

The Forgotten Half

An exploration of factors behind the poor performance of low income men in Project Pioneer, a job training demonstration program in Maine

by

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ABSTRACT

In recent decades, many anti-poverty and job training programs have been focussed on serving women on welfare. The few programs that have tried to serve low-income men have failed to produce consistently significant results. Project Pioneer was a job training program in Maine that served both low income men and women, but were less successful in achieving positive outcomes for their male participants. This paper is a study of the possible factors behind this gender difference in success rates among Project Pioneer participants.

The study points to three factors that seem to be the primary forces behind this gender difference: 1) The men came from a different population than the women, often with years of frustrating experience in the low wage labor market or with barriers that were difficult to address in the three month training program, 2) The training program was designed by people whose primary experience and knowledge was working with women and who had less of an understanding of the different needs of men, 3) Social expectations around the role of men as providers put additional pressure upon the men in the program while other social expectations about male behavior, such as aggression, were counterproductive to success.

The results of Project Pioneer point to the need to develop a better understanding of the different issues of men and to develop new training approaches that take these needs into account.

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The Context

Introduction

What we already know about men and job training programs

Data used in this study

Background and history of Project Pioneer

INTRODUCTION

In recent decades, much of the focus of anti-poverty research and policy has been on women. For a number of reasons this approach is well justified. Women, both historically and today, have lower labor force participation rates and earn less than men. More importantly, single female households account for a large and growing portion of households in poverty. Furthermore, the welfare system has been criticized for trapping women and their families in lives of poverty. The combination of these factors point to a need to help women achieve economic stability and to understand the barriers they face in attaining stable, well-paid jobs.

There are some reasons for concern, though, with focusing all of our attention on women. Recent research has pointed to the importance of male role models for youth, to the possibility that the lack of men with stable employment may contribute to the formation of female headed households, and to the possibility that poor economic prospects may be linked to increases in crime and deviant behavior. Generally, one could argue that an anti-poverty strategy that only focuses on half the population of a community is doomed to failure. In addition, research on inequality has shown that low skill men have suffered a decline in earnings both relatively and absolutely in the past two decades. This trend makes it all the more urgent to turn some of our attention towards the needs of low-income men.

Project Pioneer was a demonstration job training program in Maine that recognized these concerns and sought to include low income men in their program. The project provided basic education, occupational training, and job placement to men and women with incomes below federal poverty guidelines. The project was created in collaboration with Pioneer Plastics, a local manufacturing company, and was designed to prepare participants for work at Pioneer Plastics in jobs starting at \$7.00 an hour with benefits. In its three years of operation, Project Pioneer provided six rounds of training to a total of 111 participants, 49 men and 62 women. Sixty-eight of those participants were working six months after graduation and 61 are currently working.

During the course of the program, the coordinators of Project Pioneer became concerned because they felt that the men were not doing as well in the program as the women. A look at the numbers confirms their suspicions. Table 1 shows participant outcomes grouped by gender. The numbers demonstrate that the men were less successful at each step (completing the program, getting a job, keeping a job), with the final result that only 35 percent of the men are currently employed compared to 69 percent of the women.

Table 1 . Project Pioneer Outcomes by Gender

	Women	Men
Total number of participants	62	49
Completed training	92%	78%
Percent of those completing program who ever found work	91%	76%
Of those who found work, percent employed six months after graduation	85%	79%
Of those employed at six months, percent currently employed ¹	95%	74%
Currently employed ¹ as a percent of total participants	68%	35%

¹This number reflects differing lengths of employment depending upon graduation date.

In many ways, the poor performance of the men in Project Pioneer is not surprising. The following section will provide an account of evaluations of past welfare-to-work and job training programs that have served men. On the whole, these programs have resulted in few significant gains for their male clients while they have shown much more consistent positive effects for women. Given the importance of including men in anti-poverty programs, these findings are a source of concern. The lack of success for men in these programs points to a need to better understand the lives of low income men and the types of programs that can help them, their families, and their communities be lifted out of poverty.

The purpose of this thesis, therefore, is to use the case of Project Pioneer to take a look at the experience of low-income men in a job training program. In particular, the goal of this study is to explore the role that a variety of personal, programmatic, and labor market factors may have played in creating the different gender outcomes documented above. Given the nature of a case study and the information that is available, this study is necessarily limited. The goal is not to measure the exact contribution of each factor. Neither is the purpose of the study to do a formal evaluation of Project Pioneer. Further, without comparison programs it will be difficult to identify which findings are specific to Project Pioneer and which are applicable to a wider population of programs. Given these limitations, the goal of this study is to evaluate the relevance and importance of a number of hypotheses and identify a subgroup of factors that seem to have particularly contributed to the gender differences in Project Pioneer. These identified factors can then serve as a basis for future studies and can identify areas that need to be addressed in future job training programs and public policy initiatives that seek to improve the lives of low income men.

WHAT WE ALREADY KNOW ABOUT MEN & JOB TRAINING PROGRAMS

Government and private institutions in the United States have several decades of experience in developing, running, and evaluating job training programs for disadvantaged individuals. Certain circumstances have conspired, though, that have limited our knowledge of the experience of men in these programs. The purpose of this section is to provide a brief overview of evaluations of these training programs, focussing particularly on the results for men.

MDTA, CETA and the development of experimental evaluations

Job training programs in the United States began in 1962 with the passage of the Manpower Development and Training Act (MDTA). During this period, job training was in fact directed at men, particularly displaced workers. However, there were few evaluations of the projects and therefore little information about whether these programs were successful in serving their clients. In 1973, MDTA was replaced by the Comprehensive Employment and Training Act (CETA). By this period the training programs had broadened to include youth, disadvantaged individuals, and women as major client groups.

Many of the first attempts at formal evaluation were done on CETA programs. In an effort of isolate program impacts from program outcomes¹, evaluators of the CETA programs constructed comparison groups by matching program participants with individuals with similar earning histories. With this method, consistent positive impacts were found for women, but findings for men varied greatly, from small earnings gains to large earnings losses, depending upon the statistical model used (Orr, 1996, pg. 10; U. S. Department of Labor, 1994, pg. 28).

In response to these inconsistent results, more stringent evaluation methods were developed using an experimental design with random assignment to experimental and control groups². The use of the experimental model arose at the time of the early welfare reform movements. During this period, a number of states applied to the federal government for waivers, permission to experiment with different rules and programs that were outside of the normal AFDC guidelines. The experimental evaluation model was seen as an ideal tool for measuring the impact of these waivers and other welfare reform programs. As a result, "most of the studies of employment and training programs for adults focussed on programs for welfare recipients", who are primarily women (Orr, 1996, pg. 12). Table 2 provides details of the experimental evaluations that have been conducted on welfare-to-work and job training programs. As can be seen, most of the studies have been of programs serving AFDC recipients. A small number of the programs

¹ One of the most difficult issues in evaluating a job training program is to isolate program impacts from program outcomes. A program outcome, for example, would be the number of participants employed at the end of the program. A program impact would be the number of participants employed at the end of the program that would not have found employment during that same period of time without the program. Depending upon the population that is being served and other outside conditions, these two numbers can be very different.

² The experimental evaluation assigns potential participants to control and experimental groups. Since these two groups are created randomly from the same population, their members should have similar characteristics and experiences and similar outside conditions except that one group has been through the training program. Any differences in outcomes between these two groups, therefore, is attributed to the program.

served men who were receiving AFDC for Unemployed Parents, but they often were such a small population that it was difficult to measure any statistical impacts. Almost all of the programs evaluated led to earnings gains that were sustained over 3 years for their female populations (Orr, 1996, pg. 13). The large number of experimental studies and consistent findings led the U.S. Department of Labor report to conclude that “disadvantaged females are probably the population with which we have had the most demonstrated success” (U. S. Department of Labor, 1994, pg. 62).

In addition spurring a large number of demonstration projects and rigorous evaluations of those programs, the increase in the welfare rolls in the 1970s and recent welfare reform movements have created widespread interest in understanding the lives and issues of welfare recipients. A body of knowledge has developed around the barriers that welfare recipients and single mothers face in dealing with poverty, in raising their children, and in finding and maintaining employment. Meanwhile, fewer studies or evaluations have been conducted documenting the issues specific to low income men as they participate in job training programs and seek employment.

These circumstances have conspired to limit our knowledge of low income men. There are a few programs, though, that have served men and tried to measure the results. Below is a brief description of these programs and their results.

Table 2. Training program evaluation studies

Program	Yrs of Operation	Target Group	Experimental evaluation
Manpower Development and Training Act	1962-1974	Disadvantaged adults and youth	no
Neighborhood Youth Corps	1964-1974	Disadvantaged youth	no
Job Opportunities in the Business Sector	1968-1974	Disadvantaged adults	no
Job Corps	1964-present	Disadvantaged youth	no
Comprehensive Employment and Training Act	1974-1983	Disadvantaged adults and youth	no
Work Incentive Program	1967-1989	AFDC recipients	yes
Conditional Supported Work Demonstration	1975-1978	AFDC recipients, ex-addicts, ex-offenders , high school dropouts	yes
Homemaker-Home Health Aid Demonstration	1983-1986	AFDC recipients	yes
On-the-Job Training Opportunities in the Private Sector	1983-1986	AFDC recipients	yes
New Jersey Grant Diversion Project	1984-1987	AFDC recipients	yes
Minority Female Single Parent Demonstration	1982-1988	Low-income minority single mothers	yes
Massachusetts Employment and Training Choices	1982-1988	AFDC recipients	no
FAST Demonstration	1985-1988	High school dropouts	yes
Food Stamp Employment and Training Program	1987-present	Food stamp recipients	yes
Job Chance Demonstration	1989-1992	AFDC high school dropouts	yes
Job Opportunities and Basic Skills Training	1989-1996	AFDC recipients	yes
Job Training Partnership Act	1983-present	Disadvantaged adults and youth	yes

Source: (Friedlander, Greenberg, & Robins, 1997).

Supported Work Demonstration

One of the first experimental evaluations was the Supported Work Demonstration, which provided work experience opportunities to disadvantaged individuals. The program served four subgroups: long term AFDC recipients, youth dropouts, ex-addicts, and ex-offenders. Men were represented in the youth, ex-addict and ex-offender groups. The evaluation found large, long-term impacts for the AFDC recipients (almost all women) and small to no effects for the other groups (Orr, 1996, pg. 12).

AFDC-UP

As was mentioned above, a handful of the welfare-to-work programs served AFDC-Unemployed Parent (AFDC-UP) recipients which include men. In general, the evaluation of these programs showed limited success with this population with no statistically significant earnings or employment impacts(Gueron, 1991, pg. 35).

Table 3 shows the results from two programs that included AFDC-UP recipients as participants, both in San Diego.

Table 3. Results from two programs serving AFDC-UP recipients.

	% employed end yr 1	All Participants	AFDC-UP
San Diego 1	experimental	42.4%	53.3%
	control	36.9%	53.7%
San Diego SWIM	experimental	34.7%	38.0%
	control	25.9%	33.7%

Source: Gueron 1991, pg. 35

One important point should be noted from this table: Looking only at the outcome measures (just the experimental groups), the AFDC-UP recipients in these programs actually appeared to be doing better in the program than the experimental population as a whole, which was presumably dominated by women. It is only in looking at the control groups that we see how much less impact the program had on the AFDC-UP population. It seems that members of the AFDC-UP group were much more likely to find work on their own, making the impacts of the program less impressive.

JOBSTART

JOBSTART was a demonstration program for economically disadvantaged school dropouts ages 17 to 21, both men and women. Conducted across thirteen sites, the program focused on a long term training model providing basic education, occupational training, support services and job placement assistance with an average program length of 6.8 months(American Youth Policy Forum, 1997 pg. 73). An experimental evaluation of JOBSTART found that most programs did not produce statistically significant effects for employment levels or earnings. The one exception to this finding was the site run by the Center for Employment Training (CET) in California. CET is known for its unconventional approach to job training, which involves education integrated

into hands-on job training rather than a traditional classroom setting. CET has proven to be effective for a number of different populations and currently efforts are being made to replicate their training model at other sites.

Displaced workers

“Experimental studies of programs for displaced workers also provide a useful point of reference, because they include adult men, who are not well represented in the other randomized experiments” (Orr, 1996, pg. 13). It is important to note, though, the difference between displaced workers and the male participants in training programs for low-income individuals such as Project Pioneer. Displaced workers are people with long-term work histories that have lost their jobs usually due to industry restructuring. Many of the low-income men in programs like Project Pioneer have suffered from chronic unemployment and often face many other barriers to work. Nevertheless, the displaced workers programs do provide a point of reference. Two experimental evaluations of displaced worker programs did find earnings impacts. The Texas Worker Adjustment Demonstration, though, found larger impacts for women than for men (Orr, 1996, pg. 13).

