies has lasted as long as the WLS or been as successful in following the members of a high school class for many years. Over time, the WLS has become a multi-purpose resource for studies of people's lives. Now, it is becoming a study of the life course and aging. While the WLS focuses on Wisconsin's class of 1957,

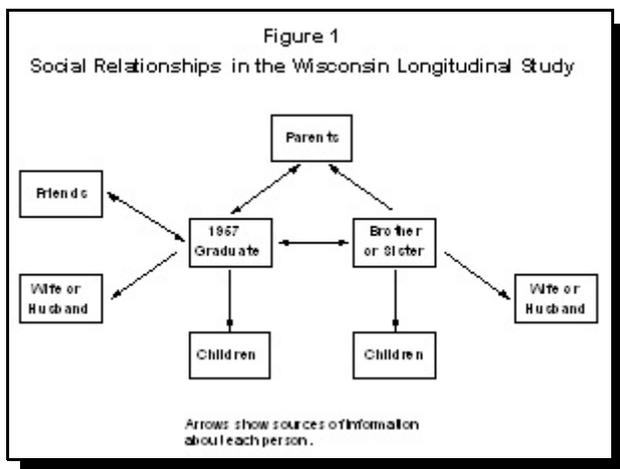
we think of class members in terms of their relationships with aging parents, young adult children, and brothers and sisters, as shown in Figure 1, as well as with their social environments -- high schools, colleges, employers, and communities.

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**The WLS will tell us what may happen as the Baby Boomers enter their 50s.**

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WLS graduates, mainly born in 1939, started their lives about a decade ahead of the baby boom generation that continues to tax social institutions and resources at each stage of life. For this reason, the WLS may give early signals of trends and problems that will become more important as the larger group passes through its fifties. Wisconsin's class of 1957 is broadly representative of white American men and women who completed at least a high school education. Among Americans aged 50 to 54 in the early 1990s, two-thirds



are non-Hispanic white persons who completed at least 12 years of school. The poverty rate in the WLS in late adolescence was 22%, compared to the national rate of 26.5% among children under 18 in 1960. Some groups in American society -- like high school dropouts and racial minorities -- are not well represented in the WLS. About 75% of Wisconsin youth graduated from high schools in the late 1950s. Everyone in the original WLS sample graduated from high school, but about 6% of brothers and sisters did not graduate. The sample is mainly of German, English, Irish, Scandinavian, Polish, or Czech ancestry. Minorities are not well represented; there are very few African American, Hispanic, or Asian persons

in the WLS. About 19% of the WLS sample is of farm origin, and this is about the same as the share of farm children in the U.S. who were born in the late 1930s.

**The 1992-94 Surveys**

In 1992 to 1994, we collected new data from WLS graduates and their brothers and sisters. Members of the class of 1957 were 53 and 54 years old, and 80% of their brothers and sisters were 44 to 62 years old. At those ages, the WLS graduates and their brothers and sisters were anticipating their own retirement and aging as well as managing relationships with one another, their adult children, and their elderly parents: In 1993, 91% of graduates had at least one living sister or brother, and almost as many had at least one living child aged 18 or older. More than half of graduates had a living mother, while only 25% had a living father. Forty-five percent had no living parents, and 15% had two living parents. Thus, we believed that the WLS graduates and their brothers and sisters were ideally suited for a study of aging and of intergenerational relations among adults.

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**WLS graduates are busy managing relationships with one another, aging parents, and -- mostly -- adult children.**

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The vast majority in the WLS have continued to take part in the study. Of 10,300 graduates, 8500 completed a telephone interview in 1993. This was more than 87% of the 9700 graduates who were still alive in the early 1990s. In addition, 6900 graduates completed the mail survey, which mainly contains health information. Finally, about 4800 brothers and sisters of graduates participated in their survey during 1993 and 1994.

**THE CLASS OF 1957 AT MIDLIFE**

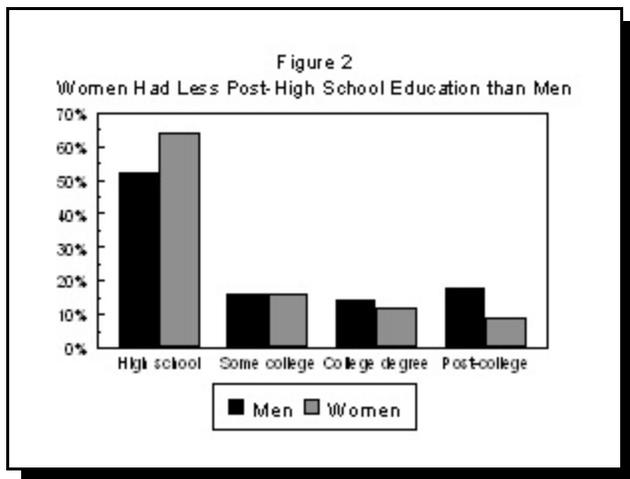
Thirty-five years after high school graduation, 70% of the class of 1957 live in Wisconsin. The next three most common states of residence are Minnesota, Illinois, and California, each with about 4% of the class in residence. No other state has more than 3% of the class, but the sunshine states of Florida, Texas, and Arizona are each home for 1 to 2 percent of graduates. Not everyone in the class has stayed near their roots, however: Members live in every one of the 50 states, Puerto Rico, the District of Columbia, and more than ten foreign countries. Death has claimed a small fraction of the class

of 1957 (5.6%), but most members of the class are alive and well and living in Wisconsin.

**Education**

Many members of the class of '57 completed academic schooling beyond high school, but women (36%) were less likely to continue beyond high school than men (48%). The highest level of schooling completed by 1993 is shown in Figure 2. Sixteen percent of women and men completed some college, while 14% of men and 12% of women earned a bachelors degree and no more. Strikingly, 18% of men, but only 9% of women earned a higher professional or graduate degree. Thus, among men who graduated from college more than half earned yet another degree, while a minority of women college graduates earned a higher degree.

Although formal education had ended by the time of our 1975 survey for more than 86% of the class of '57, those who have continued their education share distinctive traits. People who had more than a high school education in 1975 and women who had either never married or whose marriage ended after 1975 were most likely to go back to school at age 36 or older. Also, men and



women who were married for the first time after 1975 were more likely to have post-1975 education than those who married earlier in life. Among those women who pursued higher education after 1975, 10% previously had only a high school education, while about 25% had some college education, and about 33% had a college degree. The corresponding figures for men were 5%, 12% and 14%. Women were more likely than men, at every level of previous educational attainment, to complete more education after age 36.

**Families**

The lives of members of Wisconsin's class of 1957 provide little support for current observations about the weakness and instability of the American family. Figure 3 shows the marital status in 1993 of the class of '57. Almost 70% of WLS graduates remain in their first marriages, and only 15% have married more than once. Approximately 82% of men and women are currently married and living with their spouse, 11% are separated or divorced, 3% are widowed, and 4% have never married. Women are less likely than men to be currently married because they were more likely than men to be widowed or divorced. Some of the gender differences in marriage



have occurred because women married earlier in life than men and to husbands who were older than themselves. On the other hand, WLS men waited longer to marry, and they married women who were younger than themselves.

