

*Pathways to Employment*

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## *Contents*

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Executive Summary .....	1
Introduction.....	3
Family Income Study Analysis.....	3
Discussion.....	4
What Increases the Likelihood of Employment?.....	4
What Decreases the Likelihood of Employment?.....	6
Examples.....	8
Conclusions and Implications for Welfare-to-Work Programs .....	9
Technical Appendix.....	11

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## ***PATHWAYS TO EMPLOYMENT***

### ***Executive Summary***

Employment is emphasized as a major pathway off welfare in the federal reform of the AFDC program<sup>1</sup> and in recent welfare reform proposals in Washington State.

Five years of **Family Income Study** data were analyzed to determine which factors affected the likelihood of employment for women who received public assistance. For this analysis, we used a sample of women who were of working age and who were on public assistance in 1988. Some women left assistance during the five-year study period.

#### ***What INCREASES the Likelihood of Employment?***

- **Vocational Education and Training.** Enrollment in vocational education and training in the previous 12 months increased the likelihood of employment by **78 percent**.<sup>2</sup>
- **An Additional Month of Paid Work Experience.** An additional month of paid work experience (*beyond the average of 3 months in the previous 12 months*) increased the likelihood of employment by **47 percent**.<sup>3</sup>
- **An Additional Year of Education.** An additional year of education (*beyond the 11-year average*) increased the likelihood of employment by **5 percent**.

#### ***What DECREASES the Likelihood of Employment?***

- **Toddler in the Household.** The presence of a toddler (child one to three years old) in the household decreased the likelihood of employment by **30 percent**.
- **Infant in the Household.** The presence of an infant (child under 12 months) in the household decreased the likelihood of employment by **23 percent**.
- **Overnight Hospitalization of Youngest Child.** An overnight hospitalization of the youngest child decreased the likelihood of employment by **9 percent**.
- **Age of Woman.** An additional year of age (*beyond the average of 33 years*) decreased the likelihood of employment by **9 percent**.

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<sup>1</sup> Aid to Families with Dependent Children was reformed under the federal Family Support Act of 1988. The Job Opportunities and Basic Skills (JOBS) program within the Act emphasizes employment, job search, job development, and education and training for employment.

<sup>2</sup> Please see the technical appendix for definitions of “likelihood of employment” and other terms.

<sup>3</sup> Paid work experience is discussed in more detail on page 5. The technical appendix includes a discussion of the research methodology.





## ***Introduction***

The Aid for Families with Dependent Children (AFDC) program, reformed by the Family Support Act of 1988 and its Job Opportunity and Basic Skills (JOBS) program, now requires AFDC recipients with children over three years of age to: 1) work, 2) seek employment, *or* 3) participate in an education or training program that will *lead to* employment.

All states are required to target potential long-term users of AFDC<sup>4</sup> and to spend 55 percent of their JOBS funds on employment-related services, education and training, and social services for these targeted groups. Clearly, the employment of these recipients has become a central focus of the AFDC program.

## ***Family Income Study Analysis***

From the Family Income Study's first analysis of the ***employment*** of women receiving AFDC,<sup>5</sup> we learned that a *higher educational level* and *more adults in the household* were related to employment.

When we examined factors related to ***leaving public assistance***, we found that *more education*, *more adults in the household*, *recent work experience*, and *being married* were associated with leaving assistance.<sup>6</sup>

When we examined ***staying off public assistance***,<sup>7</sup> we again found that *recent paid work experience* and *more education* were important. Women who had jobs in the month *before* they left public assistance were able to stay off assistance for a median of 23 months, compared to 15 months for women who did not have jobs when they left.

When we examined the relationship between ***employment*** and ***type of education and training***, we learned that women who had enrolled in *vocational education and training* were 76 percent more likely to become employed in the following year than women who were not enrolled.<sup>8</sup>

Now, with five years of Family Income Study data, we have re-examined the relative importance of *all* of these factors in order to understand how their interaction affects the likelihood that a woman in our sample would obtain employment. A new group of variables that measured the ***health of mother and child*** was also examined.

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<sup>4</sup> See *Targeting Public Assistance*, Washington State Institute for Public Policy, September 1992.

<sup>5</sup> See *Women, Work, and Public Assistance*, Washington State Institute for Public Policy, November 1990.

<sup>6</sup> See *Leaving Public Assistance in Washington State*, Washington State Institute for Public Policy, April 1991; and *Targeting Public Assistance*, Washington State Institute for Public Policy, September 1992.