JTPA

In 1983 CETA was replaced by the Job Training Partnership Act (JTPA). While many of the JTPA funded programs for disadvantaged individuals serve welfare recipients, low-income men continue to represent a sizable subgroup of participants. The results of a randomized study of a sample of JTPA programs were recently released. The evaluation looked at four subgroups: adult men (25% of the population), adult women (30%), and out of school youths (male and female). The evaluators specifically chose to look at men and women separately “based upon the accumulated evidence of differences between the impacts of employment and training programs for the two groups” (Orr, 1996, pg. 28). Despite their efforts, the evaluation provided ambiguous results for men. While women showed consistent earning gains, men’s earning gains were “less striking” (Orr, 1996, pg. 103-104). Despite the lack of consistently significant earnings gains, though, the programs were found to be cost-effective for the men (Orr, 1996, pg. 215).

Parent’s Fair Share

In 1988, the Family Support Act mandated that states offer services to their AFDC recipients under the Job Opportunities and Basic Skills Training (JOBS) program and mandated stronger enforcement of child support. The act also authorized five states to run pilot programs giving JOBS services to unemployed noncustodial parents in an effort to help them find employment and meet their child support payments. To date, no quantitative results are available on these pilot programs. However there has been a qualitative study of a number of these pilot programs, titled Parent’s Fair Share, and the experience of their participants. This qualitative study represents one of the few efforts to document the issues and needs of low income men. While the study pointed to a some positive improvements in parenting and self esteem, there seemed to be continuing difficulties and frustration by both the participants and staff in creating successful employment outcomes (Johnson & Doolittle, 1996).

Conclusions

“After thirty years of job placement and training programs for disadvantaged workers, there is astonishingly little reliable evidence on the effects of these programs, outside that already cited for the AFDC population” (Blank, 1994, pg. 189).

Despite the many years of experience with job training programs and the development of rigorous evaluation techniques, our knowledge about the effectiveness of job training programs for men remains low. Results from evaluation have been consistently ambiguous with few documented successes. At the same time, the results for women have been much more consistently positive and significant. It is clear, therefore, that these programs generally have been less successful in serving men.

Project Pioneer then in many ways is not unique in its difficulties in serving men. However, there is a critical difference to note between the results from Project Pioneer and the results from these experimental evaluations. Going back to the AFDC-UP results in Table 3, we saw that looking only at program outcomes (the experimental group results), the men actually did better than the women. The disappointing results were only due to the fact that the male control groups also did much better, making the impact of the program a lot less. In the case of Project Pioneer, we have no control group and the men actually did worse than the women in terms of pure outcomes. This suggests that the gender differences in Project Pioneer were more extreme than in other programs. To a certain extent, then, Project Pioneer was unusual in its difficulties with men or perhaps was serving a different population of men than some of the other programs. This finding suggests that certain aspects of the results from this study may be unique to Project Pioneer and not very applicable to other programs. At the same time, the gender differences in Project Pioneer offer a valuable starting place to study these issues and it is likely that many of the factors identified in this study will hold across other programs and populations.

DATA USED IN THIS STUDY

Information for this study was gathered primarily from two sources. The first source of information was a series of personal interviews conducted with Project Pioneer participants and staff. Thirty participants were selected for interviews from the total 111. Certain restrictions were placed upon the sample: Since the primary purpose of the study was to look at issues of gender, an equal number of men and women were chosen. In addition, program coordinators felt that the project had evolved significantly over the three years and wanted to assure that there was equal representation in the sample among the different years. Following these guidelines, the total group of participants was divided into six groups, a male and a female group for each of the three years. Members within each group were then assigned random numbers and five were selected to be interviewed from each subset. This sampling strategy resulted in an oversampling of men and participants in the later rounds (see Table 10 in the appendix). This issue is not of serious concern since the goal of the interviews was not for statistical testing but rather as a source of ideas and theories. Given these goals, it is perhaps even an advantage to have oversampled the men, since the purpose of the paper is to explore the experiences of men in the program. At the same time, the use of a random sampling process for the interviews was an effort to select a representative set of experiences and for these reasons these sample issues should be kept in mind.

Of the thirty selected participants, twenty-two were actually interviewed. A number of problems accounted for the other eight of the sample who were never interviewed including: moving out of state, lack of a valid phone number or address, unable to contact, and failure to come to a number of appointments. Table 11 in the appendix shows the average statistics of all of the participants, the selected sample, those who were interviewed, and those who were not interviewed. It should be noted that those who were not interviewed had lower program completion and employment rates. This finding is not surprising, since the hardest participants to contact were those who dropped out of the program early on and severed most contacts with program staff.

The actual interviews with project participants ranged in length from fifteen minutes to an hour and fifteen minutes. The interview was comprised of open-ended questions covering personal background, reasons for participating in Project Pioneer, thoughts on the program, and thoughts on the gender issues in the program. A copy of the interview questions is included in the appendix.

In addition to the project participants, interviews were also conducted with program staff including the project coordinator, the project supervisor, trainers, members of the coordinating committee and the director of human resources at Pioneer Plastics. Interviews with project staff focussed on the experience of participants in the program, factors for success, and thoughts on reasons for the gender differences in outcomes.

The purpose of the interviews was to gain the perspectives of those most intimately involved in the program, gather information about participants that was not captured in program statistics, identify themes, gather theories about program success factors, and identify mechanisms through which different factors may have affected the outcomes of program participants.

The second source of information for this study was administrative data collected by project staff on all program participants. The data were collected from a variety of sources including: information from the organization in charge of initial assessment, intake forms with basic participant data, a database maintained by the program evaluator, individual participant files, and status reports submitted to the program funder. The consolidated administrative data contain information about each participant's marital status and children, education, work experience, welfare reciprocity, math and reading test scores, and outcomes. Table 12 in the appendix provides a full list of the administrative data fields. These administrative data were used to provide basic information about program participants and outcomes and for a regression analysis of various participant characteristics and their relationships to program outcomes.

BACKGROUND AND HISTORY OF PROJECT PIONEER

Program origins

Project Pioneer was a demonstration job training and education program funded by the federal Office of Community Services, U.S. Department of Health and Human Services, under the Job Opportunities for Low Income Individuals (JOLI) program. Project Pioneer was the fourth JOLI-funded job training program coordinated by Coastal Enterprises, Inc. (CEI) in Maine. CEI is a non-profit community development corporation that is recognized for its extensive work in economic development. CEI brought to these JOLI projects contacts with companies and knowledge of the business world through its work in financing Maine businesses and creating jobs for low-income individuals.

Project Pioneer first began in April 1994 when the coordinator for Project SOAR, one of CEI's earlier JOLI programs, approached the human resources director at Pioneer Plastics, a local plastics manufacturer, about possible placement of SOAR graduates in the company. Pioneer Plastics was planning for a period of expansion and transition to new work systems and the director suggested that a whole new training program could be created around the company's needs. That summer CEI, Pioneer Plastics, and partner agencies³ applied for and received a new JOLI grant to undertake a three-year training program.

Androscoggin County and the Lewiston/Auburn area

The target area for Project Pioneer was Androscoggin County, located in southwestern Maine. Auburn, the location of Pioneer Plastics, and its twin city Lewiston account for sixty-one percent of the county residents. From the late 19th century through the middle of this century, the Lewiston/Auburn area was a major manufacturing center, drawing large numbers of immigrants from Quebec, Canada. Nearly 90 percent of the population today is of Franco-American heritage.

Starting in the 1950s, the textile and leather manufacturers in Lewiston began to shut down or leave the area. The last of the original mills, Bates Fabrics, closed in 1985. The economic downturn arrived in Maine in 1989 and Androscoggin County was particularly hard hit. At the time that Project Pioneer began, manufacturing continued to be an important source of employment, but the work was primarily in low wage positions, often piecework in shoe manufacturing companies. The historical reliance of county residents on the low-skill, well paid jobs in the mills was reflected in their educational levels. Since work at the mills did not require a high school degree, the adult population in the county had the lowest level of high school

³Project partners were a crucial aspect of Project Pioneer. The role of the partners varied, including directly providing services and training to participants, referring eligible individuals to the program, providing services to individual participants, and serving on the project steering committees. The partners in Project Pioneer included: Coastal Enterprises, Inc., Maine Department of Human Services, Maine Centers for Women, Work and Community, Lewiston Adult Education, Mountain Valley Training/Workforce Development Center (JTPA), Lewiston and Auburn Housing Authorities, Androscoggin Head Start, Cities of Lewiston and Auburn General Assistance Programs, Maine Department of Labor Job Service, and Pioneer Plastics Corporation.

degrees in the state. In addition, the dropout rate in Lewiston High School was twice the state average (Coastal Enterprises, 1994, pgs. 6-8).

In this environment, Project Pioneer was seen as a promising opportunity to improve the basic education levels of Androscoggin County residents and offer them opportunities for work at decent wages.

The program structure

Project Pioneer provided services to 111 participants in six rounds of training. Originally the training lasted six months but later in the program it was reduced to three months as they strove to achieve their goal of serving 150 low-income individuals. The program evolved over the three years, learning from experiences and adjusting to unexpected problems. Although certain aspects of Project Pioneer changed, most of the core components remained the same. The following section details the basic elements of Project Pioneer, focusing on the experiences of and services provided to the program participants.

Recruitment and assessment

In order to be eligible to participate in Project Pioneer, an individual had to live in Androscoggin or York counties and have an income below federal poverty guidelines. Applicants were recruited through a number of methods including word of mouth, referrals from social service agencies, particularly AFDC caseworkers, and press releases. To begin the selection process for each round, a number of orientation sessions were held to provide information about the project and its requirements. Interested individuals would then sign up for an assessment.

The assessment had three basic elements. First, applicants were given the Test of Adult Basic Education (TABE) to measure their math and reading skills. It was decided that applicants needed a minimum score of eighth grade level in both areas in order to enter the program and be able to function successfully at Pioneer Plastics (for instance to be able to read safety and instruction manuals). In addition to minimum skill levels, participants had to have a high school diploma or a GED, or be willing to commit themselves to obtaining a GED during the course of the training. The second component was a two-day assessment at the Workforce Development Center, which evaluated work readiness and focused on the individual's aptitude and interest in manufacturing work. Finally, members of the coordinating committee conducted an interview with each potential participant. This interview covered a number of different topics including work history, work readiness, long term goals, and potential barriers to successful completion of the program.

Training components

Almost all of the training for Project Pioneer was conducted in a classroom setting. Most classes were held at the local community college. The training was comprised of two main components. The first was a basic education component, which included classes in math, technical writing, and computers. The basic education classes mostly taught general skills, but examples were drawn from possible work situations and a number of skills specific to work at Pioneer Plastics were included in the curriculum such as creating and reading production charts. The second

training component was the Employee Effectiveness class. This component covered a variety of topics which might fall under the broad heading of work readiness or “soft skills” including: self esteem, working with others, public speaking and teamwork. In addition to these main components, the training also included a short session on Total Quality Management (TQM), a management system that Pioneer Plastics was planning to implement.

Job placement

Graduates of Project Pioneer were given priority for interviews at Pioneer Plastics. A number of graduates did not interview at Pioneer because they were not interested in working at the company, because it was felt they were not ready for work, or because Pioneer was not hiring at the time (see the section on the single employer model below). Project Pioneer also helped arrange interviews at other local companies offering quality jobs (in particular, referrals were made to other companies that had relationships with CEI and offered jobs paying above \$6.50 an hour). Individuals that had difficulty finding work or were deemed by project staff as not work ready were often referred to Workforce Development for further job search assistance as well as to other social service agencies to address additional issues.

Supportive services

The designers of Project Pioneer recognized the impact that family and social problems have on an individual’s ability to work. To address this issue, they included in the project a Family Intervention component. At the beginning of the program, the project coordinator compiled a listing of social service agencies in the local area. During the course of the training, the coordinator was supposed to meet individually with the participants to help them identify potential family and social issues and develop a Family Intervention Plan, usually referring the individual to appropriate social service agencies. Beyond the formal intervention plans, the project coordinator made individual referrals to social service agencies as issues arose during the training and after graduation.

This element of the project was probably not as successful as it could have been. The project coordinator experimented with timing these meetings at different points during the training, trading off between allowing time for participants to be comfortable with the program so that they would share personal issues and leaving enough time to follow through on these issues before graduation. The most fundamental problem with the Family Intervention component, though, was lack of time and staff. The project coordinator was overwhelmed with the task of running both the program and the Family Intervention element. One of the greatest problems was follow-up. Although it was hoped that the participants would take the initiative to use the social services as part of their desire to complete the program and go to work, this was often not the case. Many participants did not follow up upon their referrals and the coordinator did not have the time to follow through with each participant. This staffing issue was recognized by the program supervisor at CEI who commented that “the project really needed two full-time people: a coordinator and someone in charge of the intervention strategies. I think if we had that, it would have been more of a success”.

