

**IOWA
GENDER WAGE STUDY
1999**

**Iowa Workforce Development
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Des Moines, Iowa 50319-0209**

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May 2000

In 1993, Iowa Workforce Development (then the Department of Employment Services) conducted a survey to determine if there was a gender gap in wages paid. The results of that survey indicated that women were paid 68 cents per dollar paid to males.

We felt a need to determine if this relationship of wages paid to each gender has changed since the 1993 study. In 1999, the Commission on the Status of Women requested that Iowa Workforce Development conduct research to update the 1993 information. A survey, cosponsored by the Commission on the Status of Women and Iowa Workforce Development, was conducted in 1999.

The results of the survey showed that women earned 73 percent of what men earned when both jobs were considered. (The survey asked respondents to provide information on a primary job and a secondary job.) The ratio for the primary job was 72 percent, while the ratio for the secondary job was 85 percent. Additional survey results detail the types of jobs respondents had, the types of companies for which they worked and the education and experience levels. All of these characteristics can contribute to these ratios.

While the large influx of women into the labor force may be over, it is still important to look at such information to determine if future action is needed. We present these results with that goal in mind.

We are indebted to those Iowans, female and male, who voluntarily completed the survey.

This study was completed under the general direction of Judy Erickson. The report was written by Shazada Khan, Teresa Wageman, Ann Wagner, and Yvonne Younes with administrative and technical assistance from Michael Blank, Margaret Lee and Gary Wilson. The Iowa State University Statistical Lab provided sampling advice, data entry and coding and data analysis.

CURRENT LABOR MARKET CONDITIONS

There was much optimism about Iowa's economic future as the state moved into the 21st century. The decade of the 1990's ended on a wave of prosperity that had been sustained for six years, and several of the labor force measures reflected this prosperity. Total employment climbed to a peak level of 1,534,100 in 1999, nonfarm employment was at an all-time high of 1,466,700 jobs, and the statewide unemployment rate dipped to 2.5 percent. This was the lowest unemployment rate reported in Iowa in 25 years and also the lowest jobless rate in the nation. The comparable U.S. unemployment rate for 1999 was 4.2 percent.

The economic climate has been so favorable in the state that finding an adequate supply of labor has become a challenge for many businesses. These shortages are widespread, and have affected most of Iowa's cities and industries. In certain areas of the state, tight labor supplies have even impeded further expansion. These labor constraints are reflected in the state's labor force figures for the last few years. In 1996 the statewide labor force peaked at 1,593,100, but remained well below that level for the next three years. In an effort to find additional workers, employers have begun to target previously underutilized sources of labor. These groups consist of the disabled, early retirees, immigrants, minorities and welfare recipients.

The labor force growth that occurred in the 1970's and 1980's was primarily fueled by a large influx of females and baby boomers. Demographics show us that the numbers of females and youth currently entering the Iowa labor force are smaller in size than in the past. Also, the trend toward early retirement, low unemployment, out-migration and increasing skill demands have all been factors in shrinking the current supply of labor.

Historical data on female labor force participation indicate that no decade can compare to the 1970's in terms of females entering the labor force. Approximately 162,600 females entered the labor force during this ten-year period, more than the combined total for the next two decades. While the labor force participation rate for males increased slowly from 77 percent in 1970 to 78.6 percent in 1998, the trend was quite different for females. The labor force participation rate for females grew dramatically, increasing from 40 percent in 1970 to 65.7 percent in 1998. The fact that it took so many years to integrate females into the labor force may be one of the reasons that a pay gap still exists between the genders.

FINDINGS OF STUDY

The overall finding of this study was that females made approximately 73 cents on average to every dollar made by males in Iowa. This calculation took into account the average number of hours respondents worked weekly.

Hours worked do explain some of the wage difference. While over 50 percent of both males and females worked 40 to 50 hours a week, a much higher percentage of males worked more than 50 hours a week. In addition, a much higher percentage of females worked less than 50 hours a week.

Industry and occupation also affect wage levels and gender comparisons. The highest percentage of females was in the Services industries, while the highest percentage of males was in the Manufacturing industries. The average weekly wage in 1998 for Services at \$426 represents 64 percent of the average weekly wage for Manufacturing at \$663.

Occupationally, males and females seem to be equally represented in the Executive, Professional, Sales and Service worker categories. However, their representation in Administrative Support Occupations and the Production related occupations are opposite. Over 28 percent of the female respondents were employed in Administrative Support Occupations, while over 36 percent of males were employed as Precision and Production Craft Workers, Repairers, Operators and Assemblers. The mean hourly wages for these groups in 1998 were \$10.47 for Administrative Support Occupations and \$11.95 for Production, Construction, Operating, Maintenance, and Material Handling Occupations. At a difference of almost \$1.50 per hour, the annual gap would be \$3,120.

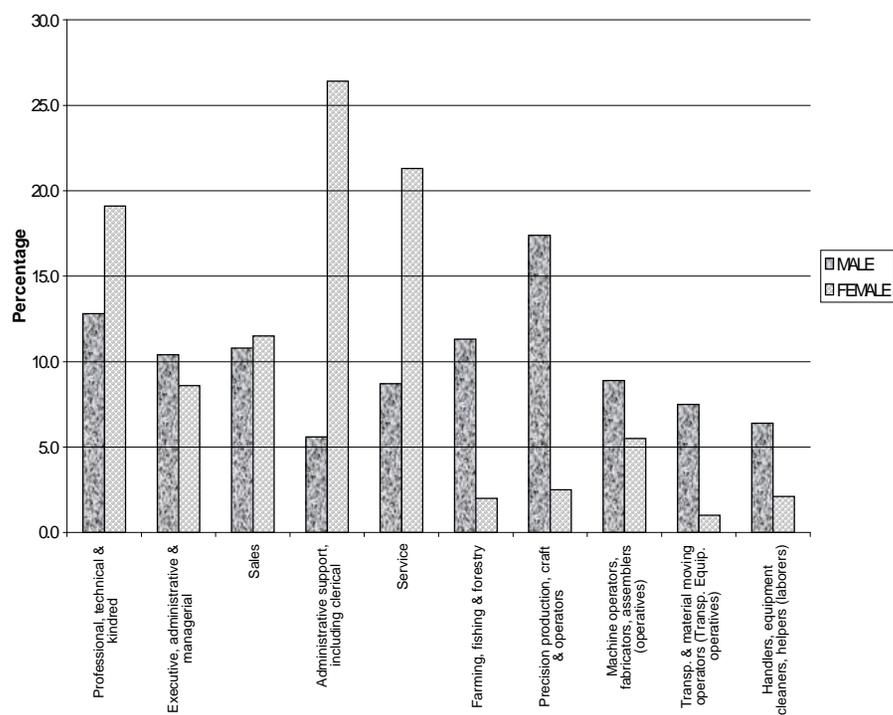
Occupation can be an individual choice. However, in the past many women were discouraged from entering certain occupations. The fact that females and males are equally represented in the executive and professional categories indicates progress. The changes in occupational employment by gender can be seen in the last three Census figures. The percentage of females employed in the higher paying occupational groups has increased since 1970. The percentage of females in Professional, Executive and Sales occupations has risen, while the percentage of females in Administrative Support and Service occupations has declined between the 1970 Census and the 1990 Census. By the 1990 Census the percentage of both males and females in Executive, Professional and Sales occupations were close and the percentage of females in Professional occupations was greater than the percentage of males

Other determinants of wages are years of experience and education, both of which seem to support higher wages for males in this study. Almost 37 percent of the males had 20 or more years of experience, while only 20 percent of the females did. Thirty percent of the females had one to five years' experience. This may be due to females leaving and re-entering the labor force to have children.