<sup>7</sup> See *Staying Off Public Assistance: What Enables a Woman to Stay Off Assistance, Once She Has Left?*, Washington State Institute for Public Policy, January 1992.

<sup>8</sup> See *Do Education and Training Benefit Women on Public Assistance?* (issue brief), Washington State Institute for Public Policy, March 1993.

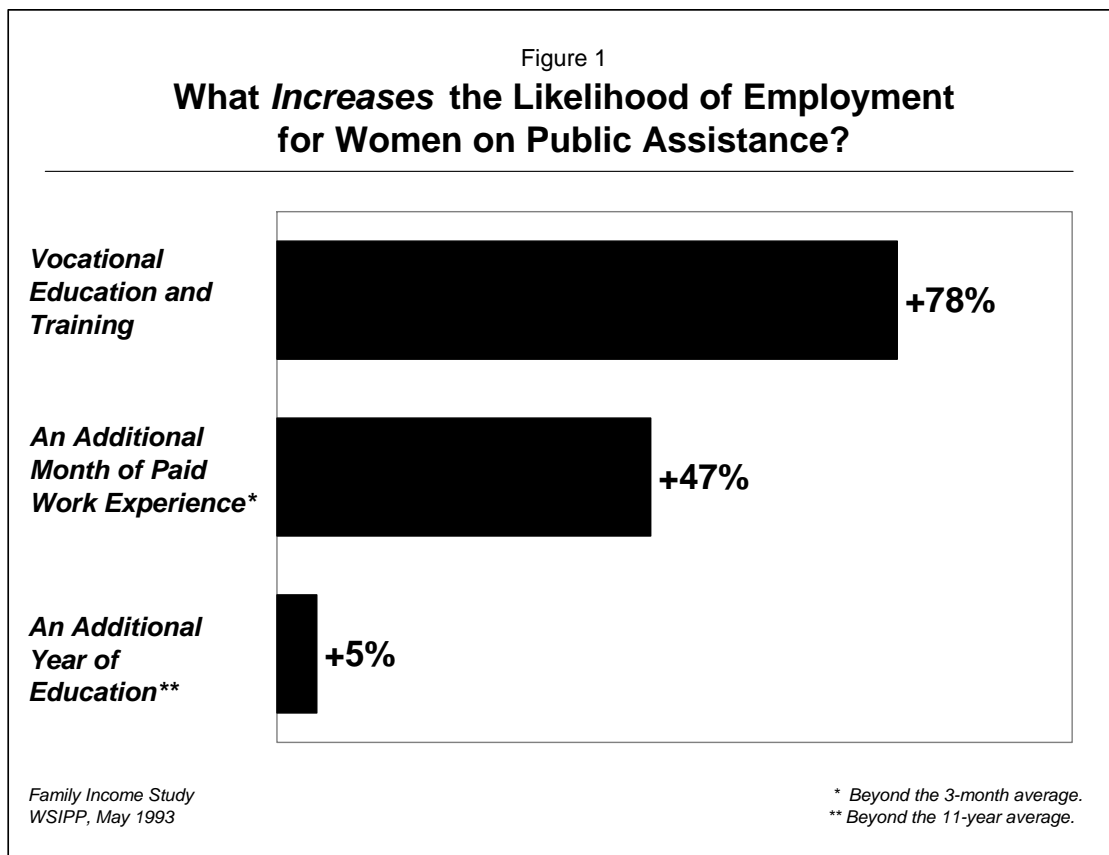
## Discussion

In the following discussion we: 1) assess the relative importance of several factors that affected the likelihood of employment of women on public assistance, and 2) present, *in italics*, the proportion of women in our 1988 samples to whom the factors applied.<sup>9</sup>

### What *INCREASES* the Likelihood of Employment?

We found the following to be statistically significant for *increasing* the likelihood of employment: (See Figure 1)

- Vocational Education and Training
- An Additional Month of Paid Work Experience
- An Additional Year of Education



<sup>9</sup> In 1988, two samples were drawn to participate in the Family Income Study. One was a sample of households that were receiving public assistance, and the other was a sample of households at risk of receiving assistance. The “at-risk” sample was drawn from households which contained a woman of childbearing age and which were in geographic areas with high rates of assistance use.

- ***Vocational Education and Training***

Vocational education and training, *when analyzed in combination with all other variables*, had a statistically significant effect upon employment. Women who had enrolled in vocational education and training were **78 percent** more likely to be employed than women who had not.