The single employer

The reliance on Pioneer Plastics as the primary source of jobs became an important issue in the project. During the first round of training Pioneer Plastics hired practically every graduate of the program. During the second round of the project, though, right before graduation, Pioneer Plastics had general layoffs and dismissed a number of their employees including all of the first round graduates. This event had several ramifications. First of all, the project coordinators had to go to "Plan B", which consisted of working to find employment for participants in other local companies that CEI had relationships with. Perhaps more important, though, was the change in attitudes. The single employer design focused all of the participants' energy and training toward a single goal and created an assumption for many of the participants that they were guaranteed a job upon graduation at Pioneer. The layoffs shattered the expectations of the second round and created hostility toward the project and its staff among the participants. Eventually, Pioneer recalled its workers including the first round participants and continued to hire graduates of later rounds, but never at the same levels as the first round. In reaction to these events, the language of the project was modified to de-emphasize the focus on Pioneer Plastics and to emphasize that no job was guaranteed. Even in later rounds, though, the assumption remained among some participants that work was guaranteed at Pioneer.

The layoffs at Pioneer also severely hurt the project's ability to recruit participants. While the first and second rounds had many times the number of applicants as positions, recruitment of potential participants became a continuous problem in later rounds. Beyond a general decrease of enthusiasm for the project, the layoffs caused the ASPIRE program (Maine's version of JOBS, an AFDC program and a major source of referrals) to withdraw from its position on the coordinating committee.

While this experience may speak strongly against the single employer model, it is also important to recognize the strengths that it brought to the project. The single employer model brought a real commitment to the project by Pioneer Plastics, particularly the human resource director. The project supervisor at CEI commented that "in terms of the company, we couldn't have had a better partner. They met us more than half way".

In addition, the single employer model was important in reaching the project's employment goals. Of the 61 people currently employed from the project, 31 are employed at Pioneer Plastics. Pioneer Plastics has been a significant source of employment and has shown a commitment to the project both in hiring participants and in working to keep them employed. In addition to the numbers, it is also important to look at the quality of the jobs. While there was some concern among both staff and participants about the jobs at Pioneer, in particular the repetitive work and late night shifts, Pioneer Plastics offered considerably better jobs than most other options. The company offers full benefits and pays for employees to continue their schooling. In addition, looking over the employment data for the participants, it is clear that Pioneer Plastics offered better starting wages and better pay raises than any other positions that participants found, including employment in the "Plan B" companies. Table 4 shows the average

wages of participants who found employment. It is clear that those participants who are working at Pioneer earn considerably more than those working in other companies⁴.

Table 4. Average wages for participants employed at Pioneer Plastics versus other employment.

	Pioneer	Other Employment
Currently employed	\$8.91	\$6.77
Ever employed ¹	\$8.69	\$6.78

¹ The highest wage reached by a participant after program completion.

⁴ It is possible that some of the wage differential could be because those in the non-Pioneer group may represent less work-ready participants who applied to Pioneer Plastics but were not hired. However, the non-Pioneer group also includes participants who never applied to Pioneer for a variety of reasons, including the period of layoffs and shift issues. It seems unlikely, therefore, that this wage difference is purely due to individual employability.

Examining Gender Differences in Success Rates

Defining success

Explanations for the different outcomes of men and women

Participant characteristics

Program characteristics

Labor market and post-program factors

Conclusions

DEFINING SUCCESS

For most job training programs, success means employment. However there are many different ways to define success. In the interviews with Project Pioneer participants almost everyone said they considered their experience in the program to be a success, even though many were not employed. A number of interviewees cited the positive impact that Project Pioneer had on their self-esteem. At least two of the participants credit the program for helping them leave abusive relationships. For many of the interviewees, Project Pioneer was the first thing in their lives that they had completed.

- “It was a success because it was something I made an effort to complete and I did well at it.” [female participant, unemployed]
- “I thought my experience was a success. It was a good achievement to start and go through with it.” [male participant, unemployed]

For a handful of the interviewees, Project Pioneer brought about changes in life goals. In particular, Project Pioneer helped them overcome fears about school, created interest in continuing their schooling, or helped them realize new possibilities.

- “It bettered my life. It showed me things were possible, more than just existing in a factory.” [male participant, working at Pioneer]

Meanwhile, a “successful” (employed) participant recognized other opportunities that she missed by going into Project Pioneer:

- “I regret having done the program, I should have stuck with ASPIRE and gone to college.” [female participant, working at Pioneer]

For many participants, therefore, their employment outcome in the program did not necessarily represent their own view of success.

These examples demonstrate how important it is to acknowledge different forms of success and incorporate them into program evaluations. Recognizing this importance, though, this study by necessity takes the narrow and formal approach to success that focuses on employment outcomes. There are two reasons for taking this approach. First of all, employment outcomes are available for all project participants and are relatively comparable across individuals. It is

beyond the scope of this study to measure, collect data on, and evaluate other forms of success for all participants. Secondly, job training programs are usually designed and evaluated upon the goals of program completion and employment, and it is upon these measures that it was concluded that men were performing worse than women in Project Pioneer. Given the importance of these outcomes, both as a poverty alleviation strategy and as the basis for future funding and policy, it is critical to understand why Project Pioneer and other job training programs have had difficulty attaining success for men along these traditional outcome standards.

Given the decision to focus on employment outcomes, success was defined for this study, particularly the quantitative aspects, by achievement of two steps: 1) completing the training and 2) being employed six months after graduating from Project Pioneer. Ideally, we would like to divide the outcomes further, such as early dropout vs. late dropout, never got a job vs. got a job and lost it, employed at six months vs. currently employed. Given the small number of people who were participants in the program, however, dividing them up so finely would leave few participants in each group upon which to generalize. The six month time period was chosen because the last round was completed in the summer, so six months was the longest period upon which all participants could be compared. Table 5 shows the success rates of men and women in Project Pioneer based on these definitions. These numbers show that men in Project Pioneer did worse than women in both of the stages of success.

Table 5. Success rates by gender.

	Women	Men
Total number of participants	61	49
Completed training ¹	93%	78%
Of those who completed, percent employed six months after graduation ²	77%	61%

¹A t-test that the two values are equal results in a p-value of 0.052.

²A t-test that the two values are equal results in a p-value of 0.099.

EXPLANATIONS FOR THE DIFFERENT OUTCOMES OF MEN AND WOMEN

Possible factors behind the gender difference in outcomes for Project Pioneer can be divided into three broad categories: 1) individual participant characteristics, 2) program elements, and 3) post-program factors.

Personal characteristics is the area in which we have the most details. Information gathered for this study included administrative data with personal information about each participant as well as interviews with participants which included discussion of personal histories and situations. In addition, we have, to a limited extent, comparison groups in that the men and women went through the same program but had different outcomes⁵. In the areas of program elements and post-program factors we have a number of clues, but conclusions are a lot less certain. There is no program to compare Project Pioneer to in order to evaluate how outcomes might be different with another program design. Not only does this lack of comparison make it harder for the researcher to evaluate various factors, but without a comparison program to refer to it was much harder for participants and staff to reflect on their own experiences (without knowing the alternatives, it's hard to say what is better or worse about a program).

Participant characteristics

In looking at participant characteristics and their role in the gender gap, we are looking for answers to a number of questions:

- How similar were the men and women who participated in the program?
- What were important characteristics for success in Project Pioneer?
- Were these factors for success different for the men versus women?
- How did preexisting attitudes, social expectations, and gender roles affect participant outcomes?

Based on the information in the interviews and basic administrative data, it seems like men and women were recruited from different sources. The AFDC system provided an easy source of referrals for female participants into the project. In order to recruit men, Project Pioneer staff had to look more widely and perhaps had to be more willing to accept men with different backgrounds. Table 6 shows the population groups from which Project Pioneer participants were recruited divided by gender. According to the table, over 60% of the female participants were AFDC recipients while the male participants came from a much wider variety of populations. It is therefore a strong possibility that male Project Pioneer participants came into the training with very different past experiences and barriers to work.

⁵ Of course, they are not real control groups because they were not randomly assigned. In fact, as is discussed in this paper, it is clear that the men and the women came from rather different populations.

Table 6. Project Pioneer male and female target populations.

Population	Women	Men
Unknown	5%	6%
AFDC	64%	25%
Low Income	23%	31%
Unemployment Insurance	7%	2%
Homeless	2%	6%
Disabled ¹		10%
Felon		2%
General Assistance		15%
Veteran		2%

¹ Disabled includes people recovering from substance abuse.

Table 7 lists the average values of the variables available in the administrative data for the full group, male, and female participants in Project Pioneer. The table shows that there were indeed a number of differences between the men and women entering the program. For instance, the male participants in Project Pioneer were on average older with more work experience, fewer months of public assistance, and more likely to be married. We can conclude from this table that these differences existed, but we cannot conclude which, if any, of these differences mattered and why.

In order to evaluate the importance of different personal characteristics, we can look to two sources: the qualitative interviews and regressions using the quantitative data. The regression model approaches this issue by dividing the participants into three groups: dropouts⁶, those who completed the training but were not employed six months later (completers), and those who were employed six months later. The regression then estimates which variables vary significantly among these three groups⁷. A statistically significant coefficient for a variable (those that are bold) tells us that, holding the other factors included in the model constant, there is a significant relationship between that variable and the likelihood that an individual will have one outcome versus another⁸. The variables used in the regression estimations are the same as those in Table

⁶ It is important to note that the dropouts include anyone who left Project Pioneer, regardless of whether they found a job later or not. This approach was chosen for two reasons. First of all, the program did not attempt to follow up with most of the dropouts, so for the most part their employment status is unknown. Secondly, the purpose of this study is to look at the success of Project Pioneer in serving their clients. Therefore we are primarily interested in looking at those people whose employment is at least partially due to the training and job placement assistance of the project. Looking only at program graduates takes us closer to measuring this type of impact.

⁷ A multinomial logistic model is used for these estimates because there are three outcomes. In the case of the estimates for women only, there were not enough female dropouts to estimate the equation, so a simple logistic regression was used to estimate whether or not graduates were employed six months later. More details on the choice of models and other statistical issues are in the appendix.

7. A full listing of the variables and their definitions are in Table 12 in the appendix. For a detailed description of the regression models and statistical processes, refer to the appendix.

The regression models are used as a way to frame the first part of the discussion on personal characteristics. In this first section, the qualitative data from the interviews, as well as relevant information from other studies, is used to support or contradict the statistical findings and to suggest the mechanisms through which these findings might affect the gender difference in outcomes. At the end of the discussion of the regression models, we draw on the qualitative information more heavily to look at the impact of individual characteristics that were not addressed in the quantitative data.

⁸ More specifically, the coefficient on the variable reflects how a one unit change in the variable would affect the natural log of the odds, or relative probability, of a participant outcome falling into one of two categories. Because of the difficulty in interpreting these numbers in an easy to understand way this paper will focus more on the statistical significance levels and signs (positive or negative) of the coefficients rather than their mathematical interpretations. For those who are interested, though, the mathematical equation is:

$$\sum \beta_{jk} x_i = \ln[P_{ij}/P_{ik}]$$

Where P_{ij} represents the probability that individual i will have an outcome j , P_{ik} is the probability of outcome k for i , and β_{jk} is the coefficient for variable x in the equation that compares outcomes j and k .

Table 7. Full group, male, and female average statistics.

Variable	All Participants		Men		Women		p-value ¹
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	
Female	0.560	0.499					
Work Exp.	12.211	9.285	16.199	8.588	9.073	8.642	0.000
Age	33.376	8.296	35.479	8.701	31.721	7.634	0.018
Less than HS	0.092	0.290	0.125	0.334	0.066	0.250	0.290
High School	0.339	0.476	0.271	0.449	0.393	0.493	0.183
GED	0.330	0.472	0.375	0.489	0.295	0.460	0.383
Further Ed.	0.239	0.428	0.229	0.425	0.246	0.434	0.841
TABE math	10.000	2.099	9.794	2.026	10.162	2.157	0.365
TABE reading	11.982	1.431	12.156	1.231	11.844	1.566	0.260
AFDC	27.697	39.401	5.875	13.802	44.869	44.321	0.000
GA	1.752	5.477	2.729	7.112	0.984	3.608	0.099
FS	30.615	36.841	12.375	15.590	44.967	42.156	0.000
Married	0.165	0.373	0.313	0.468	0.049	0.218	0.000
Dependents	1.239	1.154	0.813	1.123	1.574	1.072	0.000
Year 1	0.514	0.502	0.625	0.489	0.426	0.499	0.040
Year 2	0.220	0.416	0.146	0.357	0.279	0.452	0.098
Year 3	0.266	0.444	0.229	0.425	0.295	0.460	0.444
First Half	0.596	0.493	0.688	0.468	0.525	0.504	0.087
Second Half	0.404	0.493	0.313	0.468	0.475	0.504	0.087

¹ The p-value is for a t-test that the male and female averages are equal.

The regression results

Table 8 presents the results from the estimations of three regression models. For the first two models there are three sets of coefficients comparing each of the three groups of outcomes. Model 1 is an estimation using the total sample of participants. The first column in Model 1 compares those who dropped out of the program to those who completed the program but were not employed six months later (completers). Any number in bold means the coefficient for that variable is statistically significant. For instance, the positive and significant value for work experience in the first column tells us that higher levels of work experience increases the likelihood of being a completer versus dropped out. The negative and significant value for the marriage variable, on the other hand, suggests that being married decreases the likelihood of completing the program versus dropping out. The second column in Model 1 compares those who dropped out to those who completed and were employed six months later, the last column compares those who were completers to who were employed at six months.