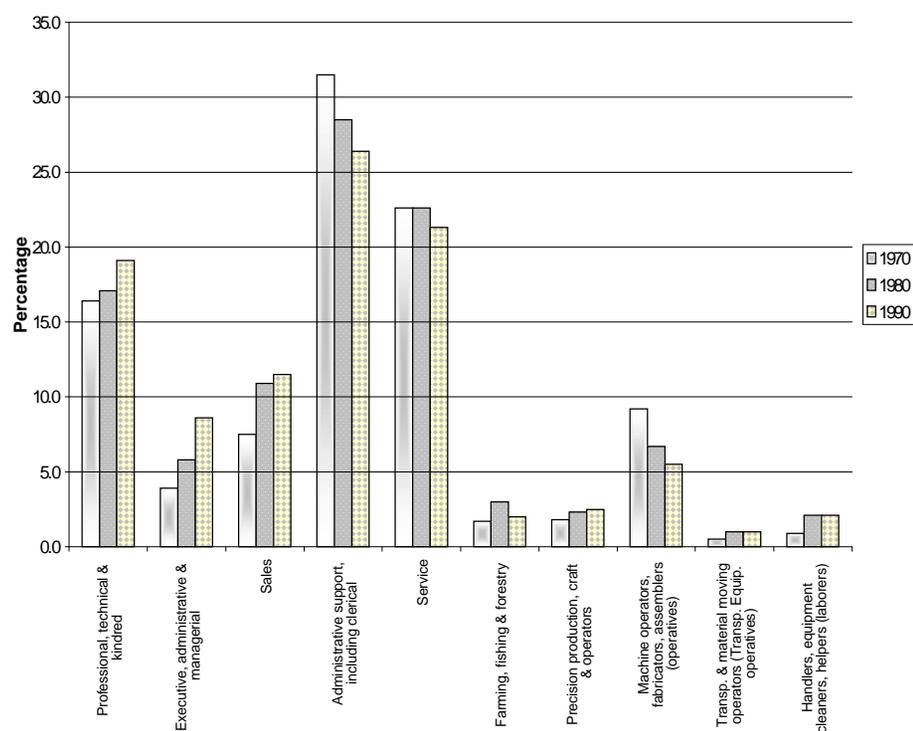
The overall finding of this study shows an increase in the ratio of female to male wages since an earlier study in 1993. In the 1993 study, only 25 percent of the females made more than \$24,000 annually compared to 36 percent making \$25,000 or more in 1999. In 1999, fewer females were employed in Retail Trade and Services industries than in 1993, while more were employed in Government. Also in 1999, more females were employed in Executive and Managerial occupations and less in Service occupations. These types of movement can have positive effects on wages.

Additionally, the ratio of wages by gender in Iowa has reached the same level as the ratio for the nation. According to the U. S. Census Bureau, the ratio of median annual earnings for females compared to earnings for males was also 73 percent in 1998. While positive change has occurred, continued opportunities for females in all areas will continue to raise this ratio.

Percent of Females and Males by Occupation (1990)



Percent of Females by Occupation

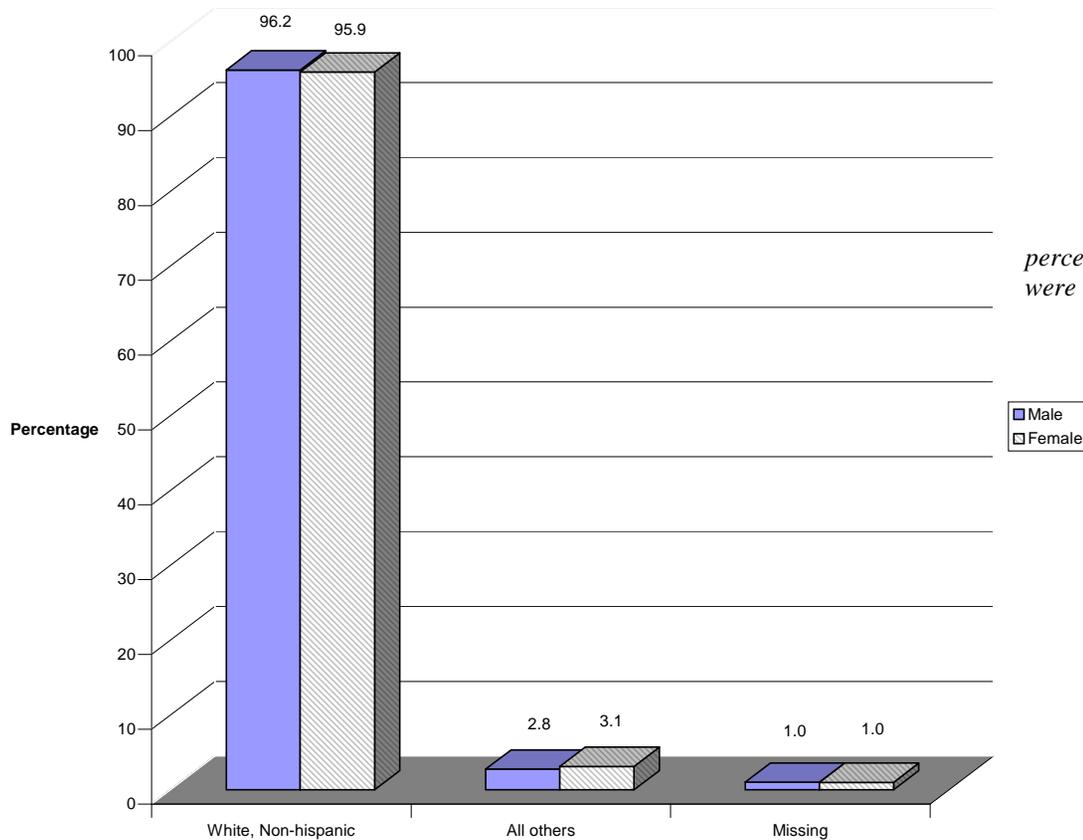


Respondents by Gender

There were 1,004 responses that were functional for this study. Of the respondents, 65 percent (609) were female and 35 percent (395) were male. Approximately 96 percent of all respondents were White, Non-Hispanic; another two percent of the respondents were made up of all other races while one percent of the respondents did not respond to the question. Eighty-two percent of the respondents have primary jobs in their county of residence. Of the respondents holding second jobs, 85 percent hold second jobs in the county in which they live.

| All Respondents | | | |
|-----------------|--------|------|-------|
| | Female | Male | Total |
| Respondents | 609 | 395 | 1,004 |
| Percentage | 65% | 35% | 100% |