*18 percent of the women on public assistance in 1988 were enrolled in vocational education and training, compared to 9 percent of women at risk of receiving public assistance.*

- ***An Additional Month of Paid Work Experience***

Paid work experience increased a woman's likelihood of employment. An additional month of paid work experience, *beyond the average of 3 months in the previous 12 months* for women in this sample, increased the likelihood of employment by **47 percent**. The average of *3 months in the previous 12 months* was calculated by averaging the paid work experience of women in the sample during the five-year study period. Those who did not work in a previous 12-month period were included in the calculation, but were counted as having zero months of paid work experience, thus lowering the average.

*41 percent of the women on public assistance in 1988 had worked sometime during the previous year. Of those women who worked, the average number of months worked was 5.6 in the previous 12 months. By comparison, 55 percent of the women at risk of receiving public assistance in 1988 worked sometime during the year. Of those women who worked, the average number of months worked was 9.5 in the previous 12 months. (See appendix)*

- ***An Additional Year of Education***

Generally, a higher level of education increases the likelihood that a woman who works will work more hours and earn a higher hourly wage. Some women in the sample increased their education during the study period; however, the average amount of education for the sample during the study period was 11 years. An additional year of education, *beyond the average of 11 years* for women in this sample, increased the likelihood of employment by **5 percent**.

Previous analysis of Family Income Study data showed that a woman with a two-year degree who worked earned 12 percent more than a woman with only a high school diploma; a woman with a four-year degree earned 38 percent more than a woman with only a high school diploma; and a woman with a high school diploma earned 14 percent more than a woman without a diploma.<sup>10</sup>

*The average years of education for women on public assistance in 1988 was 11.2 years, compared to 12.2 years for women at risk of receiving public assistance.*

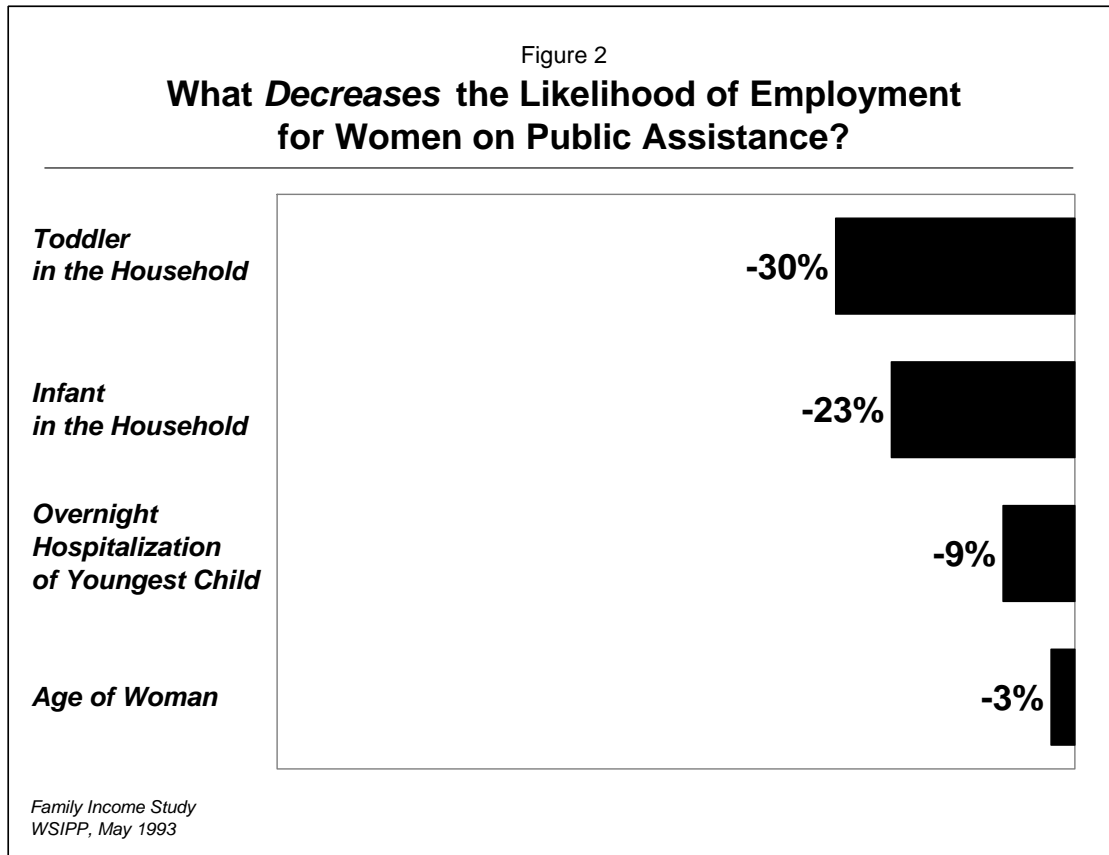
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<sup>10</sup> See *Training Needs of the Economically Disadvantaged and the Working Poor*, Washington State Institute for Public Policy, January 1991.