The coefficients for the female variable in Model 1 measures whether, holding all the variables included in the model constant, the outcome for the women is different from the men. It is interesting to note that the coefficient for the female variable comparing dropouts to completers is not statistically significant, and the same coefficient for dropouts vs. employed is only slightly significant. This finding suggests that most of the difference between men and women in terms of dropping out is explained by differences in the measurable characteristics of the male and female participants when they entered the program. Once these characteristics are controlled for, the difference between men and women in terms of dropping is much less. On the other hand, the female coefficient in the model looking at employment rates is statistically significant, telling us that there is a significant difference in male and female employment rates even after differences in the other variables are controlled for.

Models 2 and 3 present results from separate estimations for men and women. These models show that some of the variables that are related to success are different for men versus women. Because there were only four women who dropped out of the program, it was impossible to do a estimation using the dropout group. We are therefore only able to compare the completers to the employed. In addition, only three of the women in the sample were currently married and living with their spouses and all three completed the program and were employed. Because of this close relationship between success and marriage, it was statistically impossible to estimate the model and the marriage variable had to be dropped from the equation.

The rest of this section will go through each of the sets of variables included in the regression models, bringing together the quantitative and qualitative results.

Table 8. Logistic regression estimates of the likelihood of completing Project Pioneer and being employed six months later.

	Model 1: Full Sample			Model 2: Men			Model 3: Women
	Drop vs. Comp.	Drop. vs. Emp.	Comp. vs. Emp.	Drop vs. Comp.	Drop. vs. Emp.	Comp. vs. Emp.	Comp. vs. Emp.
Female ^a	0.24 (0.16)	2.19 ⁻ (1.69)	1.96 [*] (2.42)				
Work Exp.	0.25 ^{**} (2.92)	0.20 [*] (2.46)	-0.05 (-1.38)	0.29 [*] (2.51)	0.10 (0.99)	-0.19 [*] (-2.27)	0.04 (0.69)
H.S. ^b	0.91 (0.56)	1.12 (0.77)	0.21 (0.19)	1.76 (0.68)	1.00 (0.45)	-0.76 (-0.44)	0.49 (0.27)
GED ^c	0.06 (0.04)	-0.21 (-0.16)	-0.28 (-0.26)	-0.80 (-0.39)	-0.80 (-.47)	0.00 (0.00)	-0.25 (-0.14)
Further Ed. ^b	-0.92 (-0.55)	0.02 (0.01)	0.90 (0.75)	-3.06 (-1.18)	-0.99 (-0.48)	2.07 (1.02)	0.80 (0.43)
TABE math	0.40 (1.54)	0.39 (1.69)	0.00 (0.19)	0.03 (0.08)	0.40 (1.30)	0.37 (1.31)	-0.19 (-0.89)
TABE reading	-0.13 (-0.37)	-0.14 (-0.32)	0.00 (-0.02)	0.03 (0.05)	0.15 (0.36)	0.12 (0.50)	-0.07 (-0.22)
AFDC	-0.04 (-1.34)	0.00 (-0.04)	0.04 (1.57)	-0.07 (-0.83)	0.03 (0.74)	0.10 (1.14)	0.03 (0.80)
GA	-0.04 (-0.36)	-0.05 (-0.46)	-0.01 (-0.17)	-0.07 (-0.53)	0.07 (0.55)	0.15 (1.35)	-0.11 (-1.12)
FS	0.06 ⁻ (1.79)	0.01 (0.33)	0.05 ⁻ (1.95)	0.09 (1.25)	-0.07 (-0.78)	0.17 ⁻ (-1.86)	-0.03 (-0.93)
Married ^d	-3.96 [*] (-2.35)	-0.04 (-0.04)	3.92 ^{**} (2.95)	-5.14 [*] (-2.09)	-0.88 (-0.45)	4.26 [*] (2.18)	
Dependents	1.15 [*] (2.05)	0.50 (0.92)	-0.69 [*] (-2.17)	1.38 (1.31)	0.98 (1.06)	-0.39 (-0.54)	-0.76 [*] (-1.97)
Year 2 ^e	2.06 ⁻ -1.76	-1.15 (-1.22)	0.91 1.11				
Year 3 ^e	0.63 (0.50)	-0.01 (-.01)	-0.64 (-0.97)				
Second Half ^f				0.25 (1.74)	0.21 (0.13)	-0.04 (-0.04)	-1.13 (-1.36)
Observations	109			49			58

Notes: -p<0.10 *p<0.05 **p<0.01 ***p<0.001

T-statistics are in parentheses.

^a A dummy variable with Male as the reference category.

^b A set of dummy variables with Less than High School Education as the reference category.

^c A dummy variable with Unmarried as the reference category

^d A set of dummy variables with Year 1 as the reference category.

^e A dummy variable with First Half as the reference category.

Work experience & age

Work experience is seen as one of the most important forms of human capital because it has a direct relationship to the ability to find and perform work. Pioneer participants came in with a diverse range of work experience, from 0 to 30 years in positions ranging from temp jobs to carpenter. Many of the participants, though, had little or erratic work experience. Many of the participants who were interviewed discussed their frequent experience and frustration with layoffs and temporary work⁹. Many of the participants and the staff pointed to their poor work histories as a significant barrier to work.

Even though they represent different concepts, age and the number of years of work experience are often closely related. Ideally, we would have both age and work experience in the regression model to see how each individually was related to success. However the two variables were so closely related for the Project Pioneer participants that it was difficult to measure any significant effects of one variable independent of the other¹⁰. As a compromise, only the work experience number was included in the final regression model. It is important to note, therefore, that the work experience number actually represents some sort of combination of effects of both work experience and age.

Looking at the regression results, the work experience coefficient shows a significant positive relationship with completing the program for both the total sample and male sample (this number is not estimated for the female sample). This finding suggests that those participants who had more work experience (or who were older) were more likely to complete the training program. The Project Pioneer training program did involve a substantial amount of time commitment, structure, and discipline. It seems reasonable that participants who had experience in the work world or who were older and more mature would be more successful in meeting these requirements. Looking back at averages for men and women in Table 7, though, we see that the men in Project Pioneer were on average older and came in to the program with an average of 16 years of work experience while the women averaged only nine. Given these numbers, we would expect more of the women to drop out, not more of the men. This finding therefore does not help us much in understanding why men dropped out at a higher rate.

Looking at the models comparing those who only completed the program to those who were employed six months later, we see the surprising result of a negative relationship between work experience and employment success for the men. It seems that, of those who completed the training, the male participants who had more work experience were less likely to be employed six months later. A theory came out of the qualitative research that anticipated this result. The theory was that years of experience actually reflected a disadvantage in that it showed “years of failure”. It is important to remember that the program was designed to serve people who were not doing well in the labor market. Therefore, anyone with years of positive work experience would not need the program. In general, it seemed that larger economic forces (high

⁹ When asked to describe their ideal job, many of the participants cited stability as an important factor.

¹⁰ The correlation coefficient between work experience and age was .78 for the total group, .88 for the men, and .69 for the women.

unemployment rates, layoffs, plant closings) were a major source of problems for many of Project Pioneer participants. Given the fact that the participants came into the training program unemployed, or at least at low incomes, and given the conditions in the labor market, high levels of work experience in this situation could indicate: 1) frustration, anger, low-self esteem, or hopelessness stemming from years of layoffs and unstable jobs¹¹, or 2) a more underlying problem related to work and employability that has kept them from finding and keep stable work such as poor work habits, poor social skills, mental illness, aggressive behavior, or problems with authority. Both of these situations would create barriers to future employment.

Meanwhile, it was suggested in a number of interviews that the women had ended up in the program not because of poor work experiences but because they had been out of the workforce on welfare and taking care of their children.

- “[The women] just ended up [on welfare], maybe they were really good workers.” [male participant]
- “The women who we deal with have been out of the workforce for 15-20 years. They have no history of failure. Once they get a job they seem to do OK.” [staff]
- “Men would be working if they didn’t have social barriers.” [staff]

This phenomenon was noted in other training programs as well:

- “It is easier to improve the employment and earnings of those who do not spend much time in the world of work (for example young mothers) than those who are already in the labor force but fail to find and keep steady, well-paying jobs (for example, poorly skilled young men)”(American Youth Policy Forum, 1997, pg. 75).

It is also possible that this negative work experience coefficient reflects some sort of displaced worker phenomenon. If the years of work experience before the program did in fact reflect positive, stable work experience for some participants, then one would suppose that some sort of problem disrupted that work to bring the participant to the program. This type of displaced worker participant might find it much more difficult to transition into a new line of work, particularly one with lower pay. In fact, studies have concluded that short term training and job search does not work well for dislocated workers (U. S. Department of Labor, 1994, pg. 53). At least one of the male participants that was interviewed fit the displaced worker profile, a long time carpenter who because of an accident was forced to give up his occupation.

Education and basic skills

“An extensive body of human capital research links educational attainment with earnings”(Gueron, 1991, pg. 218).

Numerous studies have shown that there are substantial earnings returns to each additional year of education, and that these returns have grown significantly over the last two decades. In

¹¹ The Parent’s Fair Share study also identifies this factor as a barrier to work, referring to it as “general anger at a system that they perceive as repressive and hostile” (Johnson & Doolittle, 1996).

addition, a study of high school graduates found that those with strong basic math skills had significantly higher wages than those with poor math skills six years after graduating from high school (Murnane, Willett, & Levy, 1993). These sorts of studies are the rationale behind training programs like Project Pioneer that seek to increase the basic education and skills of low income individuals.

The question here is whether a participant's education and basic skills entering the program are important for either completing the program or for being employed. The benefit of education can really be divided into two parts, holding a degree and gaining knowledge. In this study, we have two different measures that try to capture these two different aspects of education: education levels and scores from the Test of Adult Basic Education (TABE).

Education levels

It is possible that education levels in themselves affect outcomes in Project Pioneer. Educational degrees are often important requirements for finding work. Employers often use degree requirements as a way to sort potential applicants. Based upon these ideas, one might expect to find that those participants with degrees were more successful in finding work. In addition, a degree also might reflect commitment and the ability to succeed in a classroom setting, possibly increasing the likelihood that the participant would complete the training program.

These ideas were investigated in the regression models by adding variables that represented having a high school degree, a GED, or education beyond the high school level. The coefficients of these variables reflect whether participants with these degrees had different outcomes from those who did not have a high school degree when they entered the program. Surprisingly, the regression results show that there was no significant difference in success rates among the different educational groups¹².

TABE scores

The TABE scores are used to measure how important mastery of basic math and reading skills are in completing the program and finding work. Project Pioneer's staff had differing opinions about the importance of basic skills:

- "There is little correlation between a person's education, math and writing, and employability." [Project Coordinator]
- "The barriers have little to do with the educational piece and abilities" [staff]
- "There were some in the program whose intelligence level was so low that they could not grasp what was a very basic course, it could not really be watered down any more. But there were some who simply couldn't grasp...I don't know what luck they would have in a basic job since they had trouble following simple directions." [Instructor]

¹² This finding holds true no matter which of the educational groups is used as the base category for the set of dummy variables.

Looking at the interviews with project participants, there were some indicators that educational skill levels had an impact upon their experiences in the program:

- “Education-wise, it was a review of junior high school” [female participant, employed at Pioneer, entered the program with a GED]
- “The class was taught well, considering the diverse abilities in the class. For me, I would be bored at times, but I was sitting next to a woman who was really confused and struggled.” [female participant, unemployed, entered the program with some further education]

The regression results in Table 8 found no statistically significant relationship between scores on the TABE tests and the two measures of success.

Conclusions about education

Despite the research evidence on the importance of education in determining wages and life outcomes, the results from Project Pioneer fail to reflect this importance in the success rates of participants. One possible explanation for this phenomenon is that this importance is real but is lost in the statistical analysis. Considering the possibility that educational level and TABE test scores could be closely related in a way similar to age and work experience, models were run with each set of measures individually to see if somehow education measures as a whole had an effect on the success measures. Neither of these models returned significant effects for education. Another likely possibility is that since the program required a minimal level of education and skills there is not enough variation in test scores or education levels to pick up the impact of education on success rates¹³. The regression results tell us that there does not seem to be large differences in success rates for people ranging from just less than a high school degree to a year or two of college. It is quite possible that more extreme levels of education would show an impact on success rates.

A second possibility is that education levels in reality had little or no impact on Project Pioneer outcomes. This finding would confirm the feelings of a number of the staff that other factors related to life situation, experiences, etc. were more important in determining outcomes than education and skill levels. At the same time, this finding would question some of the fundamental elements of the program. If education and skill levels are not that important, then one would question the appropriateness of screening project applicants based on these characteristics. Furthermore, one might question the purpose of a program that teaches basic skills if skill is not an important factor in success. Clearly this is an area that requires further investigation in other job training programs.