Respondents by Gender/Race



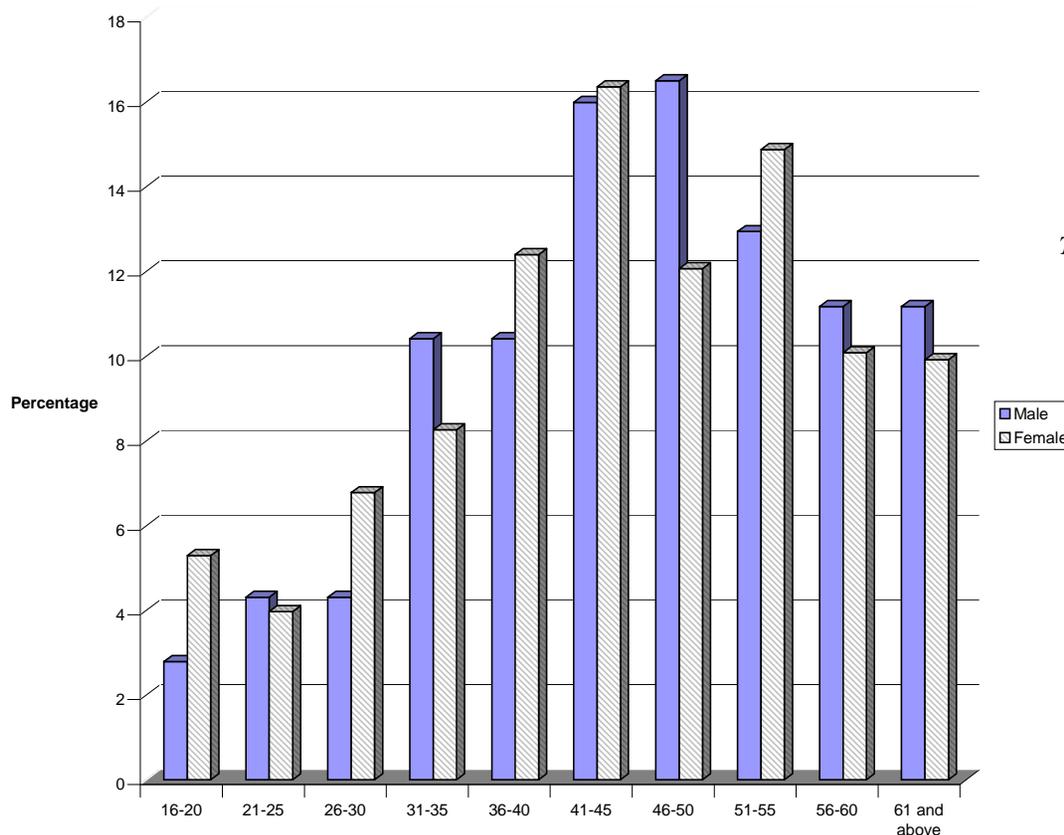
Of the respondents, 65 percent (609) were female and 35 percent (395) were male. Approximately 96 percent of all respondents were White, Non-Hispanic.

Respondents by Age

Distribution by age of the respondents, in most of the age categories, was close among males and females. It is notable that workforce participation was still the highest among the respondents of age 30 and above for both males (88.6 percent) and females (84.1 percent), and as the age increases there are more participants in the workforce, as stated in the previous study in 1993. The highest workforce contribution by males (16.5 percent) was in the age 46-50 category and among females, (16.4 percent), was in the age 41-45 group (although, in combining the 50+ age groups, more respondents, 35.3 percent of males and 34.9 percent of female, are in this category). Some other findings of interest are that there is a higher participation among females in the 16-20 age group and that workforce involvement in the age group 31-35 increased for females and decreased among males from the study conducted in 1993.

| Respondents by Age (Percentage) | | |
|---------------------------------|--------|------|
| Age Group | Female | Male |
| 16-20 | 5.3 | 2.8 |
| 21-25 | 4.0 | 4.3 |
| 26-30 | 6.8 | 4.3 |
| 31-35 | 8.3 | 10.4 |
| 36-40 | 12.4 | 10.4 |
| 41-45 | 16.4 | 16.0 |
| 46-50 | 12.1 | 16.5 |
| 51-55 | 14.9 | 12.9 |
| 56-60 | 10.1 | 11.2 |
| 61 and above | 9.9 | 11.2 |

Respondents by Age



The highest workforce contribution by males was in the age 46-50 category and among females was in the age 41-45 group.

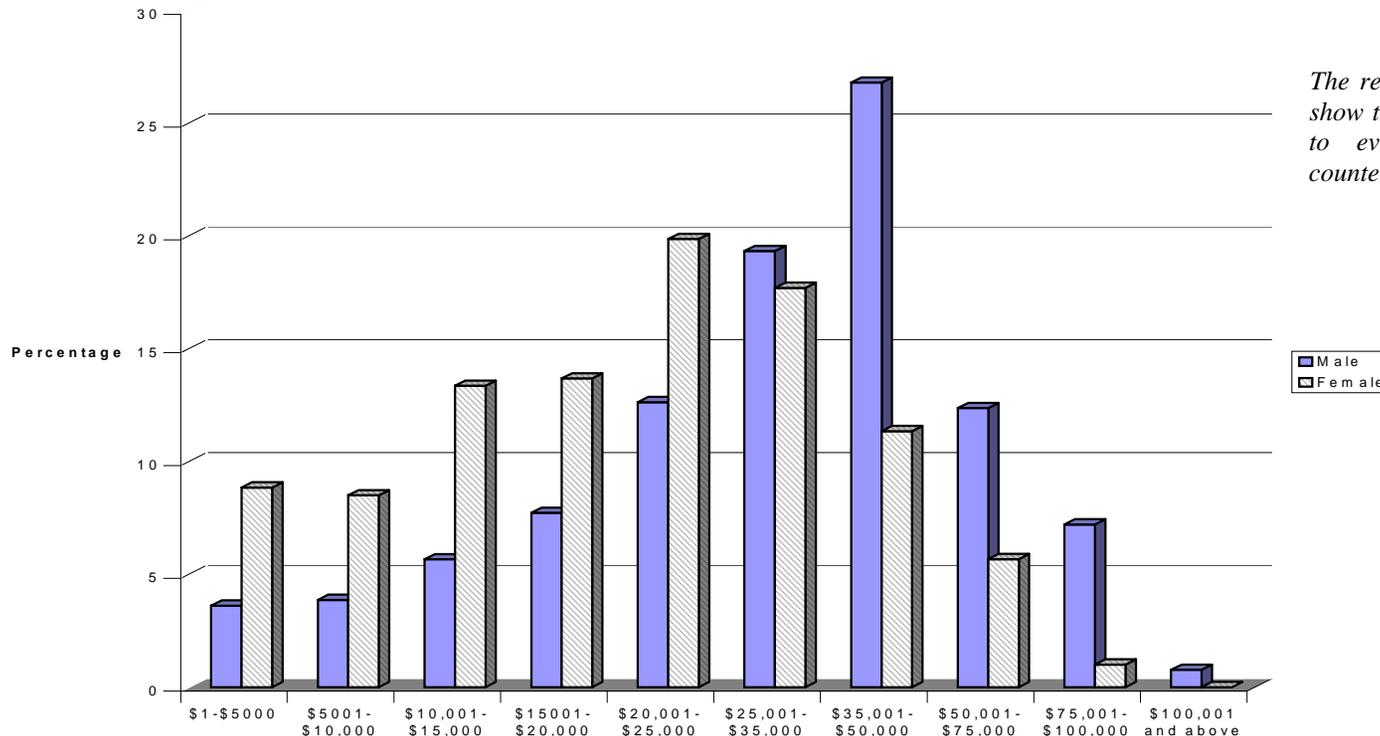
Respondents by Wage and Gender

Wages by gender indicate that 64 percent of the female respondents reported annual wages of \$25,000 or less, while 67 percent of the males earned \$25,000 or more. Only one percent of the females earned over \$75,000, while eight percent of the males fell into this high wage category. Lower wages for females appear to be tied to the types of jobs that they hold. Although the female respondents are represented as well or better than the males in the managerial and professional occupational groups, they have a much stronger presence than males in the administrative support and service occupations. According to 1998 statewide wage data (obtained through the *Occupational Employment Statistics* survey), wages are substantially lower in these two broad occupational groups. Also, females are underrepresented in all of the production-related groups where wages tend to be higher.

When gender comparisons are made for respondents who held just one job, the wage distribution is similar to the results that were obtained for the group as a whole. However, when gender comparisons are made for respondents who hold a secondary job, both genders were clustered in the low wage ranges. For those respondents who held a secondary job, close to 87 percent of the females and 73 percent of the males reported annual wages of \$10,000 or less. This is due to the fact that most secondary jobs are part-time and are heavily concentrated in the lower-paying retail trade and service industries.

| | Female | Male |
|---------------------|--------|------|
| \$1-\$5,000 | 8.9 | 3.6 |
| \$5,001-\$10,000 | 8.5 | 3.9 |
| \$10,001-\$15,000 | 13.4 | 5.7 |
| \$15,001-\$20,000 | 13.7 | 7.7 |
| \$20,001-\$25,000 | 19.9 | 12.6 |
| \$25,001-\$35,000 | 17.7 | 19.3 |
| \$35,001-\$50,000 | 11.4 | 26.8 |
| \$50,001-\$75,000 | 5.7 | 12.4 |
| \$75,001-\$100,000 | 1.0 | 7.2 |
| \$100,001 and above | 0.0 | 0.8 |

Respondents by Wage and Gender



The results for the total group of respondents show that on average females earned 73 cents to every dollar earned by their male counterparts.