**Almost 70% of WLS graduates remain in their first marriages.**

While the class of '57 has enjoyed relative stability in marriage and family, there are some differences based on level of education. Almost 80% of the class has been married only once. College-educated women (88%) and men with post-college education (84%) were most likely to have married only once.

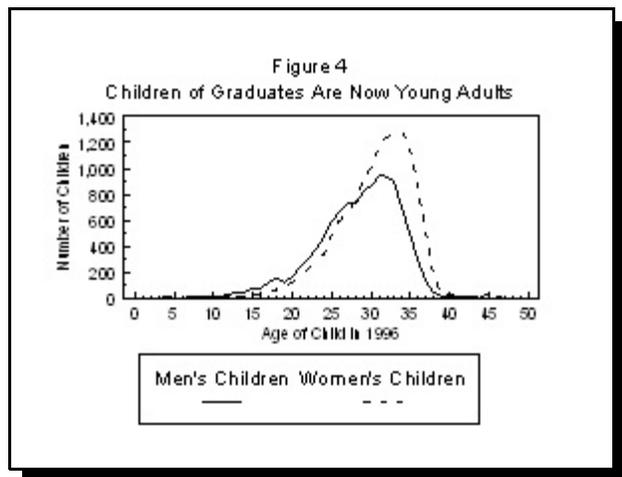
Among the currently married, women are likely to have husbands with more education, and men are likely to have wives with less education. This reflects the lower

levels of educational attainment among women than men in the 1950s and 1960s. In spite of this tendency, approximately half of men and women are married to spouses with the same level of education.

Keeping in mind that the majority of WLS graduates are still in their first marriages, it is not surprising that more than three-fourths of them say that they and their spouses have similar attitudes. In terms of "outlook on life," 55% said they shared very similar views with their spouse, and 41.5% reported somewhat similar views. Women were slightly more likely than men to report sharing very similar views with their spouse. Women with at least a college education, and post-college educated men are more likely to report sharing very similar views with their spouses than other groups of women and men. In terms of "closeness" to spouse, four-fifths reported being very close, and 18% reported being somewhat close. There was no significant difference in closeness between men and women or among education groups.

Not only are the members of the class of 1957 strongly committed to marriage, but also to having children. The majority of graduates have either two or three children, while approximately one-third have four or more children. Only 8% have no children, and 7% have only one child.

While the average number of biological children per graduate is 2.8, this number increases slightly, to 3.0, when we broaden the definition of children to include biological, adopted, foster and stepchildren. Consistent with past research on childbearing, we found that the more education one has, the fewer biological children he or she has.



Women and men had children over a span of many years. As shown in Figure 4, as of 1996, three years after most interviews, the more than 25,000 children of 1957 graduates ranged from infancy to about 40 years old, but most children were between 27 and 37 years old. Also, women in the class of '57 report having had more children than men, and their children tend to be older than the children of their male classmates because women married earlier in life than men.

The most highly educated women and men were more likely to wait until age 36 or older to start having children, or to catch up with their peers' childbearing. Three percent of men and women had their first children after age 36. Also, at each level of education, we found that Catholics were slightly more likely to have children after 1975. Children from small families tended to go on and form small families of their own, while graduates from larger families were likely to have more biological children.

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**Most of the WLS graduates still have at least one living parent.**

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Children and spouses are not the only family members with whom WLS graduates maintain ties. The majority of the class of '57 (64%) have at least one parent still living, and most report that their parents are in good health. Despite the popular notion that over-burdened sons and daughters are increasingly placing their aging parents in nursing homes, fewer than 10% of graduates said that their parent(s) live in a convalescent home. We also found few cases where the parent lives with their children; fewer than 4% of graduates said that their parent lives with them, in the graduate's home. Widowed mothers are slightly more likely to live with a child than are widowed fathers, and both are somewhat more likely to live with a daughter than a son. These rates are low because such living arrangements tend to occur shortly before a parent's death. That is, temporary arrangements will not often be observed at one point in time, even if they eventually occur in most people's lives. Women are more likely to have a parent residing with them and are also likely to report being "very close" with both their mother and father. Men less frequently reported such close-knit relationships.

While men and women vary in the degree of closeness they experience with their living parents, the two sexes are equally likely to report having a similar outlook on life with their parents. The so-called

“generation gap” -- which we might expect to see between the Baby Boomers who came of age in the late 1960s and their parents -- is not to be found in the class of ‘57.

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### **The so-called “generation gap” is not to be found in the Class of ‘57.**

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Eighty percent of both women and men rate their outlook on life as "very similar" or "somewhat similar" to both their mothers and fathers.

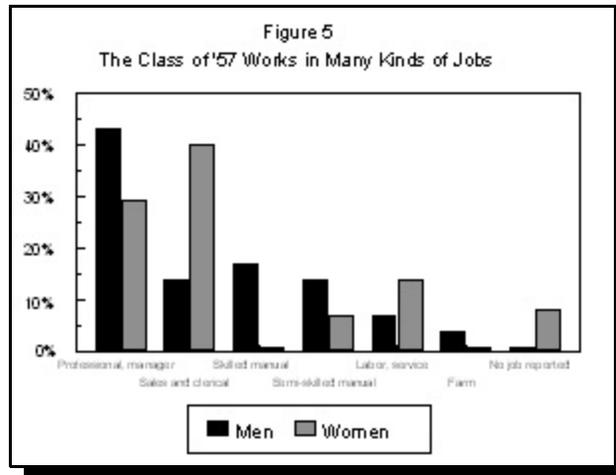
While the graduates and their parents are similar in terms of attitudes, they are quite different in terms of their life successes - at least in the eyes of the graduates. Only a minority said they are doing worse in terms of education, work and finances than their same-sex parent, when that parent was roughly 54 years old. More than 80% say that they are doing better than their parent in terms of education, while 75% believe they are doing better financially and at work. Compared to their parents, when they were age 54, fewer than four percent of sample members say that they are doing worse in terms of education or work, while slightly more (7%) assess their financial situation as worse.

Interestingly, in the eyes of the 1957 graduates, their children had not experienced similar mobility. We asked WLS graduates to compare themselves to a randomly selected child, when they were the same age as that child -- typically between 24 and 34 years old in 1993. While more than half (58%) agreed that their child had done better in terms of education, almost half felt that their children had done better in terms of work (48%) and finances (46%). Therefore, our findings offer limited support for the media's portrayal of today's young people as downwardly mobile. Only 14% said that their child had done worse in education; 18% said that their child had done worse in terms of work; and 27% said that their child had done worse financially. In general, women were more likely than men to say that their child had done better.