### ***What DECREASES the Likelihood of Employment?***

We found the following factors to be statistically significant for *decreasing* the likelihood of employment: (See Figure 2)

- Toddler in the Household
- Infant in the Household
- Overnight Hospitalization of Youngest Child
- Age of Woman



- ***Toddler in the Household***

A woman with a toddler (a child one through three years old) in the household was **30 percent** less likely to be employed than a woman who did not have a toddler. The amount of care needed for a young child, a preference for staying home, or the cost or unavailability of child care may be reasons for the decreased likelihood of employment.

*45 percent of the women on public assistance in 1988 had a toddler in their household, compared to 34 percent of the women at risk of receiving public assistance.*

- ***Infant in the Household***

A woman with an infant (child less than 12 months old) in her household was **23 percent** less likely to be employed than a woman who did not. Again, the amount of care needed for an infant, a preference for staying home with a baby, or the cost or unavailability of child care may be reasons for the decreased likelihood of employment.

*15 percent of the women on public assistance in 1988 had an infant in their household, compared to 7 percent of women at risk of receiving public assistance.*

- ***Overnight Hospitalization of Youngest Child***

We examined many variables that measured the health of the adult woman and youngest child in the household. These included: the number of overnight hospitalizations of the woman *or* youngest child, physical disability of a child in the household, chronic and acute illness of the youngest child, the number of emergency room visits of the youngest child for both injury or illness, and the woman's depression.

Of these many factors, only one was significant. An overnight hospitalization of the youngest child in the household decreased the likelihood of employment by **9 percent**.

*13 percent of the women on public assistance in 1988 had a youngest child in their household who had an overnight hospitalization, compared to 9 percent of women at risk of receiving public assistance.*

- ***Age of Woman***

An additional year of age, *beyond the average age of 33 years* for women in this sample during the study period, decreased the likelihood of employment by **3 percent**. Women's participation in the labor force has increased in the past decade, and younger women are more likely to be working than older women. (*See appendix*)

## ***Examples***

Here are two examples that illustrate how these factors interact to affect employment:

*Jan is a 29-year-old divorced woman with two children, ages 6 and 9, who has received AFDC for two years. She has 12 years of education (a high school diploma) and 6 months of paid work experience in the past year. She was enrolled in a community college receiving vocational training. Jan is very likely to be employed (89 percent probability).*

*Karen is a 34-year-old divorced woman with two children, ages 2 and 4, who has received AFDC for two years. Her 2-year-old boy was hospitalized overnight in the past year. Karen has 11 years of education (she did not graduate from high school) and 3 months of paid work experience in the past year. She was not enrolled in an education or training program. Karen is not likely to be employed (43 percent probability).*

## ***Conclusions and Implications for Welfare-to-Work Programs***

Previous Family Income Study analysis showed *paid work experience* and *educational level* to be related to employment, as well as leaving and staying off public assistance. Recent analysis of other information obtained during the five-year study period showed that enrollment in *vocational education and training* increases the likelihood of employment more than any other variable. Recent analysis has also shown that variables concerning children in the household (*infant in household, toddler in household, and overnight hospitalization of the youngest child*) decrease the likelihood of employment. Understanding the interaction of **all** of these factors can help Washington State target employment-related services and social services more effectively under the federal JOBS program.

These findings suggest the following implications in three areas for welfare-to-work programs in Washington State:

- ***Vocational education and training.***

Family Income Study findings show that vocational education and training had a substantial effect on increasing the likelihood of employment for Washington State women on public assistance. The JOBS program gives individual states flexibility in designing their JOBS programs. An emphasis on vocational education and training seems warranted in planning Washington State's welfare-to-work program.

- ***Information on employment-related history and children in the household.***

Obtaining necessary information about a new applicant is critical to planning effective services for the applicant. *Months of paid work experience, years of education, vocational education and training, presence of an infant or toddler in the household, or a child who has had an overnight hospital stay* can be obtained during the initial assessment. This information can guide appropriate decisions regarding job search, education and training, and social services for AFDC recipients under the JOBS program.