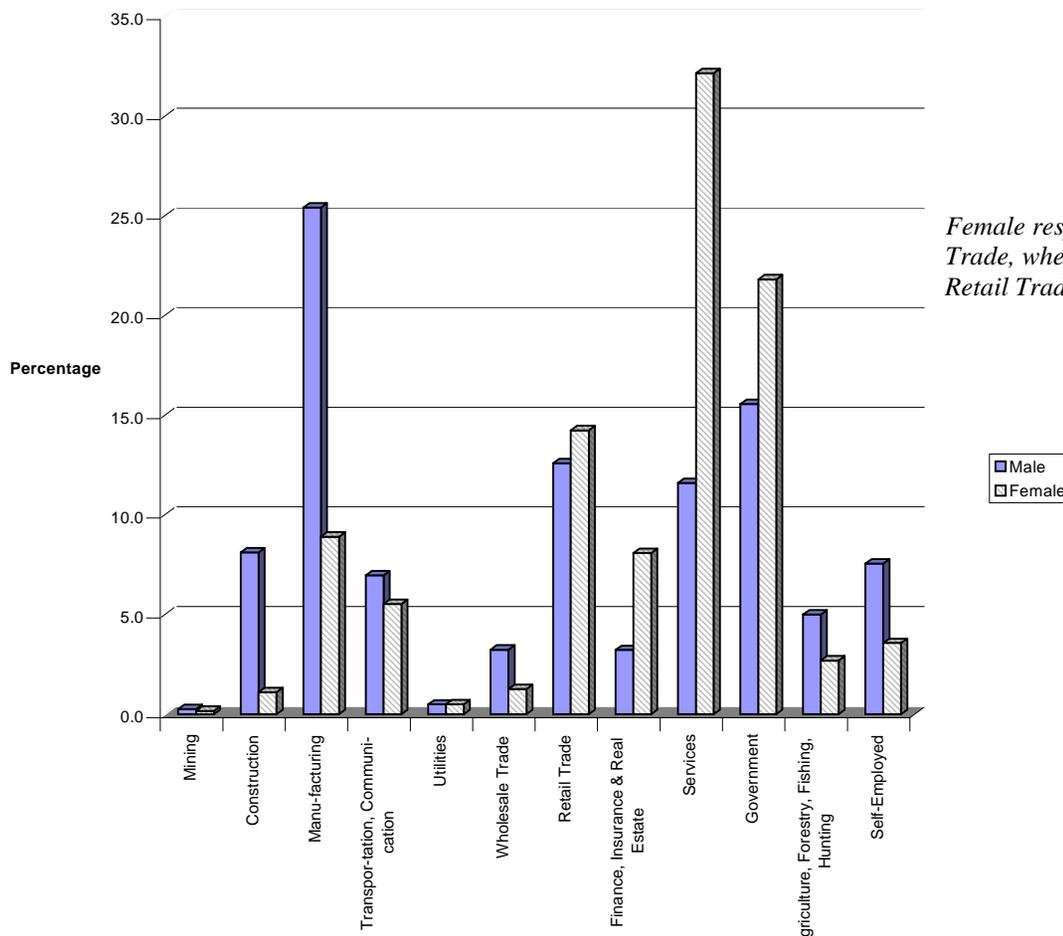
Respondents by Industry

Female respondents were concentrated in Services, Government, and Retail Trade, whereas, male respondents clustered in Manufacturing, Government, Retail Trade and Services. Thirty-two percent of the females said they worked in Services, twenty-two percent in Government, and fourteen percent in Retail Trade. For the male respondents, twenty five percent worked in Manufacturing, sixteen percent in Government, thirteen percent in Retail Trade, and twelve percent in Services. Just one percent of the females worked in construction compared to eight percent for males.

Females who held second jobs were employed in Retail Trade at twenty-one percent, fifteen percent were Self-employed, and thirteen percent in Government. Males, however, were Self-employed at a thirty-five percent clip, followed by Retail Trade and Government at 16 percent, and Services at eleven percent.

| Respondents by Industry (Percentage) | | |
|-----------------------------------------|--------|------|
| | Female | Male |
| Mining | 0.2 | 0.3 |
| Construction | 1.1 | 8.1 |
| Manufacturing | 8.9 | 25.4 |
| Transportation, Communication | 5.5 | 7.0 |
| Utilities | 0.5 | 0.5 |
| Wholesale Trade | 1.3 | 3.2 |
| Retail Trade | 14.2 | 12.6 |
| Finance, Insurance & Real Estate | 8.1 | 3.2 |
| Services | 32.2 | 11.6 |
| Government | 21.8 | 15.6 |
| Agriculture, Forestry, Fishing, Hunting | 2.7 | 5.0 |
| Self-Employed | 3.6 | 7.6 |

Respondents by Industry



Female respondents were concentrated in Services, Government, and Retail Trade, whereas, male respondents clustered in Manufacturing, Government, Retail Trade and Services

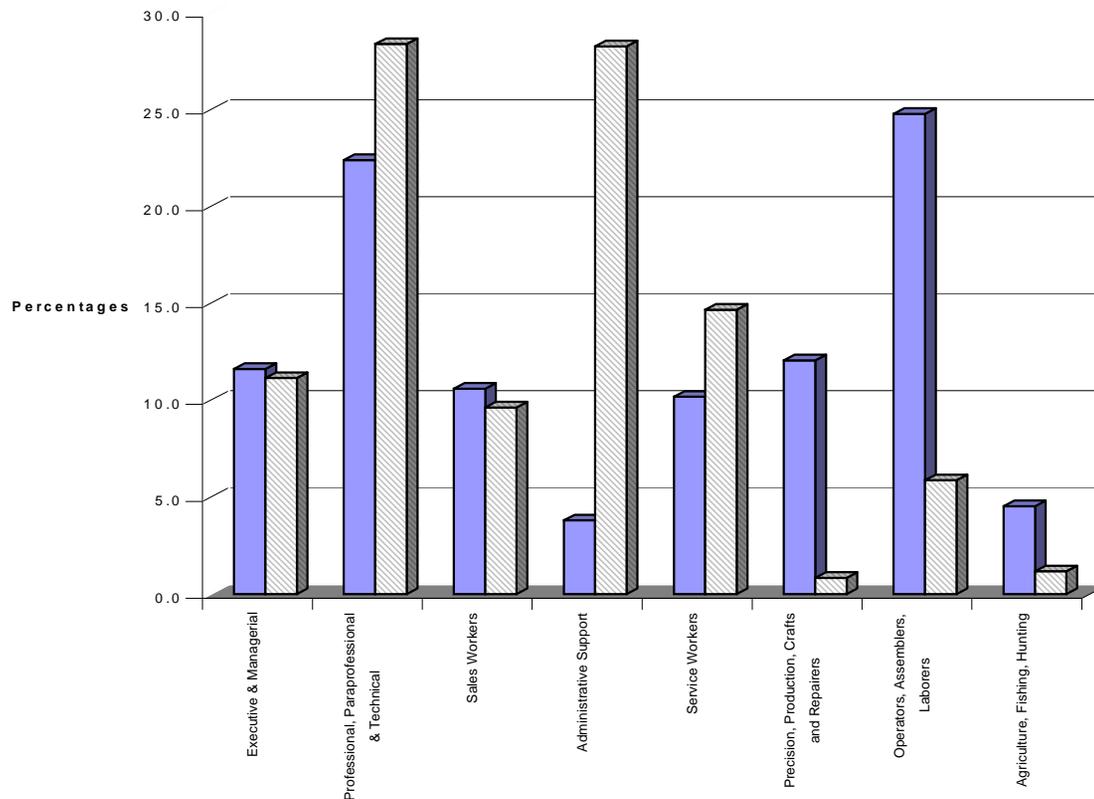
Respondents by Occupation

Of the female respondents, twenty-eight percent were engaged in both Professional and Administrative Support occupations, followed by fourteen percent in Service occupations, and eleven percent in the Executive and Managerial occupation. The males were mostly clustered in the Operators, Assemblers occupations at a twenty-five percent rate, followed by a twenty-two percent rate in the Professional ranks. Males and females were equally represented in the Executive and Management occupations.