### **Occupations and Benefits**

Almost every WLS graduate has held a job at some time between 1975 and 1993. Only 8% of women and 1% of men did not hold a job at some time in that period. Figure 5 shows the percentages of men and women in each of six broad occupation groups. If a person was not currently working, we looked at the last job that they had held since 1975. The jobs people hold

provide strong clues about their social standing and level of living. Most graduates held white collar jobs -- professional, managerial, sales, or clerical. It is striking that, despite the farm origins of nearly 20% of the WLS graduates, only a tiny fraction of men (4%) and even fewer women (1%) worked in farm occupations in 1993. There



are large differences between the occupations held by men and women. Women are much less likely than men to hold professional, managerial, skilled, semi-skilled or farm occupations, while men are much less likely than women to hold sales or clerical, labor, or service occupations.

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### **Women hold jobs that offer fewer benefits.**

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Women tend to hold jobs that offer fewer financial rewards, are less likely to offer fringe benefits, and are located on lower rungs of the organizational hierarchy. Our analyses show that these inequalities are also present at midlife among WLS graduates, and many of them persist even among women working full-time or who hold high-level positions.

Although 80% of the women in the class of ‘57 are currently working, just slightly more than half are covered by a private pension plan through their current or former employer (54%) and a similar proportion are covered by health insurance (55%). In contrast, almost 80% of men are covered by an employer-provided pension and a similar proportion obtain health insurance through their employer. These differences are due in part to variations in men's and women's employment statuses and positions in the labor market, but they also reflect

women's access to pensions and health insurance through their husbands' jobs.

When we examine pension and health insurance coverage only among women who work full-time, the gender gap lessens but does not disappear. Roughly 30% of women work part-time at their current or most recent job compared with only 5% of men. Moreover, men average 47 hours per week on the job, while women work an average of about 37 hours per week at their main job. However, among women who work full-time, 66% have private pensions and 65% have employer-provided health insurance. This still leaves a 15-percentage point difference in coverage for men and women. Some of the remaining difference may be due to the concentration of women in smaller firms, those employing 100 or fewer workers. About 45% of workers in small firms lack pension or health insurance coverage. By comparison, pension and health insurance benefits are available to about 87% of employees in larger firms. Women, on average, are somewhat more likely to be employed in the smaller and less protective firms.

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### **95% of the class of '57 have some kind of health insurance.**

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The proportion of individuals who have health insurance changes substantially when we view this as a family-provided benefit or consider other (non-employer) sources. Indeed, fully 95% of the class of '57 have some kind of health insurance. Although only 51% of women have health insurance through their own employment (compared with 79% of men), almost two-thirds of women obtain health insurance through a spouse's employer. Most individuals who do not have any kind of health benefits report the high cost of health insurance as the primary reason.

Gender differences in pension coverage are more complex. Slightly more than one-half of women (54%) have a private pension plan compared with three-quarters of men, but roughly equal proportions have an Individual Retirement Account (IRA) or Keogh Plan (58% of men and 54% of women). However, only one-third (30%) of women have *both* an employer-provided pension plan and an IRA or Keogh while almost one-half (46%) of men have both types of pension coverage.

There are differences between women and men in the *authority* and *organizational responsibility* of

people's current or most recent jobs. Men hold positions with more authority. For example, approximately 40% of men have the authority to hire and fire other workers and to influence or set the rate of pay of others. In contrast, only 19% of women have the authority to make these types of decisions. However, about 40% of women who work full-time have the authority to hire and fire

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### **Men hold jobs with more authority.**

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others, and a similar proportion influence the rate of pay. Thus, part-time work accounts for much of the difference in job authority between women and men. Another sizeable gap separates the percentage of men and women who supervise the work of others as an *official* part of their job (69% of men, 53% of women). When we examine only women who work full-time, we witness great gains in their authority; roughly 60% officially supervise the work of others, but there is still a gender gap.

When we turn the tables and ask if someone else supervises the work of WLS graduates, such as what they produce or how much, we find a much smaller gender gap. About three quarters of men and women are supervised by someone else on their jobs.

Gender differences in authority also appear in the different kinds of positions that men and women hold with their employers. Roughly 40% of men hold management positions, 14% are in supervisory jobs, and 46% are employed in non-supervisory jobs. A substantially smaller proportion of women hold managerial or supervisory positions (22% and 15%, respectively) and the majority (two-thirds) are in non-supervisory positions.

Moreover, among persons who hold positions in management, men are noticeably more likely to be employed in the upper echelons of the organization. More than half of the male managers say they are in "top" management (58%), while only 45% of women managers are in top-level management. Among men and women who hold top managerial positions, men are likely to wield more influence. Two-thirds of these men make policy decisions, such as setting budgets or determining the organization's products or services while 53% of women have this power. Likewise, although the majority of all managers are still supervised by someone else, this is more common among women: three-quarters of top women managers are supervised by someone else, versus

two-thirds of men.

Men and women workers across all kinds of positions experience varying degrees of autonomy in the work place. Six out of ten men are free to decide what time they come to work and when they can leave, either officially or unofficially. In contrast, less than one-half (44%) of women workers enjoy this amount of freedom, and the differences persist when we examine only full-time employees.

Although men's and women's jobs differ in authority and autonomy, few differences have emerged in terms of job content or working conditions: 90% of men and women are frequently or always required to concentrate intensely in their jobs; three-quarters are almost always required to work under time pressure; one-third work at physically strenuous jobs; and roughly three out of four say that their jobs allow them to learn new skills. In other aspects of work life, gender differences emerge: men are more likely than women to work at jobs where they get dirty (55% versus 48%), and men are much more often exposed to dangerous working conditions (44% versus 25%).

Despite differences in their job experiences, men and women in the class of '57 report equally high job satisfaction. Only a handful of graduates say they are dissatisfied with their jobs.

## **Looking Back, Looking Ahead: Employment Experiences and Future Plans**

Three-quarters of members of the class of '57 were working when we last interviewed them in 1975, and most have had stable work careers since. Almost all (94%) of the men were working at a full- or part-time job in 1975 as were 56% of the women. Employment experience since 1975 has usually involved few changes of employer. Fifty-one percent of men and 40% of women did not change employers from 1975 to 1993.

Since the class of '57 was about 54 years old in 1993, it is not surprising that very few of its members define themselves as retired (7%) or partly retired (5%).

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### **Most graduates plan to continue working for many years.**

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In addition, the spouses of most married persons are also currently employed and not retired (76% of wives and 80% of husbands). Most WLS graduates plan to continue working for several more years, even though many are

eligible for early retirement benefits. About one-third of women and over 40% of men who have a private pension plan could receive retirement income from these plans at age 55 or earlier. Over 80% of these individuals are eligible for retirement benefits by age 62 while less than 10% must wait until after age 62 to receive pension income.

However, despite the possibility of early retirement, 40% of men and 32% of women report that they would like to be working ten years from now.