Welfare reciprocity

Many of the participants, particularly the women, came to Project Pioneer through a public assistance office and almost all of the participants who were interviewed had received public assistance at some point in their life. Criticisms of the welfare system were common in the

¹³ Also, as is discussed in the appendix, a number of the TABE math scores were missing and had to be imputed. Since the imputing is based upon existing values, it is possible that the imputed values had less variation than the true values.

interviews. Three general theories came out of the interviews to describe how welfare reciprocity may impact program performance. First, many interviewees, both participants and staff, suspected that a number of the project participants were using the welfare system as a way to avoid work and only joined Project Pioneer as a way to continue to receive benefits.

- “She was basically only in it because the food stamp person told her she had to be so she was afraid to quit...It seemed like she wanted things right away easy.” [male participant referring to a woman who eventually dropped out]

This type of accusation of other participants’ motives was common. Of course, few of the interviewees admitted that they themselves were one of these people. A second theme was the negative incentives built into the welfare system that made it difficult for a recipient to transition to work.

- “I went on it because people said it was a good thing, it helps you. I felt it dragged me down more. You get a job and they take things away. There’s no point in getting a job. It holds people back.” [female participant who dropped out]

Finally, many of the interviewees pointed to the social stigma and negative psychological impacts of receiving welfare.

- “I had no purpose in life, I was suicidal.” [female participant, unemployed]
- “[Project Pioneer] put us on a schedule. For some people that was a big thing. Public assistance allows you to linger if you can produce the right circumstances.” [male participant, employed]
- “It was really depressive. Once I entered the program and was in school it really boosted my self-esteem. I feel better not being on welfare.” [female participant, employed]
- “My hunch is that men do not cope with welfare as well as women. They are more hostile.” [staff]

These negative views of the welfare system are obviously more widespread than within Project Pioneer. Growing criticisms of the system nationwide have driven the welfare reform movement. The negative impact of long-term welfare reciprocity has also been recognized in the job training evaluation literature where long-term recipients are often identified as a particularly disadvantaged group.

Given these views, the quantitative results of Project Pioneer are not as strong as might be expected. First of all, the women in the program had much higher welfare reciprocity rates than the men, which would lead us to think that the men should be doing better than the women in the program. The regression model in Table 8 estimates the impact that length of receiving assistance has on participant outcomes and tests the theory that long term welfare recipients are among the hardest to serve in job training programs. Surprisingly few of the measures of welfare reciprocity are statistically significant in this model. Months receiving Food Stamps appears almost significant in few instances, but with the strange finding that it has a positive, rather than

negative, impact on outcomes¹⁴. A number of other models were estimated to test whether simply having received assistance, regardless of the amount of time, had an impact on program outcomes¹⁵. In one instance, it was found that having received AFDC had an almost significant negative effect on being employed versus a completer (coefficient=-2.23 p-value=.051). There is, therefore, some evidence to support the idea that welfare reciprocity had a negative impact upon participant outcomes. This variable was not significant, however, for the separate male regression model. These findings lead us to conclude that, at least for Project Pioneer participants, the length of welfare reciprocity was not as important as we might expect in determining participant outcomes and does little to explain the gender difference in outcomes.

Marital status

Marital status can be thought of as a measure of social, logistical, and economic support. In the regression model, only those who were married and living with their spouse when they entered the program were counted as married, since the impact of marriage should primarily be due to having the spouse in the household. Only three of the female Project Pioneer participants fit this definition of marriage when they entered the program. All three of these women completed the training and were employed at six months. The small number of married women and their similar outcomes made it impossible to include the marriage variable in the model using only women. The regression estimates for the total sample and the men, though, show large and significant relationships between marital status and the success measures. It seems that the Project Pioneer participants who were married were much more likely to either drop out of the training or be employed six months after the program, and least likely to complete the program but not be employed. These results are very surprising because they are so strong and yet there do not seem to be too many logical explanations for this phenomenon. Two possible theories could fit these results, neither of which we have data to test. The first is that the two different results represent two different marital relationships. Those participants with poor marriages would drop out of the program early on, while those with supportive spouses would benefit from that support and be more likely to succeed. A second theory is that married participants felt more pressures to find work, which would result in them either leaving the program to find work immediately or sticking with the program as a way to find good jobs. It is also possible that the results for marriage are more due to an unusual coincidence in the small number of married participants in the program than any real relationship between marriage and success rates. Given the strong results in the regression equations, however, it is likely that marriage has at least a minor relationship with success rates.

¹⁴ AFDC and Food Stamp reciprocity were closely correlated, but removal of one of these variables from the model, in a fashion similar to the way age and experience were treated, still did not result in statistical significance.

¹⁵Two models were tested. The first was a dummy variable equal to one if the participant had received any type of assistance in the past. This model resulted in no statistically significant findings. The second model was a dummy variable equal to one only if the participant had received AFDC payments in the past. This variable led to a statistically significant negative coefficient for the dummy in the comparison of completers to employed for the total population.

Number of dependents

Project Pioneer participants and staff pointed to two conflicting impacts that children could have on individual outcomes. On one hand, children could be a source of motivation. During their intake interviews, many participants discussed wanting to improve their children's lives as a reason for entering the program. Project staff saw the influence of this motivation in participant behaviors and this positive influence of children as a possible explanation of the gender differences in outcomes.

- "I would say that a majority of the participants have used [drugs] at one time, but the women have recovered and stopped... No matter how bad their actual child-rearing skills are, they really do care about their children and because of that they don't use." [staff]
- "Some of the men were not parents. Being a parent creates additional incentives and motivation." [staff]

This positive influence of children seems to be reflected in the regression estimates¹⁶. It seems that those who dropped out of the program were less likely to have children than those who completed the program but were not employed six months later. The number of children, therefore, seems to have some relationship to the decision to complete the program versus dropping out.

On the other hand, children were also a source of difficulty and stress. Child care arrangements were a serious barrier to work for a number of the single parents, particularly evening child care which was necessary for work in Pioneer Plastic's available shifts.

- "[Child care] is a constant issue even now, day by day." [female participant employed at Pioneer]
- "Finding sitters at night was one of the hardest things I've done in my life." [female participant who left Pioneer because of child care problems]

This negative impact of children is also reflected in the regression estimates. It seems that of the participants who completed the training, those living with more children were less likely to be employed at six months. This effect is not significant in the separate regression for men, but continues to be significant for the women. To look more closely at this phenomenon, a second regression was estimated with a variable that simply measured whether there were children in the household, regardless of the number. This model resulted in similar and slightly stronger results for completing the program, supporting idea that child is a source of motivation for completing but more children may not necessarily motivate more. On the other hand, the coefficient for number of kids is more statistically significant for employment versus completing, suggesting that there is something about having an additional child in the house that further decreases the likelihood of getting work. This could be due to increased difficulty or expense of childcare, or, since we have no measure of the child's age, could be an indication that at least one of them is

¹⁶ As with the married variable, the dependents variable only counts the number of children living with the participant, with the assumption that the strongest effects will be through direct contact and responsibility for the children.

young and therefore requires more care. This negative effect of children, though, does not help us in explaining the poor performance of the men in the program. The women on average lived with more children than the men, so with this effect we would expect the women to be doing worse than the men.

Additional qualitative issues on personal characteristics

While the quantitative data is helpful in identifying important characteristics and testing the plausibility of a number of theories, it is necessarily limited. Many characteristics of Project Pioneer participants were either not recorded or impossible (or at least very costly) to measure accurately. There is considerable evidence that a number of these unmeasured characteristics were very important in determining outcomes. For instance, Project Pioneer staff often discussed the very challenging and tiring nature of their work. Usually, though, their discussions did not focus on barriers due to measurable characteristics (poor work history, math skills, etc.) but rather on the attitudes and personal issues that they struggled to help the participants overcome. The remainder of this section on personal characteristics, therefore, covers the unmeasured participants' characteristics that were identified in the interviews as important determinants of success in Project Pioneer.

Attitudes, motivation, and readiness

- “It was up to the person whether or not they benefited from it. You can't make someone benefit. It's a needed program in society. Unfortunately, you need to be motivated.” [female participant, employed at Pioneer]

It is almost impossible to get through a discussion about factors for success in a job training program without hearing the words attitudes, motivation, or readiness. Other evaluations of training programs have come upon these same conclusions.

- “‘They weren't ready' is the most frequent explanation that staff and trainees give for why some participants drop out of YouthBuild” (Ferguson & Clay, 1996).

Themes of motivation, readiness, and attitudes were present in many of the interviews with Project Pioneer participants and staff. In general, three different aspects or results of motivation and readiness were identified:

Commitment to the goal of work. This commitment was often contrasted with those who found life on welfare acceptable.

- “I think Project Pioneer best serves the purpose of weeding out the individuals who are not determined enough to attain full time employment...I have to say that Project Pioneer is a vehicle for people who are already set on finding employment.” [female participant, employed at Pioneer]
- “Early on, we looked at their work history, their child care plan. They can have all that, but if they are not committed they won't succeed.” [staff]

- “The value toward work is what made or broke them. There were people who said they hated being on assistance, but they didn’t really hate it that much. It was an acceptable lifestyle.” [staff]
- “Maybe those who felt that it [being on welfare] was the most demeaning are the ones who have more motivation, feel like they need to do something in life.” [staff]

Seriousness and maturity.

- “The first round interviewing process was not strict enough. I felt like I was the only one who was serious.” [female participant, unemployed]
- “[The women] were really there to learn. A couple of guys were trying too, but the girls more. They were more mature.” [male participant, unemployed]

Following through.

- “They were all fired up when they were being pushed, but now that no one is pushing, they are back in the same groove.” [male participant, employed at Pioneer]
- “He had a lot of major problems. Once we were aware of them, all we could do was refer him. He never followed through.” [staff]

One of the greatest difficulties in evaluating factors such as motivation and readiness is determining whether it is an innate personality trait, something that can be taught, or a result of other factors or circumstances. To a certain extent, there does seem to be a part of motivation, readiness, and attitudes that is unexplainable.

- “I looked for a certain quality. There were people who had more obstacles than others and yet got a job and are still working. The person has to be willing to learn, open to growing.” [staff]
- “She was one of those that had that quality. She was receiving food stamps, unemployment, was a single mom. She’s doing well. She never complained or did much. She knew where she was going.” [staff]
- “They had something missing, like inner tools. Whether it’s nature or nurture or whatever. We can keep throwing money away giving them skills, but we can’t give them desire.” [staff]

At the same time, it is important to try to distinguish between motivation as a factor in and of itself and motivation as a outcome of other factors and influences. For instance, as was discussed previously, children can act as an important motivating force. If we only looked at the surface, we would conclude that a participant was successful because she was motivated. Delving deeper, though, we might find the participant’s commitment to her children, or some other factor, was an important source of this motivation. Thus, while it does seem like success for a small handful of participants can only be attributed to that unexplained “quality”, it is also important to recognize that many of the factors for success discussed in this section influenced participant outcomes through motivation, readiness, and attitudes.

Social expectations of men

U.S. society has different expectations about the roles and proper behaviors of men and women. These expectations are learned at an early age and affect both people’s actions and their perceptions about themselves and others.

Social expectations around men and work

“A man without a job is a dead man to me...and every man needs a job...you need to be productive in some kind of way.” (Kost, 1996, pg. 14).

Men have traditionally been expected to play the role of worker and provider in American families. The recent welfare reform movement reflects changing attitudes towards the expectation of work for women, but it is still much more socially acceptable for women to receive welfare than men. These expectations may have had a real impact on male Project Pioneer participants, their levels of self-esteem, and consequently their efforts in the program.

- “Society values men working more than women, so their self esteem is very low.” [staff]
- “He realized that he was not such a bad guy after all...He could finally picture himself as somewhat successful. We need to debunk the myth, especially about economic success.” [staff]
- “The men had different layers of issues. For many I guess it was still believing in having to provide, and feeling shame.” [staff]

In addition to impacts on individual feelings of self-worth, the social expectations of men around work and welfare also potentially affected other people’s views of male Project Pioneer participants. Because of the expectation that they can and should be working, jobless men are often considered among the most undeserving poor in the United States. The possible impact of these outside perceptions on the outcomes of men in Project Pioneer will be discussed in later sections.

Other social expectations

In addition to social expectations about work, there are also certain social expectations about behavior that are related to gender. Some of these expectations for men ran counter to the kind of behavior that was necessary for success in Project Pioneer. Three of these types of negative behaviors, all somewhat related, were identified in the interviews:

Hostility and aggression. Project Pioneer staff in particular pointed to the more hostile and aggressive personalities of the male participants. These behaviors interfered with their success in the training and in keeping a job. An extreme example is one participant who was fired from Pioneer Plastics for getting into a physical fight with another participant.

- “When they are put down, women tend to become passive, while men tend to become more aggressive, which makes it harder to help them.” [staff]
- “The men look to be put down, they get defensive. They don’t see anything as a simple mistake.” [staff]
- “They are more hostile. For the women it was taking advantage of an opportunity. The men think it’s owed to them, they hear promises being made.” [staff]

A sense of entitlement and resistance to authority. As the last quote suggests, project staff also felt that many of the men in the program had a strong sense of entitlement rather than viewing the training as an opportunity.