- ***Paid work experience.***

Because paid work experience increases the likelihood of employment, AFDC recipients who are not in need of basic education can be encouraged to participate in "job search." Social service and employment and training agencies can also actively work with employers to locate jobs for these recipients. There is evidence, from the second-year follow-up of California's GAIN program, that this type of "employment-focused" approach can be successful in increasing earnings and reducing welfare payments of AFDC recipients.<sup>11</sup>

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<sup>11</sup> See *GAIN: Two-Year Impacts in Six Counties*, Manpower Demonstration Research Corporation, New York, March 1993.





## *Technical Appendix*

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### **Sample:**

We used the Family Income Study sample of women on public assistance in 1988 who were of working age, between 17 and 54 years old. Where possible, we used all five years of data. For some variables that are “lagged” one year, we began with data from the second-year interviews and then used each observation in each subsequent year. This “stacked” sample resulted in a total of 3,507 observations.

### **Definitions:**

*Likelihood of employment* was defined as an increase or decrease in the probability of being employed for the average individual in the sample, if the variable under discussion, such as paid work experience or infant in household, changes by one unit. For example, if we state that one additional month of paid work experience increases the likelihood of employment by 48 percent, we mean that for the average person in the sample who has 3 months of paid work experience, one more month of paid work experience (*for a total of four months*) would make her *148 percent as likely* to be employed as she was with 3 months of paid work experience. Similarly, when we state that the presence of an infant in the household reduces the likelihood of employment by 23 percent, we mean that the average sample member would now be only *77 percent as likely* to be employed as she was when there was *no infant* in the household.

*Employment* was defined as being employed for pay. It does not refer to rate of pay or “quality” of the job. This analysis does not assess hourly wage rates or “job quality.”

*Months of paid work experience* was defined as the number of months worked in the previous 12 months. The average number of months of paid work experience for *all* women in this sample *during the study period* was 3 months in the previous 12 months. Women who did not work were assigned zero months paid work experience. We included both women who worked and women who did not work in order to determine the likelihood of working, compared to not working, during the year.

*Vocational education and training* was defined as education or training for a particular job which was provided by a high school, vocational training institute, or community college. It did not include education or training received at a four-year college or university.

*Overnight hospitalization* was defined as an overnight stay in a hospital for the woman or the youngest child in the household. Overnight hospitalizations for the woman did *not* include hospitalizations for childbirth. The hospitalizations could have been for an injury or for an illness.

*Age of woman* was defined as the average age of women in the sample. For women receiving public assistance in 1988, the average age was 31 years, and the median age was 29. However, women in the sample aged over the five-year study period, making the average age for the five-year study period 33 years.

**Methodology:**

*Analysis:* Our dependent variable, “employment” (whether the respondent worked for pay) during the observation year, was dichotomous. The independent variables fell into two categories: those that were expected to influence the woman’s earnings potential or “human capital,” such as education; and those that were expected to influence the “costs of working,” such as having an infant in the household. We used a logistic regression model to estimate the impact of the independent variables upon the likelihood, or odds, of employment. The odds ratios are expressed as percents in the following table.

*Level of Significance:* We used the three standard levels of significance (p-values) to indicate the degree to which we were confident that this estimate of the effect of the independent variable was accurate. **High** = 1 percent (.01), **Significant** = 5 percent (.05), **Low** = 10 percent (.10), and **Not Significant** = greater than 10 percent.

## ***VARIABLES RELATED TO LIKELIHOOD OF EMPLOYMENT***

Variable	Level of Significance	+/- Effect on Likelihood of Employment	Average of Working-Age Women in Sample (1988-1992)	Average of All Women on Assistance in 1988
Vocational education and training	High	+78%	14%	18%
Months of paid work experience	High	+47%	3 months	2 months
Toddler in household	High	-30%	30%	49%
Woman's age	High	-3%	33 years	31 years
Infant in household	Significant	-23%	12%	15%
Years of education	Significant	+5%	11 years	11 years
Overnight hospitalization of youngest child	Low	-9%	9%	13%

\* From odds ratio.

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### ***Variables That Did Not Affect the Likelihood of Employment***

We examined many variables in our analysis, and those listed below had no measurable impact on the likelihood of employment:

- parents received welfare while the woman was growing up
- woman's age at birth of first child
- woman's overnight hospitalization (excluding childbirth)
- child with a physical disability in the household
- educational level of the woman's mother or father
- woman's marital status
- child with a chronic or acute illness in the household
- woman's emotional depression (as measured on the depression scale)