Of graduates who want to keep working, 25% would like to be working part-time. The majority of those who want to continue working would like to do the same kind of work they are doing now, but roughly one-third of both men and women say they would like to do a different kind of work. More than three-quarters report that the chances are 50-50 or better that they will be able to do what they plan.

Members of the class of '57 are less sure about the standard of living they will enjoy when they eventually retire. The majority see stability ahead: More than 60% of men and women believe that their standard of living will be about the same, and only a tiny fraction say that it will improve. However, about one quarter of men and one third of all women say that their standard of living will decrease somewhat, and about 5% think it will decrease a lot.

## **Work Values and Attitudes**

The class of '57 has adapted to the challenges of balancing the competing demands of work and family. When we asked employed graduates a series of questions about the relationship between families and jobs, only 17% said that family matters reduce the time they can devote to their jobs. However, the work-family juggling act puts different pressures on men and women. More than twice as many women (27%) as men (11%) said that family obligations reduce the time they have to relax and be alone. If family responsibilities consume most of women's time, then it appears that work takes up most of men's time and energy. More than 40% of men say that their jobs reduce the amount of time they can spend with their families. Men's time with their families may also be reduced due to out-of-town business travel; nearly 15% of men reported having to travel away from home for work, but fewer than 4% of women had to travel in connection with their work. However, 32% of women say that their jobs reduce family time.

Support from the family may alleviate some of men's job pressures. Sixty-two percent of men agreed

that they can devote a lot of time to their job because of the support they get on the home front, while only 52% of women expressed the same opinion. Despite the fact that work responsibilities are often difficult to balance with family activities, the majority (70%) of WLS graduates say that they would work to make a living even if they didn't have to.

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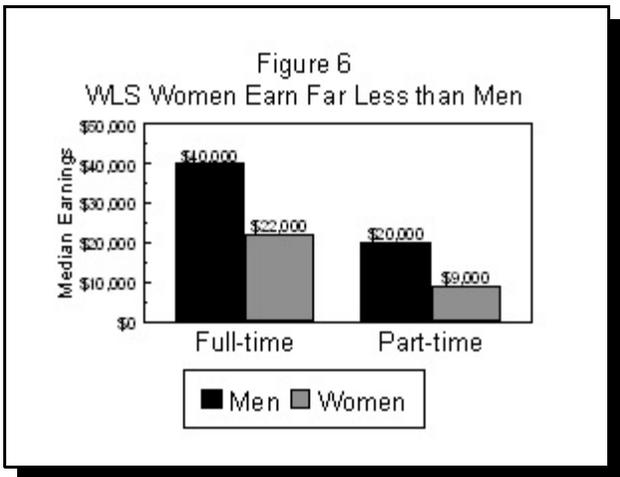
**High pay is not the most important thing in a job.**

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Interestingly, the class of '57 told us that high pay is not the most desirable or important job characteristic. Rather, on-the-job training, being able to do different things on the job, a low risk of job loss, the ability to work without frequent checking by a supervisor, and the availability of health insurance and pension plans are of greater importance than high pay. Being able to avoid getting dirty on the job, a large number of paid vacation days, having a job that others regard highly, and being able to decide what time to come to work and when to leave, are valued equally or less than high pay.

**Economic Well-Being**

The much-documented earnings disparity between men and women appears among Wisconsin graduates, as shown in Figure 6. Even for full-time workers (those who work 35 hours a week or more), the median annual wage and salary earnings for women is just 55% of men's earnings (\$22,000 versus \$40,000). That is, half of men earned more than \$40,000, but only half of women earned



more than \$22,000. Among part-time workers (those who work less than 35 hours) the earnings gap is even more pronounced: Women earn less than one-half as much as men. Median earnings of men and women who work part-time are \$20,000 and \$9,000 per year, respectively.

Despite the earnings gap, men and women do not report very different levels of housing and property ownership. The large majority of WLS graduates (88%) own their own homes, while only 8% are renting. The remainder live with relatives or in alternative settings. Homeowners report a median home value of \$90,000.

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**88% of WLS graduates own their homes.**

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More than one-third of graduates also reported owning some other real estate. A sizeable minority (22%) of sample members also told us that they own a family business or farm, which had a median value of \$115,000. Furthermore, a large minority of graduates have recently come into inheritances, with a median value of \$15,000.

In addition to asking WLS graduates about their income and wealth, we also asked whether or not they donated any money or property worth \$500 or more to charity in the last year. More than half (54%) said that they had made charitable contributions. The median contribution was just over \$1,000.

We were also interested in whether WLS graduates exchanged financial contributions with their parents, and we asked about the incomes of surviving parents. For parents who were still married, the median income was \$20,000. For widowed, divorced, separated or remarried fathers, the median income was \$13,500. For mothers who were divorced, widowed, separated or remarried to someone other than the graduate's father, the median income was \$10,000. Graduates also reported their parents' net worth, including their home if they owned one. For parents who are still married, the median net worth was \$100,000. For widowed, divorced, separated or remarried fathers, and for mothers who were no longer married to the graduate's father, the median net worth was \$50,000.

Fewer than one-third of the class of '57 reported that they had ever received financial assistance from their parents. Thirty-one percent of the gifts had no specific purpose, while 24% were for a down payment on a home. The median gifts received were \$9,000 for men and \$6,000 for women. We suspect that some graduates may have forgotten about help from

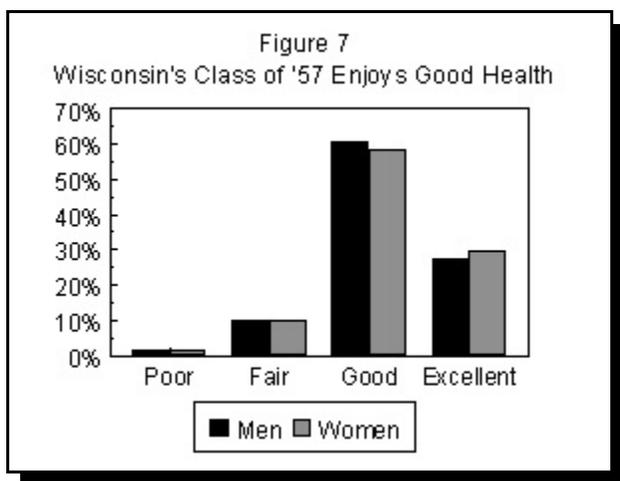
their own parents in completing post-secondary schooling, but they surely have not forgotten educational support offered to their own children.

A much smaller share of graduates said that they had *given* money to their parents since 1975. Of those who gave to their parents, the largest proportion (29%) gave money to their mothers. The most frequently cited reason for giving to parents was for housing expenses (30%), and a slightly smaller proportion gave the money to be spent any way the parent wanted. The average amount *given to* parents is far lower than the average gifts *received from* parents. The median value of gifts to parents was \$5000.