- “There seemed to be more anger from the men because it was something they ‘had to do’. More resentment and resistance to project requirements.” [staff]
- “They saw the project as punitive rather than an opportunity. It was mostly men who seemed to have a sense of entitlement. ‘You’re supposed to get me an interview’.” [staff]

Willingness to show vulnerability. In a study of YouthBuild, a training program for mostly male youth, an important component of readiness was identified as willingness “to get humble, and put their stuff on the line and really put their hearts up there” (Ferguson & Clay, 1996, pg. 254). Gender roles, though, make it less acceptable for men to show this kind of vulnerability. This issue came through clearly in Project Pioneer in discussions around the Employee Effectiveness (EE) part of the training which focussed on self-exploration, self esteem, conflict resolution, and teambuilding. The instructors for this part of the training recognized this issue and tried to address the special needs of the men.

- “Men don’t understand our part of the training” [EE staff]
- “The self-esteem building is the same process, but a different language.” [EE staff]

Despite the staff’s efforts this unwillingness to show vulnerability continued to be an issue for a number of the male participants.

- “They don’t want to talk about personal stuff. Just get me a job and I’ll be fine. They don’t see that it’s the other way around.” [staff]
- “The people who didn’t want to take part in the effectiveness training were men. That class taught us to look at yourself in the mirror. When you don’t want to do it, you stick out” [male participant, unemployed]
- “We spent too much time trying to get in touch with our inner selves. People are here to learn something and work. You don’t deal with this stuff in the real world.” [male participant, employed]
- “It’s a blur. Inner self-healing. It was a great class, motivational, but it could have been streamlined. Cut out the psychological mumbo-jumbo.” [male participant, employed]
- “Probably the least amusing class.” [male participant, in college]
- “I think it was more difficult for the men to go through the touchy-feely part of the training, it was easier for the women.” [female participant, employed]
- “It was my favorite class. I loved learning about my personality, and my skills” [female participant, employed]
- “I noticed that in math the women weren’t as good as some of the guys. But then the women were better in communication, talkers I guess. The guys were more shy about talking.” [male participant, in college]

Family history of poverty

It was suggested by at least one staff member that the men in Project Pioneer came from very different backgrounds than the women. He felt that the “men have been in lifelong poverty” whereas the women “are put in poverty because of the loss of a marriage”. This background of poverty could have resulted in a lack of role models and self-esteem when growing up and the learning of different social norms.

In the interviews, participants were asked about their family, their parent’s work, and whether they “would consider their families well off when growing up”. Surprisingly, few of the interviewees said that they were not well off growing up. In addition, there was no difference in the responses between men and women. It seems unlikely, therefore, that the poverty of men was a particularly strong factor in the difference in outcomes.

Substance abuse

Substance abuse was a major issue that was not well covered in this study. The interview did not contain questions about substance abuse because it was unclear whether the interview was an appropriate place to bring up this issue and expect a truthful answer. There was a feeling by the staff, though, that the men were more involved in substance abuse.

- “The men hide it really well, both alcohol and drug use.” [staff]
- “I think a lot of the difference is substance abuse. Most of them were men. They don’t have responsibilities. I would say that a majority of the participants have used at one time, but the women have recovered and stopped. *Why?* The responsibility of childbearing.” [staff]

There is some support for this view in the program data. Looking back to Table 6, the male and female target populations, we see that 10% (5) of the male participants were documented as disabled when entering the program, which includes people recovering from substance abuse. In addition, records indicated that at least four male participants were referred out of the program due to issues with alcoholism. These findings suggest that substance abuse was a more common issue for the male population in Project Pioneer.

Personal crises and support systems

The quantitative data were unable to document the large number of personal and family crises that many of the Project Pioneer participants faced. These crises included children with special needs, domestic violence, medical problems, and depression.

- “Things came out in class or were discussed openly that were surprising to me. Drug abuse, alcohol abuse, spouse abuse, jail. I was mystified. They were talking about these things just like we would talk about the movie we had seen. It was not bravado, comparing about who had had a worse life, but rather matter-of-factly, like this kind of thing was common. There was no understanding that these kinds of issues were not part of everyone’s lives.” [staff]

For some people, these crises became all encompassing and a major barrier to success.

- “Not to judge her difficulties, but sometimes that kind of barrier becomes a focus and consumes a person.” [staff]

Other participants, though, somehow dealt with these crises and managed to pull their seemingly chaotic lives together. It is difficult to identify exactly the difference between these two types of people. To some extent, the difference goes back to that elusive “quality”, the person who for no understandable reason has the determination to tackle their barriers. For other participants, though, their ability to deal with crises could be traced back to other aspects of their lives. Enough positive characteristics in areas such as those covered in this paper could give a person the confidence and skills they needed. Enough negative factors stacked up could make success impossible. For many participants, though, a key was social supports.

- “If she is a single mother it is almost impossible unless she has an amazing support system. The women who have been successful have extended family supports.” [staff]
- “I’m so lucky I have a supportive family, otherwise I would be dead.” [female participant, employed at Pioneer]

The interview questions designed to look at issues of social support were not as successful as was hoped in gathering information about support systems and identifying any gender patterns. Most interviewees generally said that their friends and family were supportive of their activities in Project Pioneer. Going back to the idea of social expectations, though, it seems possible that the men in the project were less likely to show their vulnerabilities to their families and friends by asking them for help. This factor was identified in the study of men in the Parent’s Fair Share program:

- “For many of these men, having to rely on their family and friends to make ends meet or just to survive challenges their perceptions of self-worth and reminds them of their inability to be independent” (Johnson & Doolittle, 1996, pg. 31)

Conclusions on personal characteristics

The information on personal characteristics leads us to conclude that the men in Project Pioneer entered the program with significantly different experiences, barriers, and attitudes than the women. The female participants in Project Pioneer for the most part came in with similar backgrounds: single mothers on welfare, many with little work experience. The men came from a diverse set of backgrounds, including some from very troubled groups such as disabled, homeless, or ex-convict. The higher levels of previous work experience for the men may indicate that many of them were either extremely discouraged or had some sort of employability problem. Their situations may have been exacerbated by social pressures that expect them to be working and social expectations encouraging behaviors that would be counterproductive in a training program and in employment. It is clear that these differences in personal backgrounds, therefore, are an important part of explaining the gender differences in outcomes for Project Pioneer participants.

Program characteristics

Looking at participant characteristics has pointed to a number of differences between male and female participants, their issues, needs, and attitudes towards the program. Now we turn to

characteristics of the Project Pioneer training program to look at how certain elements of the training program might have also contributed to gender differences in outcomes.

Classroom training

One theory proposed by program staff was that men did worse in the program because they do not respond well to classroom-based training. It was felt that more of the men had had poor experiences in high school that would make them less responsive to training that reminded them of those experiences. In addition, it was felt that men were generally more responsive to hand-on types of learning.

A number of the questions in the interview tried to get at this effect of classroom training. On one hand, many participants did see the Project Pioneer training as “going back to school”, and for some this was a source of anxiety.

- “They crammed in too much...It’s a lot, especially for people who have not been in school for 25 years.” [male participant, in college]
- “Going back to school scared the hell out of me” [female participant, employed]

But there were few gender patterns to these responses. In addition, when asked about their experiences in high school, most cited social problems and issues such as getting pregnant rather than academic difficulties. When asked how Project Pioneer was similar or different to high school, most interviewees focussed on how they themselves had changed.

- “I am so different now” [female, employed at Pioneer]
- “I wanted to learn this time. I was an adult.” [male participant, in college]

There was therefore little support for the theory that the men in particular disliked the classroom training because it reminded them of failures in high school.

In looking at the issue of preferences in training style, a number of the questions in the interview asked for participants’ evaluation of the program design. Since school and Project Pioneer were the only types of programs that they were familiar with, though, few of the interviewees seemed aware of any possibilities besides training in the classroom. In addition, it is impossible to measure possible effects of the classroom training by comparing different rounds because it was a characteristic of all of the rounds. Conclusions about this theory are therefore unclear. Two final quotes, though, seem to indicate that the classroom training did have some impact on gender outcomes:

- “*Why do you think differences between the men and women may have occurred? Maybe because they didn’t want to sit in school all day.*” [male participant, dropped out of the training, unemployed]
- “I never thought I would say this, but I think that the work-first approach with work attachment and then bringing in training might be the most promising. I think in particular it might work better for men. That’s what men were asking for, a job. Why not give it to them immediately?” [project supervisor]

Female-oriented structure

Many of the Project Pioneer coordinating agencies were organizations that primarily dealt with female clients, in particular welfare recipients. As they developed the program, they were able to rely on their experiences with women to anticipate the barriers and issues that would have to be addressed to help them succeed in the program. In addition the training curriculums, particularly the Employee Effectiveness component, were adapted from programs originally designed to serve women. It seems that one strong factor in explaining the poor outcomes of men in Project Pioneer, therefore, might be that the program design and staff had less understanding of and experience with men's issues and barriers. These difficulties may have been exacerbated by the fact that the men came from a wider variety of backgrounds, rather than just from AFDC, and therefore brought to the program a wider variety of issues and barriers. Finally, it is possible that the project staff, to at least some extent, shared society's lower tolerance for employed men. In general, the project staff were very up front in discussing their difficulties in dealing with the men in the program.

- “When I worked before with just women, they were very reinforcing. Here I couldn't do anything right” [staff]
- “I'm used to working with women, it's different here. There were different dynamics with having both men and women. It was not just the men” [staff]
- “There are different issues for men in poverty and we did not address that. We went in very blind.” [staff]
- “The program was probably geared more towards women. We thought the people who would be interested in the program would be women at home, not working, with children, looking for an opportunity to work.” [employer]
- “When I see a man in the program, I see a red flag and I think: why isn't he working?” [staff]

The female orientation of the program was also noted by a number of the male interviewees.

- “Speaking as a male, it was geared more towards women...In the seminars, all the materials were made for single mothers on welfare...It's fine to have a program like that, but if you are going to gear it towards women, don't have men in the program.” [male participant, employed]
- “We got a lot of the pro-women feeling, men are scum...The men felt that.” [male participant, employed]
- “It was like it was based on a female agenda, and the men were just there to fill in.” [male participant, unemployed]

Some of these issues were addressed partway through the program when a male instructor joined the team teaching the Employee Effectiveness curriculum. The men in the interviews who particularly focussed on the "female agenda" of the project were in the earlier rounds before the male instructor was hired. Looking at the regression results, though, there are no statistically significant improvements in male outcomes in the second half of the project after the instructor was hired.

The small numbers of men in later rounds

A final program characteristic that may have contributed to gender difference in outcomes is the gender balance in the program. In the later rounds of the training, men were a minority. A number of the interviewees discussed the effects of this situation.

- “I guess the women were more extroverts.” [male participant, employed]
- “The guys were more shy about talking” [male participant, in college]
- “My class had a lot of single mothers with kids. They always talked about it, every day.” [male participant, unemployed]
- “There were more women than men which was a little uncomfortable...the girls’ conversations were a little scary. They would get on men-are-useless kicks.” [male participant, employed at Pioneer]
- “With more women in the class, they voiced their opinions more than the men. It was disrespectful.” [male participant, employed at Pioneer]

The numbers, however, do not agree with this theory. Table 9 presents information about the percentage of men in each round and the success rates of those men. The highlighted numbers show that the rounds in which the men were most in minority were actually the rounds that they did the best. One could even argue from these results that, despite their complaints, the men actually benefited from being in a class with more women.

Table 9. Percentage of men in each round and their success rates.

Round	%Men	% Complete	%Employed
1	62%	62%	50%
2	47%	100%	64%
3	33%	100%	100%
4	27%	100%	75%
5	42%	62%	20%
6	30%	100%	100%

Post-program factors

A final place to look for explanations for the differences in outcomes is in post-program and labor market characteristics. This section asks whether there were differences in the experiences of the male and female participants after they left Project Pioneer that would explain their different outcomes.

Pioneer Plastics

Pioneer Plastics was the primary employer of Project Pioneer graduates. On the surface, it would seem that, if anything, this would be a company where the men should have an advantage. The work is primarily manual work in a manufacturing company, a traditionally male type of occupation. In addition, Pioneer Plastics only offered second and third shift positions, which should have posed a considerable barrier for single mothers (79% of all female Project Pioneer participants were single mothers). Looking at the hiring rates, we see that in fact 48% of the male graduates were ever hired by Pioneer Plastics, compared to 41% of the female graduates.

Six months later, though, only 65% of the male graduates who were hired were still working at Pioneer, compared to 88% of the women. It seems, therefore, that the issue with the men was not so much getting hired at Pioneer Plastics as keeping their position once they were hired.

The human resources director at Pioneer Plastics was very frank about the difficulties that the project graduates faced at the company.