Females who held second jobs were clustered in Professional/Technical (25 percent), Service (25 percent), and Administrative Support (11 percent) occupations. Males were engaged in the Operators and Assemblers occupation trade at 23 percent and Agriculture/Fishing at 21 percent.

| Respondents by Occupation (Percentage) | | |
|---------------------------------------------|--------|------|
| | Female | Male |
| Executive & Managerial | 11.2 | 11.6 |
| Professional, Paraprofessional & Technical | 28.4 | 22.4 |
| Sales Workers | 9.6 | 10.6 |
| Administrative Support | 28.3 | 3.8 |
| Service Workers | 14.7 | 10.2 |
| Precision, Production, Crafts and Repairers | 0.8 | 12.1 |
| Operators, Assemblers, Laborers | 5.9 | 24.8 |
| Agriculture, Fishing, Hunting | 1.2 | 4.5 |

Respondents by Occupation



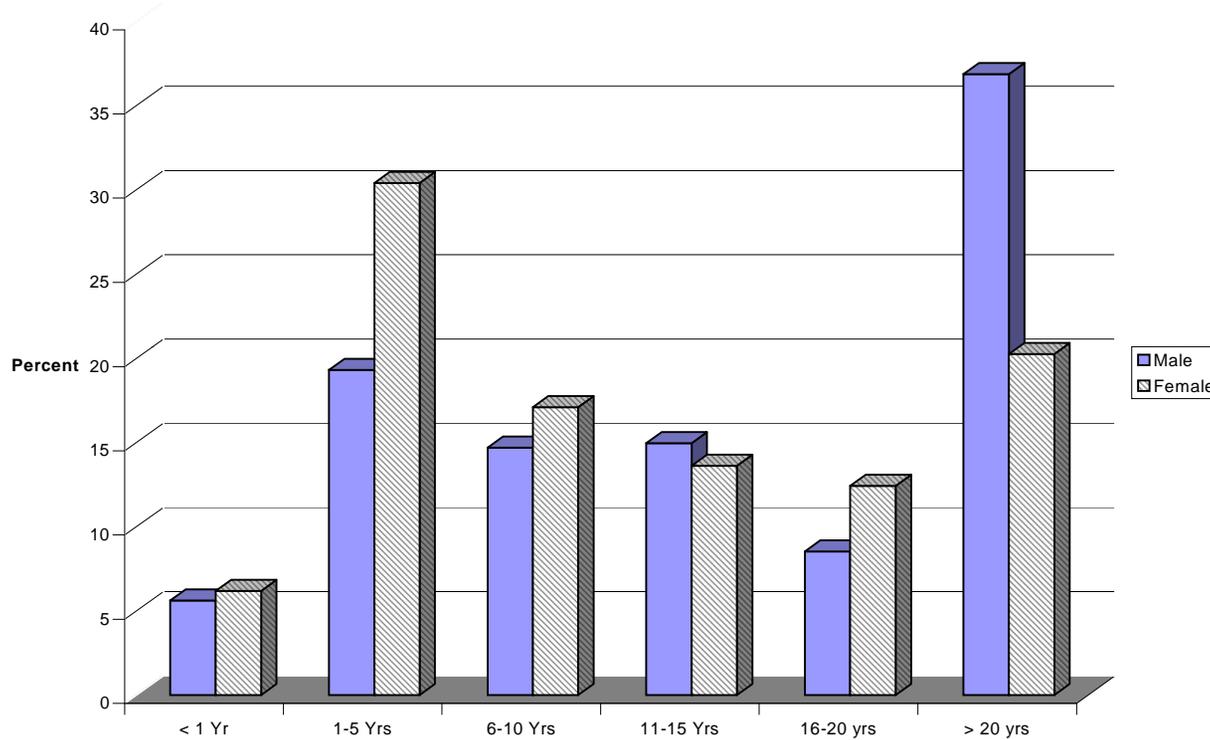
Of the female respondents, twenty-eight percent were engaged in both Professional and Administrative Support occupations

Respondents by Years of Experience on the Job

With regard to years of experience on the job, 30 percent of females and 19 percent of males have 1-5 years' experience on the job. For respondents with 6-10 years, 11-15 years, or 16-20 years of experience the percentage difference of male and female respondents is smaller. However, 36.9 percent of males and 20.3 percent of females have more than 20 years experience on the job. For respondents who reported a second job, the distribution for years of experience in a second job is similar to overall years of experience. Again, more females than males reported 1-5 years' experience, and more males than females reported more than 20 years' experience.

| | Female | Male |
|-------------|--------|------|
| < 1 Years | 6.2 | 5.6 |
| 1-5 Years | 30.4 | 19.3 |
| 6-10 Years | 17.1 | 14.7 |
| 11-15 Years | 13.6 | 15.0 |
| 16-20 Years | 12.4 | 8.5 |
| > 20 Years | 20.3 | 36.9 |

Respondents by Years of Experience on the Job



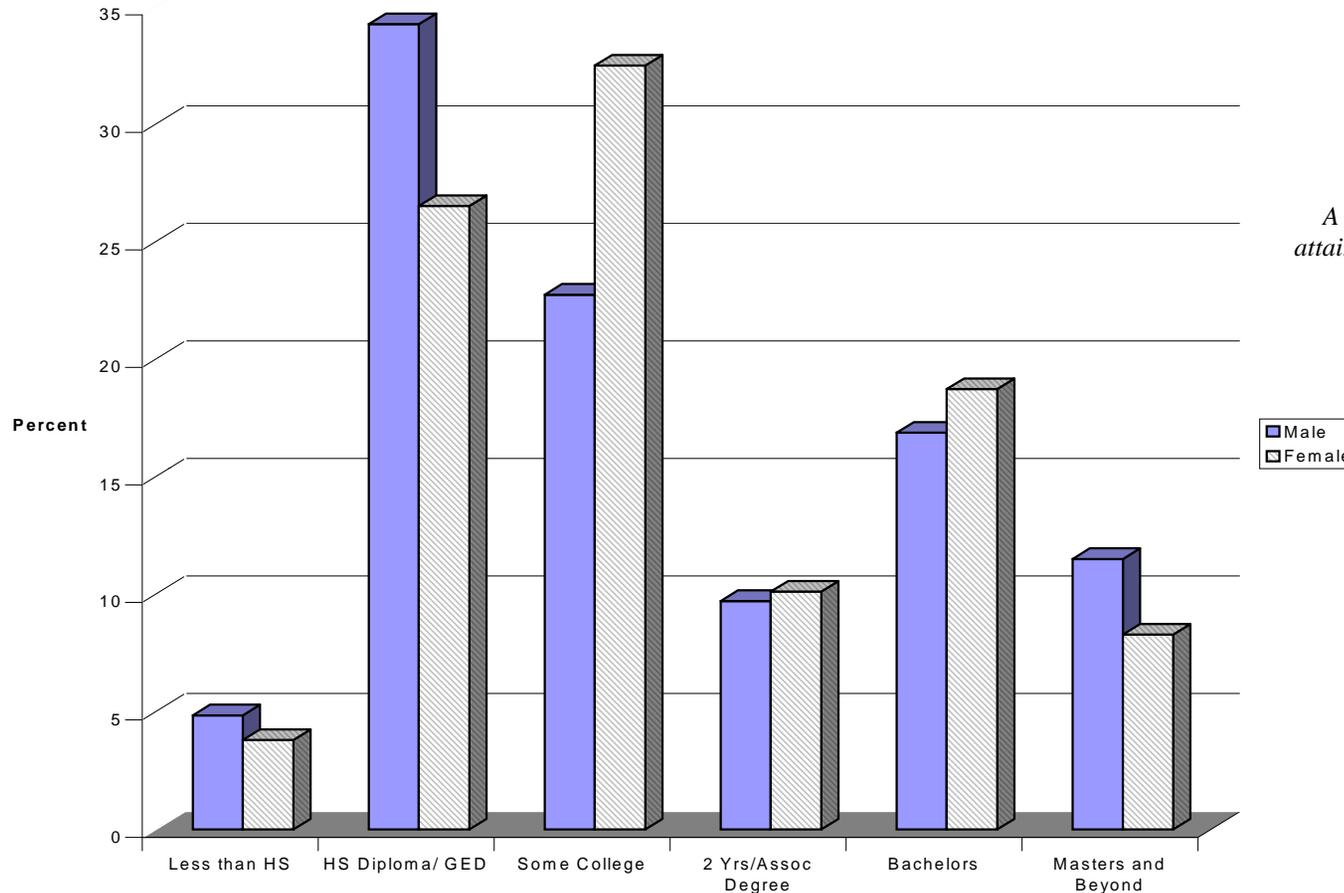
Overall, males have more experience on the job than females.