WLS graduates also told us whether they had given or loaned money to any of their children. The most common reason for giving to children was for educational expenses (56%). Giving money to children to help them with a family business or farm was the least common reason; only 4% of the graduates helping in this way.

## Health and Well-Being

The graduates of '57 are a generally healthy group who maintain their health through regular exercise. As shown in Figure 7, nearly 90% of men and women rated their present health as good or excellent, and more than three-quarters report that their health is just as good - if not better - than ten years ago. A large majority of men and women also report that they are aging gracefully, with nearly two-thirds responding that their physical appearance and health was about the same as ten years earlier. However, among those who reported changes, more people said that their health and appearance had become worse, rather than better, in the past decade.



WLS graduates seldom let poor health prevent them from keeping up with their daily activities. Fewer than 10% of sample members spent one or more days in the hospital in the year before the survey, and the majority of both men (70%) and women (60%) spent no days in bed during that year due to illness or injury.

Regular exercise appears to be one of the keys to graduates' self-reported good health. The majority of both men (80%) and women (76%) tell us that they participate in light exercise, such as walking or golfing, at least once a week. Far fewer participate in vigorous exercise regimes, but more men (35%) than women (26%) participate in activities such as running or aerobics on a weekly basis.

Self-reports of height and weight show that the average woman in our sample is 5'4" tall and weighs 153 pounds, while men report an average height of 5'10" and weigh 195 pounds.

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## More women than men now smoke.

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While many more men (60%) than women (47%) report that they have ever smoked, a higher proportion of women (36%) than men (27%) are current cigarette smokers. Despite this, men who currently smoke are much heavier smokers than women. While 91% of women who currently smoke limit their daily cigarette count to one pack or fewer, more than one-quarter of male smokers finish at least 2 packs of cigarettes a day. Both male and female smokers report that they have smoked for an average of 22 years.

Although graduates gave themselves very positive evaluations on global health and well-being measures, an examination of specific health symptoms shows that nearly all graduates (96%) have suffered from at least one physical symptom in the past six months. Clear gender differences in the number of these symptoms emerged, with women typically reporting that they have recently experienced 4 to 5 of the 23 symptoms listed, and men reporting that they have experienced an average of 3 to 4 symptoms.

Women generally report a greater sense of physical and mental fatigue; they are more likely than men to experience lack of energy (50% vs. 38%); trouble sleeping (48% vs. 36%); headaches (58% vs. 39%); and exhaustion (35% vs. 25%). Similarly, women are more likely than men to suffer from a variety of other symptoms -- nausea (9% vs. 3%); constipation (16% vs. 7%); diarrhea (19% vs. 14%); stiff or swollen joints (31% vs.

22%); and excessive sweating (13% vs. 6%).

Despite the common finding that men are more prone to heart problems than women, we did not find this to be true for cardiac symptoms. Rather, men and women were equally likely to report chest pains (6%) and shortness of breath (11%). Men and women were

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### **Men and women were equally likely to report cardiac symptoms.**

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also equally likely to report visual problems, numbness, upset stomach, urination problems, aching muscles, back pain/strain, respiratory problems, and skin problems.

While nearly all graduates report having suffered at least one physical symptom in the last six months, far fewer report that they have a serious illness or condition that had been diagnosed by a medical professional. Still, the majority of women (68%) and men (63%) indicated that they have at least one of a list of 16 illnesses. Of those graduates reporting at least one illness, the most frequently reported conditions include arthritis/rheumatism (36%), high blood pressure (32%), allergies (21%), and serious back trouble (13%).

Although a very small proportion of graduates reported that they suffer from more severe illnesses, several gender differences emerge in this area. Many more women than men report that their doctor has diagnosed anemia (7% vs. less than 1%); cancer (4% vs. 2%); and circulation problems (9% vs. 5%). Even though men and women reported symptoms equally, male graduates were more likely to have been diagnosed with heart disease (12% vs. 6%) or high blood pressure (36% vs. 29%).

## **Menopause**

The WLS is a unique resource for studying the menopausal experience. The reason is that most studies of menopause are based on clinical populations, that is, on women who have sought help for health problems. However, some women progress through menopause with few disagreeable symptoms, and little is known about their experiences. One-quarter (29%) of our sample of women menstruated within the twelve months before the survey, and only 14.0% said that they had not begun or had not completed the menopausal transition. The median age at menopause for all women is about 50 years.

Women graduates were also asked whether and to what extent they experienced a number of symptoms

associated with menopause. Consistent with other studies of menopause, hot flashes was the most commonly reported symptom. Slightly more than four-fifths (82%) of graduates reported ever having hot flashes. Those who had hot flashes were spread fairly evenly in terms of the frequency and severity of the flashes. The next most commonly experienced symptoms were night sweats (72%) and sleep disturbances (70%). Nearly one-third reported aching bones.

The large majority of women in our sample experienced menopause as a medically-mediated event. Nearly half reported ever having used hormone replacement therapy to alleviate menopausal symptoms. Women who took hormones appear to have had good reasons for doing so: They were nearly twice as likely as other women to report having "a lot" of hot flashes. Nearly one-third of women who ever took hormones said they were having a lot of hot flashes, while only 16% of women who never used hormone therapy said so. Likewise, nearly one-fifth of those who ever used hormones reported having a lot of night sweats, while only 12% of those who never used hormones said the same. In fact, each symptom mentioned in the questionnaire was more common among hormone users than among non-hormone users, probably because women with more serious symptoms were likely to seek medical treatment.

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### **Almost one third of WLS women have had hysterectomies.**

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Hysterectomy rates in the United States are very high compared to other nations, and these high rates are reflected in the experience of WLS graduates. One-third of female graduates have undergone hysterectomy (surgical removal of the uterus) and/or oophorectomy (surgical removal of one or more ovaries). The majority (86%) of these women who had surgery had hysterectomies. The median age at surgery for women in the WLS was about 41 years.

Only a minority of women graduates reported that the menopausal experience took a psychological toll. Eighteen percent of graduates reported more than "a little" depression associated with menopause, yet few women reported *only* negative effects of menopause on their family life, their work life or their feelings about themselves as women. More than 70% of the women stated that menopause had no effect, or that they did not expect menopause to have an effect on these areas of their lives. Though the percentages were small, women who

ever used hormones were most likely to report negative and mixed feelings about how menopause impacted these three aspects of their lives. On the other hand, women who experienced surgical menopause most often reported positive feelings about all three domains.

## Depression

Both men and women were asked a series of questions about recent depression as well as any earlier experiences of feeling sad for two weeks or more. A sizeable minority of graduates indicated that they had a time in their lives lasting two weeks or longer when nearly every day they felt sad and lost interest in their daily activities and hobbies. A significantly higher proportion of women (21%) than men (12%) reported ever having experienced these feelings. When depression strikes, it is usually a mid-life phenomenon for WLS graduates. Of those who reported ever being depressed, more than 55% of men and women told us that they had experienced their worst spell of depression after the age of 45. While 46% of men and women who were ever depressed said that they had experienced just one such spell, an additional 37% reported 2 to 5 such experiences.