- “We kind of shoved [the project] on the business. We didn’t address stereotypical comments. We did not get buy-in from the supervisors and co-workers...Inside the business, some people viewed [project participants] as taking jobs away from friends they wanted to refer, or saying ‘I had to work my way here and they get it easy.’”
- “For instance round one. They were very excited. When they graduated they got t-shirts advertising who they were and wore them to work. They were the last group to do that. There was a negative connotation.”
- “What we were really doing was training for the future, for instance teaching things like working as a team. The participants learned it, leaned to speak up, and the supervisors weren’t ready because it was something we [the company] hadn’t reached yet. I think that it was positive in that it showed that we could do it. But the old way wasn’t like that at Pioneer. Some of the participants were seen as troublemakers, making noise, by their peers or supervisor. They were challenging the traditional ways.”
- “The instructors did a good job in meeting our requirements, perhaps too good a job. In class, it was expected that this work culture we were teaching *was* the work culture at Pioneer. It was a shock for some people when they came here.”

These quotes illustrate the difficulties that project graduates had to overcome once they graduated from the training. In general, these difficulties should have equally impacted the male and female graduates. It is possible that the men received more negative reactions from co-workers, though, because the social stigma attached to low income men is stronger than the one for low-income women. It is also possible that the men were less skilled in dealing with these negative conditions. This lack of coping skills could have been due to a number of issues outlined above such as aggressive behavior or negative past work experiences and their lack of engagement in the Employee Effectiveness training that focussed on dealing with conflict.

Reservation wages

A final theory regarding gender outcomes was that the men had higher expectations regarding wages and were less likely to take a position that did not meet their wage expectations. These wage expectations would be based on greater previous work experience and the fact that men historically have received higher wages. In the interviews, there did seem to be some support for this theory. Interviewees were asked how much a job would have to pay to make it worthwhile for them to accept. The women typically said around \$6-8 an hour. The men usually said around \$8 an hour and higher. This theory is also supported in the administrative data. While the men and women working at Pioneer Plastics had very similar wages, the male participants who found jobs outside of Pioneer averaged wages of \$7.21 an hour while the women averaged \$6.62 an hour. These numbers provide some credibility to the theory that, when looking for work in the wider labor market, the women were more willing to accept work at lower wages.

CONCLUSIONS

In looking over all of the evidence in this study, three factors seem to be the most important overall in explaining why men were less successful than women in Project Pioneer:

1. *The different experiences and background of men entering Project Pioneer.* There seems to be considerable evidence that the men in Project Pioneer came from different backgrounds than the women. The women for the most part came as single mothers and welfare recipients. Their common difficulties were lack of self-esteem, little experience in the work world, and logistical issues such as child care. The men, on the other hand, came from more diverse backgrounds and perhaps faced barriers that were harder to address in a three-month job training program, such as frustration with the labor market and substance abuse.
2. *Lack of staff experience with men.* Many current job training and social service programs, including organizations participating in Project Pioneer, are focussed on serving the primarily female welfare population. The lack of knowledge about male issues and the “female orientation” of the Project Pioneer probably also contributed to the difference in outcomes.
3. *Social expectations around gender.* Society has less tolerance for jobless men. This sentiment may have impacted the male participants’ feelings of self-worth and motivation. This attitude towards unemployed men may have also influenced others related to the program. At the most benign level, this attitude may have resulted in a lack of understanding of the issues of the male participants by program staff. At more extreme levels, this attitude may have caused a more active intolerance or poor treatment of male Project Pioneer participants by co-workers and supervisors once they went to work. In addition to expectations around work, society also tolerates and expects certain types of attitudes and behaviors from men that may have been counterproductive to program goals.

One issue that cannot be resolved by this paper is the relative contribution of each of these factors. For instance, an important question would be how much of the gender differences in outcomes was due to the men and women entering the program with different backgrounds and how much was due to gender-role attitudes and behaviors. Future studies could look more closely at this issue by identifying a subgroup of men and women who share similar types of work histories and experiences. Answering this question would be relevant for future program development, since it is important to know whether the issue is developing new approaches to addressing the particular needs men or developing new approaches to training both men and women that have a certain type of background or work history.

Summary and Implications for Further Research

In recent decades we have seen a dramatic growth of earnings inequality and real declines in the earnings of low skill men. A body of research has developed investigating the causes of these trends, focusing particularly on the changing nature of the economy and the decline in the demand for low skill workers (Acs & Danziger, 1993; Bound & Freeman, 1991; Danziger & Gottschalk, 1995; Levy & Murnane, 1992). In addition, research by Wilson has brought attention to the impact that joblessness has had on life in inner-city neighborhoods (Wilson, 1997). These studies all point to the larger economic forces impacting the lives of low-income people in the United States. Their conclusions point to the need for policies that counter these economic forces and work to ensure the availability of work at livable wages.

While the availability of work is crucial for both now and the future, the experience of Project Pioneer suggests that, at least in the short run, there is a certain population of low income men who face more difficulties than simply finding a job. These difficulties may be related to years of frustration and loss of self-esteem in the low-wage and unstable labor market, or they may be more serious issues such as social problems, aggressive behavior, or substance abuse. These findings challenge society's assumption that men should be ready and able to work.

In the recent years of welfare reform, there has been a growing literature documenting the issues and barriers that women on welfare face and they seek to enter the work world. In addition, the large numbers of welfare to work programs, experiments, and evaluations have developed a certain knowledge about ways to help these women overcome their barriers. A similar effort has not been undertaken for low-income men. The poor outcomes of the men in Project Pioneer show that we cannot simply take programs originally designed for women on welfare and expect them to work for men. The experiences documented in this study make it clear that low-income men face a different set of barriers to work than women on welfare, and therefore they will require different strategies to help them effectively deal with these issues.

The most basic finding of this study, therefore, is the need to begin to develop of body of research around low income men. The experience of Project Pioneer and past job training programs suggest that the process of developing strategies for men will be difficult and will take some time. Given the recent trends in the economy, it is crucial that we begin to address these issues now before the situation of low skill men becomes even more critical. In particular what is needed is further research on the barriers to work that low-income men face and their experiences in job training programs. People widely acknowledge that job training programs are not as effective for men, yet few have asked why this is true.

This study was a preliminary look into this emerging issue of low-income men and job training programs. It is hoped that in the future other researchers will continue to develop a better understanding of the issues facing low-income men as they try to succeed in the work world. With this new knowledge, we can then begin to develop job training programs and other policy initiatives that can act as effective tools in our efforts to combat poverty.

Appendix

Sampling for the qualitative interviews

The quantitative approach

The data

Missing values

The choice of regression models

Issues of collinearity

The interview

Combining quantitative and qualitative research

Residual analysis

General lessons

SAMPLING FOR THE QUALITATIVE INTERVIEWS

As discussed in the text of the paper, the selection of thirty Project Pioneer participants to be interviewed was done on a random basis. The goal of the selection was not necessarily to create a statistically sound sample that could be considered representative of entire population. Rather, the purpose of the sampling method was to select participants with a variety of experiences and outcomes and to choose a sample that would probably be more diverse than simply interviewing those who were the most easily contacted.

Given the nature of the study, the sampling strategy was designed to assure that certain groups were well represented in the interview sample. In particular, there was interest in interviewing male participants and participants from each of the three training years. Following these needs, the 111 participants were divided into six groups, a male and a female group for each of the three years of training. Within these groups, the participants were assigned a random number and using these numbers five were selected from each group for a total of 30 participants to be interviewed. Table 10 presents the number of participants in each of the six groups. The percentages reflect the proportion of each group that was selected to be interviewed. Due to the sampling strategy, men and participants in later rounds were oversampled.

Table 10. Number of participants in each group and percent selected to be interviewed.

	Men		Women		Total	
	# Participants	% Selected ¹	# Participants	% Selected ¹	# Participants	% Selected ¹
Year 1	31	16%	26	19%	57	18%
Year 2	7	71%	17	29%	24	42%
Year 3	11	45%	19	26%	30	33%
Total	49	31%	62	24%	111	27%

¹ Five men and five women were selected to be interviewed for each of the three years.

Despite the fact that considerable effort was made to contact and interview all of the selected participants, in the end not everyone who was selected was actually interviewed. The most common reason for this was that the participants proved to be very difficult to locate and contact. Moving within the area and out of the area was very common for Project Pioneer participants as they faced new crises or found new opportunities. Table 11 compares the average values of the administrative data for the entire group of Project Pioneer participants, those who were selected to be interviewed, and those who were interviewed.

Table 11. Variable averages by interview status.

Variable	Full Group	Selected	p-value ¹	Interviewed	Not Interviewed	p-value ²
Women	56%	50%		50%	50%	
Age	33.38	31.00	0.065	31.36	30.00	0.204
Work	11.72	9.47	0.105	10.36	7.00	0.332
Less Than HS	10%	10%	0.856	14%	0%	0.422
HS Diploma	33%	47%	0.085	45%	50%	0.205
GED	32%	33%	0.967	36%	25%	0.713
Further Education	24%	10%	0.037	5%	25%	0.017
TABE math	10.05	9.66	0.295	10.14	8.34	0.735
TABE reading	12.00	11.90	0.704	11.85	12.03	0.631
AFDC	27.20	21.67	0.327	24.50	13.88	0.672
GA	1.77	2.53	0.361	2.82	1.75	0.309
FS	30.32	27.47	0.585	29.05	23.13	0.824
Married	16%	30%	0.019	32%	25%	0.031
Dependents	1.23	1.30	0.734	1.32	1.25	0.719
Completed training?	86%	80%	0.111	86%	63%	0.784
Ever Employed?	74%	70%	0.440	73%	63%	0.764
Employed 6 months later?	61%	63%	0.901	68%	50%	0.543
Currently employed?	54%	53%	0.736	59%	38%	0.744
Ever employed at Pioneer?	44%	43%	0.928	50%	25%	0.533
Currently at Pioneer?	29%	27%	0.803	32%	13%	0.697

¹ P-value for a t-test that the selected group has the same average value as the full sample.

² P-value for a t-test that the interviewed group have the same average value as the full sample.

THE QUANTITATIVE APPROACH

This section will provide details regarding the quantitative aspects of the study, particularly the regression strategy.

The data

Table 12 presents the variables contained in the administrative database. Much of this information was gathered through a short survey filled out by the participants when they entered the program. Additional information was gathered through searching program files and through follow up efforts to track the employment status of graduates. It is important to note that all of the information (with the exception of the TABE scores) was self-reported by the participants and therefore may be subject to such problems as misreporting, poor understanding of questions, and concealment of information.

Table 12. Administrative data variable definitions.

Variable	Name used in regression tables
Is the participant female? (1=yes, 0=no)	Female
Number of years of work experience	Work Exp.
Age	Age
Education less than high school (1=yes, 0=no)	Less than HS
Highest education a high school degree (1=yes, 0=no)	High School
Highest education a GED (1=yes, 0=no)	GED
Has education beyond high school/GED (1=yes, 0=no)	Further Ed.
TABE math score	TABE math
TABE reading score	TABE reading
Number of months received AFDC	AFDC
Number of months received General Assistance	GA
Number of months received Food Stamps	FS
Participant is married and living with spouse (1=yes, 0=no)	Married
Number of dependents living in household	Dependents
Trained in rounds 1 or 2 (1=yes, 0=no)	Year 1
Trained in rounds 3 or 4 (1=yes, 0=no)	Year 2
Trained in rounds 5 or 6 (1=yes, 0=no)	Year 3
Trained in rounds 1-3 (1=yes, 0=no)	First Half

Trained in rounds 4-6 (1=yes, 0=no)

Second Half

Participant completed program (1=yes, 0=no)

Participant found work (1=yes, 0=no)

Participant ever worked at Pioneer (1=yes, 0=no)

Wage

Six month employment status

Current employment status & place of employment

Missing values

For most variables, the administrative database was remarkably complete¹⁷. There were two important variables, however, that contained missing data: years of work experience and TABE scores. Fifteen of the participants were lacking information on the number of years of work experience. Nine of the participants were missing their math and reading TABE scores. In both of these cases, the missing data were imputed by regressing the missing variable on the remaining independent variables in the database. The coefficients from this estimation were then used to impute the values for those participants who were missing that information. This method was particularly effective for the work experience variable, since the R-squared value for the regression was .71, suggesting that the variation in the other variables in the database were closely related to the work experience values. The R-squared values for the TABE math and reading scores were considerably lower, .19 in both cases. It was felt, however that this method provided the best guess of the missing value, and allowed those nine participants to be included in the regression models. It is possible, however, that this method of imputation may have had an effect upon the final regression results, particularly in explaining the lack of significance for the TABE scores.

The choice of regression models

Given the nature of the study and the data available, a number of different regression models were considered. The purpose of the study was to look at factors affecting participant outcomes. An ideal measure of outcomes would have been changes in earnings levels. However, reliable reports on earnings both before and after the program were not available. Instead, the study looks at more basic outcome measures such as completing the training program and finding and keeping a job. Given the categorical nature of these outcomes some sort of logistic regression was needed. In particular, I looked at four different types of logistic regression: basic logistic regressions, ordered logit, nested logit, and multinomial logit.