Respondents by Highest Education Level

A higher percentage of males report having a high school diploma or GED (34.27 percent males, 26.53 percent females), while a higher percentage of females report having some college (32.50 percent females, 22.76 percent males). Respondents reporting the highest level of education of Two-year/Associate degree or Bachelor degree were reasonably consistent. However, a higher percentage of males than females attained an education level of Masters and beyond.

| | Female | Male |
|--------------------|--------|------|
| Less than HS | 3.8 | 4.9 |
| HS Diploma/ GED | 26.5 | 34.3 |
| Some College | 32.5 | 22.8 |
| 2 Yrs/Assoc Degree | 10.1 | 9.7 |
| Bachelors | 18.7 | 16.9 |
| Masters and Beyond | 8.3 | 11.5 |

Respondents by Highest Education Level



A higher percentage of females than males attain an education level beyond high school.

Respondents by Level of Education and Wage by Gender

A higher percentage of males than females have a highest level of education of high school diploma/GED. However, males tend to have higher wages than females for the same level of education. In the high school diploma/GED category, 54.3 percent of males earn \$25,000 or more, while 17.3 percent of females in this same category earn \$25,000 or more.

Although 32.5 percent of females and 22.8 percent of males have some college, males again have a higher percentage of higher salary levels than females. (69.0 percent males and 24.5 percent females report a salary level of \$25,001 or higher.) Males and females have approximately equal percentages of respondents who have a Two-year/Associate degree. Females show significantly lower wages than males. Wages for females at this education level are fairly evenly distributed although more males than females earned wages of \$25,001 or more.

At the bachelor degree level, wage comparisons show less of a disparity between males and females at any particular wage level. However, the percentage of males who earn \$25,001 or more still exceed the percentage of females at the same educational level. At the Masters degree or beyond educational level, females have a higher percentage of higher wages than males (91.8 percent of females earned \$25,001 or more, 84.1 percent of males earned \$25,001 or more.)

| Number of Respondents by Level of Education, Wage and Gender | | | | | | | | |
|--------------------------------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|---------------------|
| MALES | | | | | | | | |
| EDUCATION LEVEL | \$10,001-\$15,000 | \$15,001-\$20,000 | \$20,001-\$25,000 | \$25,001-\$35,000 | \$35,001-\$50,000 | \$50,001-\$75,000 | \$75,001-\$100,000 | \$100,000 and above |
| Less than high school | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| High school diploma/GED | 10 | 13 | 26 | 31 | 28 | 11 | 0 | 0 |
| Some college or post secondary | 5 | 7 | 5 | 18 | 28 | 9 | 3 | 2 |
| 2 Year/Associate degree | 1 | 4 | 7 | 9 | 11 | 2 | 1 | 0 |
| Bachelor degree | 3 | 2 | 5 | 12 | 20 | 11 | 5 | 4 |
| Masters degree and beyond | 1 | 0 | 3 | 3 | 12 | 9 | 6 | 7 |
| 8th grade | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 9th grade | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| 10th grade | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| 11th grade | 1 | 1 | 1 | 2 | 1 | 0 | 0 | 0 |
| | | | | | | | | |
| | | | | | | | | |
| FEMALES | | | | | | | | |
| EDUCATION LEVEL | \$10,001-\$15,000 | \$15,001-\$20,000 | \$20,001-\$25,000 | \$25,001-\$35,000 | \$35,001-\$50,000 | \$50,001-\$75,000 | \$75,001-\$100,000 | \$100,000 and above |
| Less than high school | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| High school diploma/GED | 32 | 32 | 27 | 14 | 7 | 4 | 0 | 2 |
| Some college or post secondary | 30 | 30 | 44 | 31 | 8 | 6 | 2 | 0 |
| 2 Year/Associate degree | 9 | 9 | 14 | 11 | 9 | 0 | 0 | 0 |
| Bachelor degree | 7 | 9 | 24 | 27 | 25 | 9 | 1 | 0 |
| Masters degree and beyond | 0 | 1 | 2 | 15 | 18 | 11 | 0 | 1 |
| 8th grade | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| 9th grade | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 0 |
| 10th grade | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| 11th grade | 2 | 1 | 2 | 2 | 0 | 0 | 0 | 0 |