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### When depression strikes, it is clearly a mid-life phenomenon for WLS graduates.

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An examination of graduates' reports of both depression and psychological well-being has yielded several distinct mental health profiles. One-fifth of graduates are consistently healthy in terms of mental health, having high scores on the psychological well-being scale and no history of depression. A similar proportion report no history of severe depression, but also are not high on well-being. Roughly 10% of graduates are resilient, having had at least one spell of depression, but are currently coping quite well, as evidenced by their average to high scores on well-being scales. Only a handful (2%) of graduates are chronically depressed.

## Caregiving

Midlife has often been viewed as a particularly stressful period in the life-course: a time when 50-year olds must grapple with the competing demands of children leaving the nest, and of aging -- and often ailing -- parents. Indeed, WLS graduates were much more likely to give than to receive care.

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### Two thirds of all caregivers were women, and caregivers are prone to physical illness and depression.

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One third of graduates said that they have ever provided care to someone with a limiting condition -- a physical or mental condition, illness, or disability which limits what they are able to do. Twenty-three percent of graduates have at some time been called on to *give* personal care for a period of one month or more. However, only 13% provided such care within the last 12 months. The recipient of this care was most often the mother of the graduate. Caregiving is a recent role among WLS graduates; more than half (55%) first assumed their role as caregiver since 1991. The remaining starting dates fall evenly over the years since high school graduation. Consistent with traditional gender role socialization, we found that two-thirds of all caregivers were women. Our analysis also suggests that caregivers are more prone to physical illness and depression than their non-caregiving peers.

About 17% of sample members said that they have a physical or mental condition, illness, or disability which limits what they are able to do, or is likely to limit what they do in the future. Only three percent of those describing such a condition have *received* personal care for one month or more in the past twelve months. Of those who have received care, the majority (85%) said that they received help with household chores, while 40% were assisted with more personal activities such as bathing, dressing, eating or going to the bathroom. Two-thirds of those receiving care named their spouse as the primary caregiver.

## Religion and Social Participation

Members of the class of 1957 were aged 36 when interviewed in 1975, and most of them had school-aged children. Accordingly, many were at a point in their lives when interest and participation in community activities was very high. Eighteen years later, in 1993, participation patterns have changed now that most children have grown up.

Graduates are not attending religious services as regularly as they did in 1975. While a full 94% attended church in 1975, only 85% attended in 1993. In both years, women were more likely than men to attend church. Still, a full two-thirds of WLS graduates said that they attended religious services at least once a month,

with 44% attending once a week or more, and another 16% attending a few times each month.

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### Church attendance has fallen since 1975.

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In 1993, as in 1975, the majority of graduates were Protestant (49%), roughly 40% were Catholics, and 1% were Jewish. Slightly more than 7% reported that they had no religious preference, while the same proportion reported that they belonged to another religious body. More than half of all Protestants were Lutherans, who accounted for more than one-quarter of all graduates. A large majority of graduates (86%) have the same religious preference as their wives or husbands.

Just as the 1957 graduates are regular churchgoers, they also remain active in a variety of community, professional and charitable organizations. Roughly one-third of graduates said that they participated in business or civic groups, professional groups, charities, or hobby groups. Sports teams were also quite popular; 27% reported at least a little participation in athletic groups.

### Death

During our efforts to find graduates, both in 1975 and in the early 1990s, we recorded deaths as reported by a variety of informants, usually a parent, brother, sister, or child. While 7% of men and 4% of women in the class of 1957 are now deceased, these figures vary by social standing. One way to measure social standing is by the level of one's job or one's father's job. For instance, while fewer than 3% of men of farm origin are now deceased, more than 10% of men have died since 1957 if their father's job ranked among the lowest 25% in social standing. There is a similar differential for women. Among the children of parents with non-farm jobs, the rate of deaths declined from 10.2% of men to 6.0% of men across occupational levels, and the rate of deaths of women declined from 4.9% to 2.9%. Note that the children of farmers had greater chances of surviving even than those whose fathers held very high-status jobs.

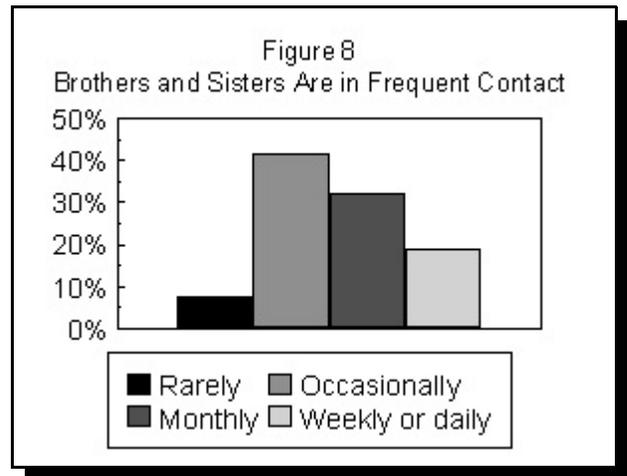
There are also differences in graduates' mortality by their own levels of schooling. Among men with 12 years of schooling, 8.0% had died by 1993, compared

to 4.3% among men with a college degree. Among women with 12 years of schooling, 4.3% had died by 1993, compared to 3.2% among women with a college degree.

### WHAT ABOUT BROTHERS AND SISTERS?

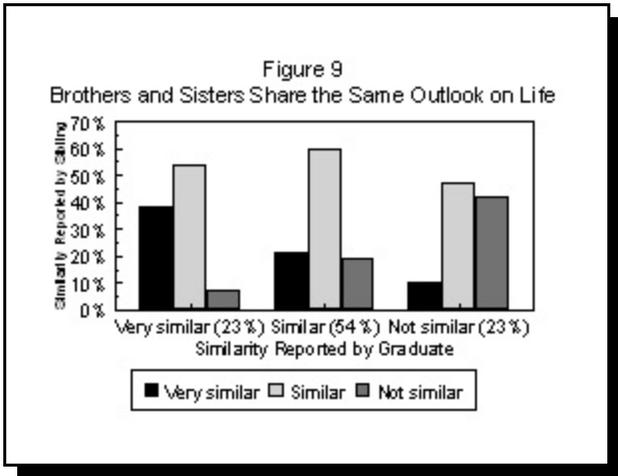
During the 1975 WLS interviews, we asked a few questions about each brother or sister of the graduates. Then, we chose one brother or sister at random and learned more about that person and his or her relationship with the 1957 graduate. We interviewed about 2000 brothers or sisters in 1977, and we interviewed about 4500 brothers or sisters in 1993 and 1994. Thus, we are now learning a great deal about relationships among brothers and sisters in Wisconsin families.

Most brothers or sisters are frequently in touch with one another. Figure 8 shows that 19% have weekly or daily contact, 32% are in touch several times a month,



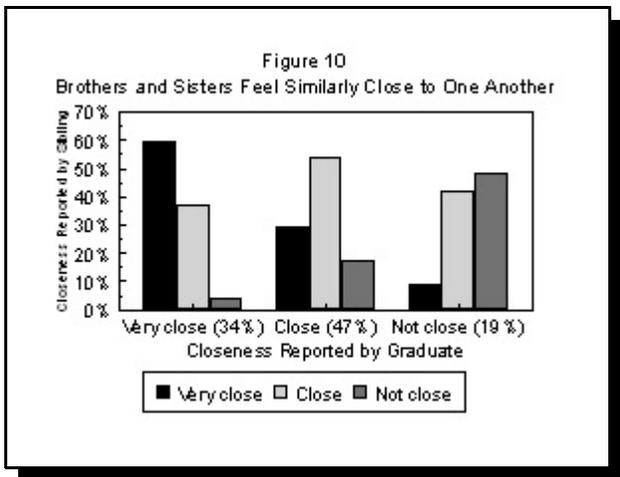
41% have occasional contact, and only 8% have rare contact -- once a year or less. We also found that brothers and sisters agree about how much contact they have: The more contact reported by the graduate, the more contact reported by their brother or sister.

It is thus not surprising that graduates and their brothers or sisters say that they share a similar outlook on life. Figure 9 shows that 23% of graduates say they are very similar to their brother or sister; 54% are similar; and 23% say they are not similar in outlook. Also, there



is high agreement among brothers and sisters in their perceptions of similarity. For example, among graduates who say that they are very similar to their brother or sister, more than 90% of the brothers or sisters report that they are similar or very similar in outlook to the graduate. Among graduates who say they are not similar to their brother or sister, more than 40% of the brothers or sisters say that they are not similar in outlook to the graduate.

Graduates are slightly more likely to say that they feel close to their brother or sister than that they share the same outlook on life. Figure 10 shows that 34% of graduates say they feel very close, and 47% feel close to their brother or sister. Only 19% of graduates do not feel close to their brother or sister. Brothers or sisters feel the same way about one another. Among graduates

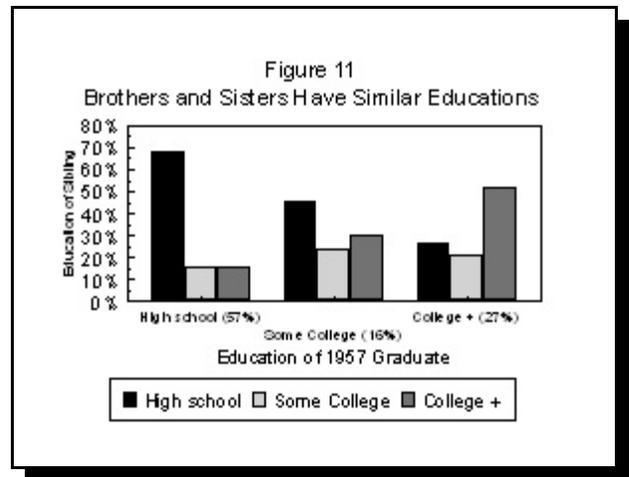


who feel very close to their brother or sister, more than 95% of brothers or sisters feel close or very close to the graduate. On the other hand, among graduates who do not feel close to their brother or sister, 49% of brothers

or sisters say that they are not close to the graduate, and only 9% report feeling close.

### Education, Occupation, and Income

Brothers and sisters tend to complete the same levels of schooling. As shown in Figure 11, among 1957 graduates with exactly a high school education, more than 65% of brothers and sisters also had no schooling beyond high school. At the same time, among WLS graduates with a college degree or more, more than half of their brothers and sisters also completed at least a college degree. On the other hand, many graduates have brothers or sisters with different levels of schooling. About one sixth of the WLS graduates who did not go beyond high school had a brother or sister with a college



degree, and more than a quarter of the WLS college graduates had a brother or sister with no more than a high school diploma.

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### Graduates hold jobs like those of their brothers or sisters.

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There are also relationships between the kinds of jobs held by brothers and sisters. For example, Figure 12 shows relationships between the occupations of male graduates and their brothers. The categories shown in the figure are white collar (professional, managerial, sales, and clerical); upper blue collar (skilled and semi-skilled); and lower blue collar (labor, service, and farm). There is a tendency for brothers to hold similar jobs. For example, 65% of white collar graduates have brothers with white collar jobs. Male graduates with upper blue

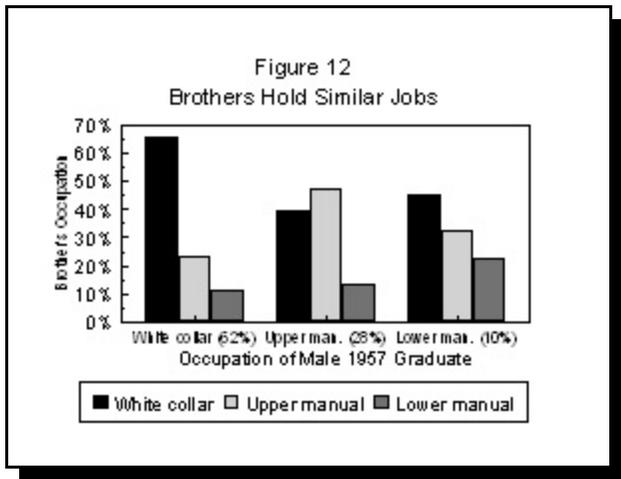
collar jobs are most likely to have brothers with the same kinds of jobs (47%), but many of their brothers, also, are in white collar jobs (39%). Graduates who work in labor, service, or farm jobs are more likely than other graduates to have brothers who work in those kinds of jobs (23%), but most men in the lower blue collar group have brothers with upper blue collar (32%) or white collar jobs (45%).