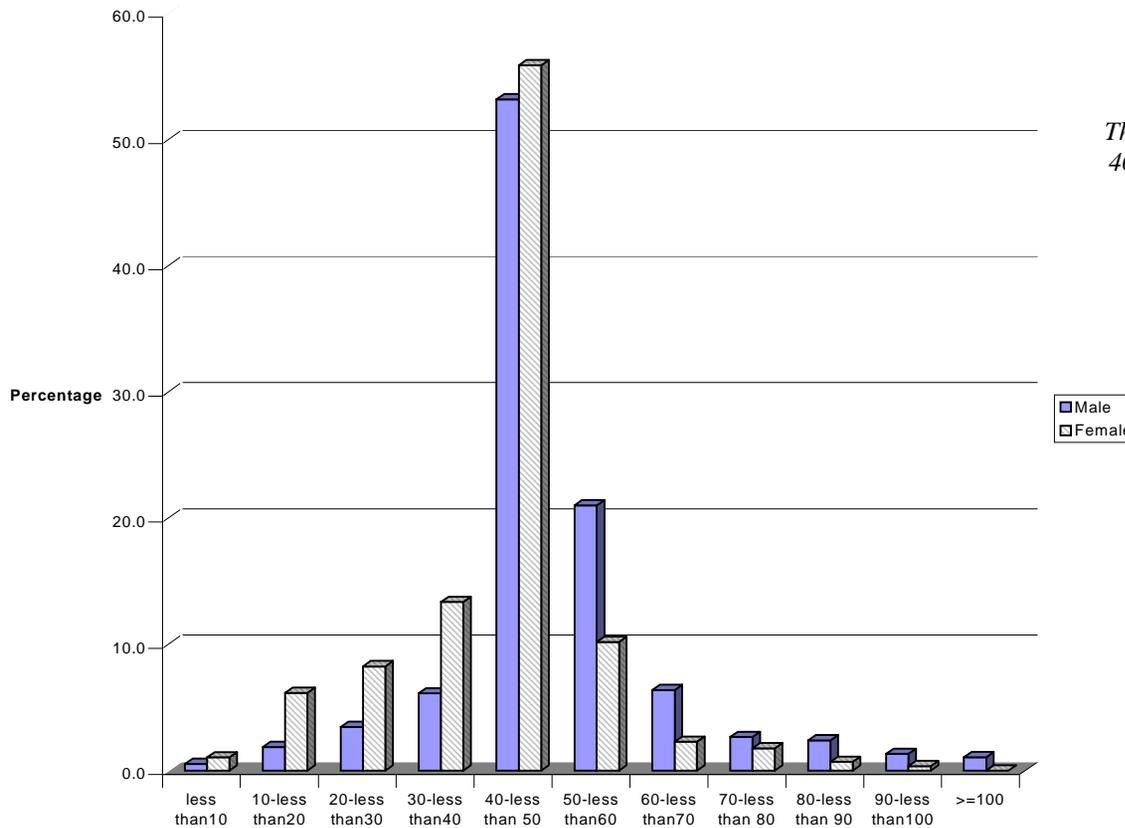
Respondents by Hours of Work Per Week

Both genders reported a high percentage of respondents working 40 to 50 hours per week (56 percent for females and 53 percent for males). However, there are other patterns that are significant and show some distinct differences between the genders. For example, the proportion of female respondents who worked less than 40 hours per week (29 percent) is more than double the male proportion (12 percent) that worked those hours. The reverse situation is reflected in the data for respondents who worked 50 or more hours per week. Male respondents far outnumbered females in this category (35 percent versus 15 percent).

For those respondents who reported working a secondary job, 91 percent of the females and 75 percent of the males worked less than 30 hours per week. Again, most secondary jobs are part-time and are worked to supplement the wages earned in a primary job. This would account for the high percentage of respondents working less than 30 hours per week.

| Respondents by Hours of Work per Week (Percentages) | | |
|-----------------------------------------------------|--------|------|
| | Female | Male |
| less than 10 | 1.1 | 0.5 |
| 10-less than 20 | 6.2 | 1.9 |
| 20-less than 30 | 8.3 | 3.5 |
| 30-less than 40 | 13.4 | 6.1 |
| 40-less than 50 | 55.9 | 53.2 |
| 50-less than 60 | 10.2 | 21.0 |
| 60-less than 70 | 2.3 | 6.4 |
| 70-less than 80 | 1.8 | 2.7 |
| 80+ | 1.0 | 4.8 |

Respondents by Hours of Work per Week



The proportion of female respondents who worked less than 40 hours per week is more than double the male proportion that worked those hours

Methodology

and

Survey Questions

Methodology Report for *Iowa Gender Wage Equity Survey*

J.D. Opsomer, D.A. Anderson, M. Bachan, S.M. Nusser
Survey Section, Statistical Laboratory, Iowa State University
February 29, 2000

The Iowa Gender Wage Equity survey was designed by Iowa Workforce Development (IWD) to assess the relationship between wages for women and men. Based on advice from the Statistical Laboratory at Iowa State University (Nusser and Bachan, 1999), IWD selected a sample of 3,000 individuals using systematic sampling on a frame developed by matching the Iowa Drivers License file with the Wage Records file maintained by IWD, and mailed questionnaires to the selected individuals. Because of a lower than expected response rate and a lack of resources for a follow-up study, a second sample of 3,000 was selected in a similar manner by IWD.

Overall, 537 individuals from the first mailing and 523 individuals from the second mailing responded, for a total of 1,060 respondents. There were 45 cases that were determined to be ineligible: 6 respondents out of state, 1 deceased, 2 disabled, 10 unemployed, and 26 retired. Of the 1,015 eligible respondents, seven returned no information, and four others did not specify a gender and were not included in the data file for weighting, resulting in a final sample size of 1,004. The overall response rate for the study was 16.9 percent.

The Statistical Laboratory coded and key-entered the data. No survey weights were calculated, because all analysis is performed on the male and female respondents separately. The data set was analyzed and summary tables were produced on job characteristic differences between genders. Because the survey asked about two jobs, it was of interest to look not only at each job separately, but also at both of them combined. Hence, a method for combining wages and hours worked for each respondent had to be developed. Total hours worked was assumed to be the sum of the hours reported for each job. Since only wage ranges were available, the midpoints for the wage ranges (e.g. \$7,500 for the range \$5,000-\$10,000) for each job were used, and these were treated as actual wages. Total wage is then the sum of these midpoints. For the highest range (\$100,000+), the value \$100,000 was used since no midpoint was available here. Only three respondents reported an income in that highest category.

The average wage by gender was calculated for both jobs separately and for both combined. In all cases, this was done by dividing wages by weekly hours for each respondent, averaging these hours-adjusted wages across respondents for both genders, and calculating the ratio, R . Let W_{gi} represent the wages and H_{gi} the hours worked for individual i of gender g , where $g=1$ denotes female and $g=2$ male. The hours-adjusted wages for respondent i of gender g are equal to $y_{gi} = W_{gi} / H_{gi}$. The wage ratio was calculated as

$$R = \frac{\bar{y}_1}{\bar{y}_2}.$$

Some respondents reported wage information, but no corresponding hours: 47 individuals had missing hours for job 1 and 16 had missing hours for job 2. Whenever hours were missing, a value of 40 hours/week was imputed for job 1 and 16 hours/week for job 2. These numbers represent the average number of hours reported in the remaining sample. Confidence intervals at the 95% confidence level can be calculated using the provided standard deviations, by taking the ratio estimate and adding and subtracting 1.96 times the standard estimated deviation $\hat{\sigma}_R$, or

$$\left(R - 1.96\hat{\sigma}_R, \quad R + 1.96\hat{\sigma}_R \right).$$

In order to make tables for occupations and company type, it was necessary to compute “fractional” respondents whenever someone reported working in more than one occupation and/or for more than one company type. The fractions for respondents with two jobs were calculated based on the numbers of hours worked in each job. For instance, if someone worked 40 hours in job 1 and 20 hours in job 2, then the occupation for this respondent becomes 67% of his job 1 occupation and 33% of his job 2 occupation. In addition, six respondents reported more than one occupation and/or more than one type of company within either job 1 or job 2. For example, one person reported Sales/Service as current occupation in job 1. In all these cases, we assumed that this person works 50% in one occupation and 50% in the other. The same reasoning was used for type of company. These “fractional” occupations/company type respondents were then combined with the remaining respondents in the calculation of the summary tables. When hours were missing but the other information was provided for occupation and company type, the same imputation procedure as for the wage ratio was used.

For each question, the tabulated responses provide estimates for the percentage of employees who selected each of the possible answer categories. These estimates are valid at the 95% confidence level within approximately $\pm 4\%$ for females and $\pm 5\%$ for males. For instance, suppose that for a certain question, 48% of the female respondents report working in a certain occupation. One is then 95% certain that the true percentage working in that occupation for the whole population falls between 44 and 52%. When the results for job 2 are considered separately, the sample size is only 137, so that the estimates are less precise. The confidence intervals for both females and males for job 2 are approximately $\pm 12\%$.

Reference:

Nusser, S.M. and Bachan, M. *Sample Design Recommendations for the Iowa Gender Wage Equity Survey*. February 17, 1999

Questionnaire

For each question, choose the one response that best describes your job situation during March 1999. Circle the number to the left of that response or fill in the blank.