Figure 13 shows the relationships between the

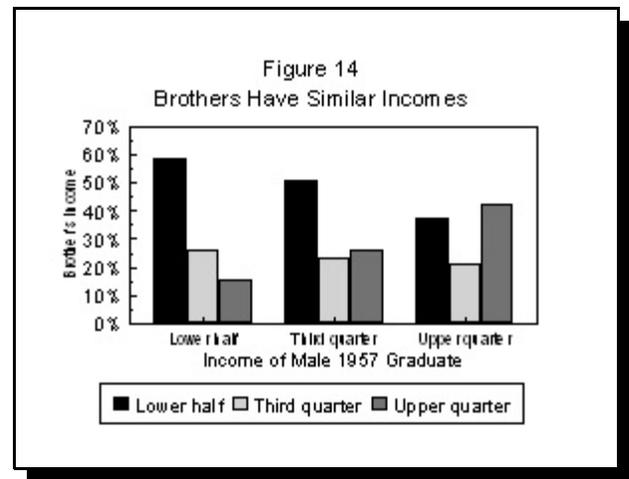
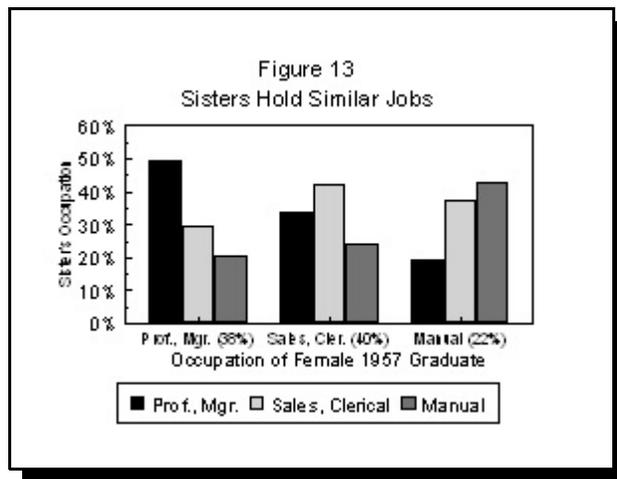
of sales or clerical workers (34%) and blue collar workers (20%). Also, sisters of graduates with blue collar jobs are the most likely to hold such jobs (43%), while the percentages in blue work are lower among the sisters of sales or clerical workers (24%) and professionals or managers (21%).

**Among graduates in the lower half of income, only 15% of their brothers are in the top quarter.**

Brothers and sisters also have similar levels of income from work. Figure 14 shows the relationship between the incomes of male graduates and those of their brothers. The categories correspond roughly to the bottom half of the male income distribution (less than \$41,000), the third quarter of incomes (\$41,000 to \$60,000), and the top quarter of incomes (more than \$60,000). There is wide variation in the income of brothers at every level of male graduates' incomes. At the same time, there is some tendency for brothers to earn more when graduates earn more. For example, among men in the lower half

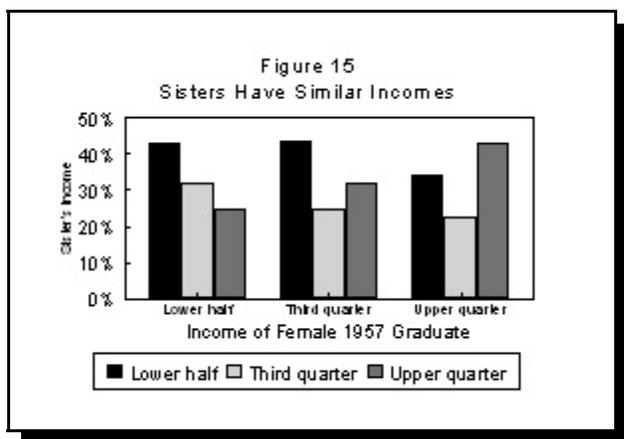


jobs of female graduates and their sisters. Here, we have grouped jobs differently than for men because the great majority of women have white collar jobs. The three groups in Figure 13 are professional and managerial, sales and clerical, and blue collar (skilled, semi-skilled, labor, service, and farm). Women graduates with professional or managerial jobs are the most likely to have sisters in the same kinds of jobs (50%), and the percentages of professionals or managers are far lower among the sisters



of male incomes, only about 15% of their brothers are in the top quarter. However, among graduates in the top quarter, 42% of brothers were also in the top quarter. Correspondingly, among male graduates in the lower half of incomes, 59% of brothers were also in the lower half, but among male graduates in the upper quarter of incomes, only 37% of brothers were in the lower half.

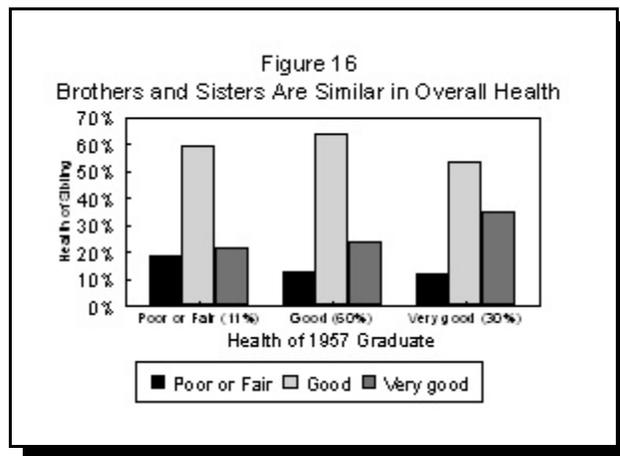
Women earn much less than men, so we used different income groups to compare the incomes of women who worked with the incomes of their sisters: the lower half (less than \$18,000), the third quarter (\$18,000 to \$30,000), and the top quarter (\$30,000 and more). Figure 15 shows that women graduates' earnings loosely resemble those of their sisters. Among women graduates in the bottom three-quarters of incomes, about 45% of sisters earned less than \$18,000. However, among women in the upper quarter of incomes, only 34% of sisters earned less than \$18,000. Among women graduates in the lower half of incomes, 25% of sisters earned more than \$30,000, but among women in the top quarter, 43% of sisters earned more than \$30,000. Higher earning women tend to have higher earning sisters, especially in the upper half of the income distribution.



### Does Health Run in Families?

Graduates who report that they are in better or worse health have brothers or sisters who report similar levels of health. Figure 16 shows the overall self-ratings of health by WLS graduates and their brothers or sisters. Among graduates, 30% say that they are in very good health, 60% say that they are in good health, and 11% say that they are in fair or poor health. The health ratings by brothers and sisters are very similar: 27% in very good health, 60% in good health, and 13% in fair or poor health. Most brothers or sisters report that they are in good health, regardless of the health of the graduate, but health is similar between graduates and their brothers or sisters. For example, among graduates in fair or poor health, 18% of brothers or sisters say they are in fair or poor health, but among graduates in very good health, only 12% of brothers or sisters say they are in fair or poor health. The

other side of the coin is that, among graduates in poor or fair health, only 21% of brothers or sisters say they are in very good health, but among graduates in very good health, 35% of brothers or sisters report very good health. In our future research with the WLS data, we hope to learn some of the reasons why brothers and sisters have similar or different levels of living and health or well-being.



### To Conclude ... for Now

The preceding observations touch on only a few of the topics covered in the Wisconsin Longitudinal Study -- and not at all on the links between adolescence and midlife that are unique to the study. New research is now underway on social and economic factors in health, the timing of menopause, the effects of grandparents on the lives of their grandchildren, economic factors in divorce and remarriage, the transition from work to retirement, interactions between labor markets and employment, and the development of psychological well-being. And while the cumulative WLS data are already a unique scientific resource, we hope that -- with your help -- it will be possible to follow Wisconsin's "Class of '57" into the retirement years.

Again, we thank you for your participation in the Wisconsin Longitudinal Study. Please write us with your comments about this report, questions about the WLS, and future address changes:

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