1. What is your gender?

- 01 = Male
- 02 = Female

2. What was your age as of March 31, 1999?

- 01 = 16-20
- 02 = 21-25
- 03 = 26-30
- 04 = 31-35
- 05 = 36-40
- 06 = 41-45
- 07 = 46-50
- 08 = 51-55
- 09 = 56-60
- 10 = 61 and above

3. In what county do you live?

4. What is your race or ethnic group?

- 01 = White, Nonhispanic
- 02 = White, Hispanic
- 03 = Black, Nonhispanic
- 04 = Black, Hispanic
- 05 = American Indian
- 06 = Alaskan native
- 07 = Japanese
- 08 = Chinese
- 09 = Other Asian
- 10=Other(please specify): _____

5. What is the highest level of education you have obtained?

- 01 = Less than High School _____ (enter number of years)
- 02 = High school diploma/GED
- 03 = Some college or post secondary
- 04 = 2 Year/Associate degree
- 05 = Bachelor degree
- 06 = Masters degree and beyond

Questions 6-17 pertain to your job situation during **March 1999**.

If you had only one job, answer questions 6-11.

If you had more than one job, answer questions 6-17.

Answer questions 6-11 based on your primary job.

Answer questions 12-17 based on your secondary job.

Primary Job

6. What is your current occupation? (See examples at far right)

- 01** = Executive & Managerial
- 02** = Professional, Paraprofessional & Technical
- 03** = Sales Workers
- 04** = Administrative Support
- 05** = Service Workers
- 06** = Precision, Production, Crafts & Repairers
- 07** = Operators, Assemblers, Laborers
- 08** = Agriculture, Fishing, Hunting

7. For what kind of company do you work? (See examples at far right.)

- 01** = Mining
- 02** = Construction
- 03** = Manufacturing
- 04** = Transportation, Communication
- 05** = Utilities
- 06** = Wholesale Trade
- 07** = Retail Trade
- 08** = Finance, Insurance & Real Estate
- 09** = Services
- 10** = Government (federal/state/county/city)
- 11** = Agriculture, Forestry, Fishing, Hunting
- 12** = Self-employed

8. How many hours (on average) do you work per week?

9. What are your annual wages?

- 01** = \$1.00 - \$5,000
- 02** = \$5,001-\$10,000
- 03** = \$10,001-\$15,000
- 04** = \$15,001-\$20,000
- 05** = \$20,001-\$25,000
- 06** = \$25,001-\$35,000
- 07** = \$35,001-\$50,000
- 08** = \$50,001-\$75,000
- 09** = \$75,001-\$100,000
- 10** = \$100,001 and above

10. How many years have you been in this type of work?

- 01** = Less than 1 year
- 02** = 1-5 years
- 03** = 6-10 years
- 04** = 11-15 years
- 05** = 16-20 years
- 06** = 20 years and beyond

11. In what county do you work?

Secondary Job

12. What is your current occupation? (See examples at far right)

- 01** = Executive & Managerial
- 02** = Professional, Paraprofessional & Technical
- 03** = Sales Workers
- 04** = Administrative Support
- 05** = Service Workers
- 06** = Precision, Production, Crafts & Repair
- 07** = Operators, Assemblers, Laborers
- 08** = Agriculture, Fishing, Hunting

13. For what kind of company do you work? (See examples at far right)

- 01** = Mining
- 02** = Construction
- 03** = Manufacturing
- 04** = Transportation, Communication
- 05** = Utilities
- 06** = Wholesale Trade
- 07** = Retail Trade
- 08** = Finance, Insurance & Real Estate
- 09** = Services
- 10** = Government (federal/state/county/city)
- 11** = Agriculture, Forestry, Fishing, Hunting
- 12** = Self-employed

14. How many hours (on average) do you work per week?

15. What are your annual wages?

- 01** = \$1.00 - \$5,000
- 02** = \$5,001-\$10,000
- 03** = \$10,001-\$15,000
- 04** = \$15,001-\$20,000
- 05** = \$20,001-\$25,000
- 06** = \$25,001-\$35,000
- 07** = \$35,001-\$50,000
- 08** = \$50,001-\$75,000
- 09** = \$75,001-\$100,000
- 10** = \$100,001 and above

16. How many years have you been in this type of work?

- 01** = Less than 1 year
- 02** = 1-5 years
- 03** = 6-10 years
- 04** = 11-15 years
- 05** = 16-20 years
- 06** = 20 years and beyond

17. In what county do you work?

Examples for QUESTIONS 6 & 12

01 = Executive & Managerial: top level managers, administrators & executives; legislators, specific area or departmental managers

02 = Professional, Paraprofessional & Technical: human resource, financial, computer & mathematical specialists; engineers; natural & social scientists; lawyers; teachers; nurses; health practitioners, technologists, technicians; writers, artists, entertainers, athletes

03 = Sales Workers: marketing & sales supervisors; insurance, real estate, securities sales; travel agents, cashiers, telemarketers, retail salespersons, sales representatives

04 = Administrative Support: clerical supervisors, secretaries, receptionists, typists, bookkeepers, accounting & general office assistants, bank tellers, teacher aides, computer & office machine operators, mail carriers & clerks, shipping & receiving clerks; loan, insurance, credit clerks; customer service representatives

05 = Service Workers: firefighters, police, guards, waiters/waitresses, cooks, nurse aides, health service assistants, maids, janitors, hairdressers, child care workers, amusement services attendants

06 = Precision, Production, Crafts & Repair: mechanics, installers, repairers; carpenters, electricians, painters, plumbers, brick & stone masons; machinists, tool & die makers, sheet metal workers; slaughterers & butchers, highway maintenance workers

07 = Operators, Assemblers, Laborers: welders, assemblers, fabricators, truck, bus, taxi drivers; hand packers & packagers; machine operators, setters, tenders; meat cutters; construction, mechanic & repair helpers

08 = Agriculture, Fishing Workers: farmers, farm workers, animal caretakers, gardeners & groundskeepers, lawn maintenance workers, nursery workers, farm equipment operators, veterinary assistants, hunters, trappers, logging workers

Thank you!
Please return within five days.
Remove your address label.
Fold with Business Reply Permit visible.
Secure with tape.

Examples for QUESTIONS 7 & 13

01 = Mining: metal mining, coal mining, oil & gas extraction, mining & quarrying minerals

02 = Construction: general contractors; bridge, highway & street contractors; special trade contractors, e.g., carpentry, electrical, plumbing, excavation, & roofing

03 = Manufacturing: companies which make/produce: food, textile mill, apparel, lumber, wood, furniture, paper, chemical, rubber, plastic, leather, stone, clay & metal products; machinery; electronic & transportation equipment, scientific instruments & controls, printing & publishing, petroleum refining

04 = Transportation, Communication: railroads, taxi cabs, bus lines & charters, freight transportation, warehousing, postal service, water & air transportation, pipelines, travel agencies, telephone, radio, television

05 = Utilities: electric services, gas production & distribution, water supply, sanitary services

06 = Wholesale Trade: sale of goods generally not open to public, e.g. sales to retailers, contractors & other wholesalers

07 = Retail Trade: sale of goods open to public, including restaurants

08 = Finance, Insurance & Real Estate: banking & savings institutions, credit unions, credit/loan institutions, mortgage bankers, security & commodity brokers, life insurance providers & sales, real estate management & sales, abstract companies

09 = Services: hotels & lodging; personal, business, repair, amusement services; health, legal, engineering, accounting services; private educational institutions; membership organizations, private household services

10 = Government (federal/state/county/city): executive, legislative, judicial, administrative & regulatory activities; public safety, security, administration of human resource, environmental quality, housing & economic programs; public educational institutions

11 = Agriculture, Forestry, Fishing: crop, livestock, poultry, dairy production; soil & crop, veterinary, farm labor & management, landscaping & horticulture services; tree farms, nurseries, commercial fishing, hunting & trapping

12 = Self-employed: not included on any establishment's payroll