¹⁷ Two participants were completely removed from the quantitative analysis because the missing information for them was so extensive. One of the participants, a male, never officially enrolled in the program but was maintained in the database because of a legal dispute. The second participant, a female, according to a status report had completed the program and was working at Pioneer Plastics, but all of her background information was missing.

Basic logistic regressions

This study looked at two different stages of success: 1) completing the program and 2) getting and keeping a job. The basic logistic regression model would require running a separate estimate for each of these two stages. The main problem in this approach arose when running the regression for completing the program. A basic logistic regression model would treat the participant population as two groups, those who completed the program and those who did not complete the program. The fact that there are two stages of success, however, suggests that those who completed the program may not be a uniform population. Some of those who completed the program were employed six months later and some were not. There is a possibility that these two types of participants may have completed the program for different reasons or due to different factors. Given that we have more detailed information about the participants, that is we know both stages of their outcomes, it makes sense to choose a model that will take advantage of these details in our analysis.

Ordered logit

An ordered logistic model is one possible choice for taking these stages of outcomes into account. The ordered logit model assumes multiple outcomes that have a certain order to them. In this case, the order would represent the range from “failure” to “success”: dropping out, completing the training but not employed, and employed. The model then estimates a set of coefficients for the dependant variables and a number of “threshold” points that identify the predicted outcome. The central problem with the ordered logit model for this study is that it assumes a uniform relationship between the independent variables and the outcomes. In particular, it assumes that the same variables are important for predicting the different levels of outcomes (only one coefficient is estimated for each independent variable). So, it assumes that if a variable is positively related to moving from one outcome to the next, than an even greater increase in that variable will be related to moving to the next higher outcome. This assumption did not seem to hold true in the data. For instance, an initial look at various averages (and the final regression model) suggested that some variables were strongly related to completing the program while others were strongly related to being employed. It seems that completing the training and being employed are two different processes that require different types of skills, abilities, or characteristics. Given this finding, the constraints of the ordered logit model did not seem appropriate.

Nested logit

At first the nested logit seemed to be a promising model. The nested logit model is designed for situations where there are two or more stages in the decision making process. In the case of this study, the first “decision” would be completing the program or not, the second would be whether or not to be employed. The model does allow for different choices or outcomes to have different independent variables in their equations. However, it forces the coefficient for an independent variable to be the same in any equation in which it is included. In the end, the ability to choose which variables to include in each outcome equation does not help very much, since the real interest is to put in all of the variables and have the regression tell us which ones are important for which outcomes.

Multinomial logistic regression

In the end, the multinomial logistic regression model was chosen. Like ordered logit, this model allows for multiple outcomes but in this case the outcomes do not have a specific order. In addition, multiple coefficients are estimated for each independent variable allowing for the variables to take on different levels of significance in different situations. Mathematically, however, separate coefficients cannot be determined for each outcome. Instead, several sets of coefficients are estimated comparing one outcome to another (e.g. dropouts vs. completers and dropouts vs. employed). Thus the model determines which variables are significantly different for one outcome group versus another (e.g. do dropouts have significantly less work experience than those who were employed?). Thus, the coefficient of a variable tells us the effect that a unit change would have on the log likelihood that the participant would have one outcome versus another. This multinomial logistic regression model provides the best solution for the two problems identified earlier: The model simultaneously takes into account the three different types of participants in the sample (dropouts, completers, and employed) while at the same time allowing different variables to be significant for different outcomes.

The female-only model

A problem was encountered in trying to apply the multinomial regression model to the separate sample of female participants. It seems that a very small number of the women in the program dropped out of the training (4 out of 61 women). This small number of female dropouts made it statistically impossible to estimate a logistic model that included dropouts as an outcome (this was true of both multinomial logit and regular logistic models). Instead, a simple logistic model was estimated for the women population on only the employment outcome and with a sample that only included those women who had completed the training. As a comparison, similar logistic regressions were run for the male and total populations. These test regressions yielded very similar results to the part of the multinomial regressions that compared the completers to the employed (they had the same significant variables and very similar, but not exactly the same, values for the coefficients). These similar results suggested that using this model for the female population would yield rather reliable and comparable estimates.

Issues of collinearity

Table 13, Table 14, and Table 15 present correlation matrices for the administrative data. Highlighted on the tables are two pairs of variables that had high levels of correlation: work experience & age, and AFDC & FS. As mentioned in the paper, this high level of correlation did seem to affect the results for the work experience and age variables. When both variables were included in the regression, neither had statistically significant coefficients. When one of the two variables were removed, the remaining variable then became significant¹⁸. These results suggest that when both variables are in the equation, controlling for one variable leaves very little variation in the other variable on which to estimate a coefficient. The significance of the variable when entered alone, however, tells that one or both of these variables have a significant relationship with the outcomes. Since there was no way to correct the collinearity between these two variables in the data, it was decided to enter only work experience in the model and treat it as

¹⁸ This effect was found for the total group, male, and female regression models.

a variable representing the combined and indistinguishable effects of work experience and age. In the case of AFDC and Food Stamps, these variables were not statistically significant whether they were entered individually or together in the regression equation.

Table 13. Correlation matrix for all Project Pioneer participants.

	Female	Age	Work Exp.	Less HS	HS	GED	Further Ed.	TABE math	TABE read	AFDC	GA	FS	Marri
Female	1.00												
Age	-0.23	1.00											
Work Exp.	-0.38	0.78	1.00										
Less than HS	-0.10	-0.10	-0.03	1.00									
High School	0.13	-0.15	-0.12	-0.23	1.00								
GED	-0.08	-0.06	0.06	-0.22	-0.50	1.00							
Further Ed.	0.02	0.30	0.09	-0.18	-0.40	-0.39	1.00						
TABE math	0.09	-0.02	-0.06	-0.23	0.09	-0.18	0.26	1.00					
TABE reading	-0.11	0.09	0.03	-0.30	0.16	-0.16	0.20	0.40	1.00				
AFDC	0.49	0.00	-0.25	-0.05	-0.04	-0.02	0.10	0.03	0.01	1.00			
GA	-0.16	0.27	0.34	-0.02	0.01	-0.04	0.05	-0.11	0.04	-0.18	1.00		
FS	0.44	-0.01	-0.21	-0.05	-0.11	-0.07	0.23	0.13	0.05	0.85	-0.06	1.00	
Married	-0.35	0.06	0.09	0.03	0.05	-0.10	0.04	-0.03	0.01	-0.19	0.12	-0.11	1.00
Dependents	0.33	-0.20	-0.25	0.04	0.12	-0.06	-0.10	-0.06	-0.06	0.32	-0.26	0.22	0.00
1	-0.20	0.10	0.05	-0.07	-0.16	0.18	0.03	0.09	0.13	0.04	0.04	0.00	-0.00
2	0.16	0.03	0.02	-0.02	-0.01	0.05	-0.04	-0.01	-0.09	0.11	-0.05	0.15	0.00
3	0.07	-0.14	-0.08	0.10	0.18	-0.25	0.00	-0.10	-0.07	-0.14	0.00	-0.14	0.00
Half	-0.16	0.14	0.15	-0.13	-0.12	0.22	-0.02	0.05	0.02	-0.02	0.07	-0.05	0.00
and Half	0.16	-0.14	-0.15	0.13	0.12	-0.22	0.02	-0.05	-0.02	0.02	-0.07	0.05	-0.00

Table 14. Correlation matrix for male Project Pioneer participants.

	Age	Work Exp.	Less HS	HS	GED	Further Ed.	TABE math	TABE read	AFDC	GA	FS	Married	Dependent
Age	1.00												
Work Exp.	0.88	1.00											
Less than HS	-0.10	-0.12	1.00										
High School	-0.13	-0.05	-0.23	1.00									
GED	-0.09	0.00	-0.29	-0.47	1.00								
Further Ed.	0.33	0.15	-0.21	-0.33	-0.42	1.00							
TABE math	0.15	0.08	-0.20	0.28	-0.32	0.23	1.00						
TABE reading	0.08	0.05	-0.14	0.16	-0.26	0.24	0.24	1.00					
AFDC	-0.11	-0.03	-0.13	0.15	-0.11	0.07	-0.01	-0.01	1.00				
GA	0.39	0.42	-0.09	-0.05	-0.04	0.17	-0.05	0.14	-0.14	1.00			
FS	0.01	-0.06	-0.12	0.00	-0.20	0.31	-0.01	0.11	0.69	0.26	1.00		
Married	0.05	0.05	0.02	0.09	-0.15	0.06	-0.06	-0.07	0.36	0.10	0.30	1.00	
Dependent	-0.17	-0.11	0.18	0.02	-0.02	-0.13	-0.06	-0.18	0.30	-0.26	0.08	0.64	1.00
1	0.20	0.24	0.03	-0.21	0.16	0.01	-0.08	-0.05	0.00	0.11	-0.19	-0.13	-0.13
2	0.00	-0.07	-0.16	-0.12	0.17	0.06	0.17	0.00	-0.11	-0.02	0.07	0.10	0.10
3	-0.23	-0.22	0.09	0.34	-0.32	-0.06	-0.05	0.06	0.10	-0.11	0.16	0.06	0.06
Half	0.23	0.27	-0.02	-0.30	0.24	0.05	0.04	-0.14	-0.06	0.14	-0.24	-0.13	-0.13
and Half	-0.23	-0.27	0.02	0.30	-0.24	-0.05	-0.04	0.14	0.06	-0.14	0.24	0.13	0.13

Table 15. Correlation matrix for female Project Pioneer participants.

	Age	Work Exp.	Less HS	HS	GED	Further Ed.	TABE math	TABE read	AFDC	GA	FS	Married	Dependent
	1.00												
Work Exp.	0.69	1.00											
Less than HS	-0.16	-0.02	1.00										
High School	-0.13	-0.11	-0.21	1.00									
GED	-0.07	0.06	-0.17	-0.52	1.00								
Further Ed.	0.31	0.07	-0.15	-0.46	-0.37	1.00							
TABE math	-0.12	-0.11	-0.26	-0.05	-0.06	0.28	1.00						
TABE reading	0.05	-0.06	-0.49	0.19	-0.12	0.19	0.51	1.00					
AFDC	0.22	-0.09	0.04	-0.19	0.07	0.13	-0.01	0.10	1.00				
GA	0.01	0.17	0.08	0.15	-0.09	-0.13	-0.18	-0.12	-0.18	1.00			
FS	0.15	-0.06	0.04	-0.25	0.00	0.26	0.15	0.12	0.82	-0.12	1.00		
Married	-0.17	-0.24	-0.06	0.13	-0.15	0.05	0.08	0.01	-0.22	-0.06	-0.07	1.00	
Dependent	-0.11	-0.18	-0.02	0.13	-0.04	-0.09	-0.12	0.08	0.20	-0.18	0.10	0.16	1.00
1	-0.07	-0.23	-0.23	-0.08	0.17	0.05	0.25	0.22	0.22	-0.14	0.19	-0.04	-0.04
2	0.13	0.19	0.13	0.02	0.00	-0.10	-0.13	-0.11	0.07	-0.05	0.10	0.03	0.03
3	-0.05	0.07	0.12	0.07	-0.18	0.05	-0.14	-0.13	-0.30	0.20	-0.30	0.02	0.02
Half	0.02	-0.02	-0.28	0.03	0.18	-0.07	0.09	0.08	0.11	-0.09	0.10	0.06	0.06
and Half	-0.02	0.02	0.28	-0.03	-0.18	0.07	-0.09	-0.08	-0.11	0.09	-0.10	-0.06	-0.06

THE INTERVIEW

Below is a copy of the questions used for interviewing Project Pioneer participants. The interviews with participants were open-ended and semi-structured. The content of the interviews and even the questions asked varied depending upon the interviewee. The bold questions below were asked in basically all of the interviews. The other questions served as a guide to gather more detailed information or to guide interviewees towards the most important aspects of the main questions. Additional questions were used in the interviews based upon the information, topics, and even personality of the interviewee. As mentioned in the paper, the purpose of the interviews was not necessarily to be representative of all the participants but more for getting a feeling for the experiences of some of the participants and developing theories and explanations for the research question.

Explain Study to the Interviewee

How important their views are. They are the expert.

What this interview is about. Two parts:

- Understand who went through the program, why it works better for some people than others.
- Get your feedback on the program and on whether job training programs like these work.

Assure Confidentiality

To start with, I was wondering if you could tell me a little about yourself...

Have you always lived in Maine? if not where? Where in Maine?

Did you like growing up in (Maine)?

Were you from a large family?

What did your parents do?

Would you say that your family was well off when you were growing up?

Do you have kids? do they live with you?

How did you find out about Project Pioneer?

Have you been in other training programs?

How did Pioneer compare to other programs?

What kind of job are you most interested in/ what is your ideal job?

What are the most important aspects of a job for you?

What wage would a job have to pay to make it worthwhile for you to take it?

Have you ever been on public assistance?

What do you think about the welfare system in Maine?

Ways it could be improved?

What do you think about recent changes?

What has your own experience on welfare been like?

How long? how did you end up there?

Are other people in your family on public assistance?

What kind of work had you done before you entered the program?

What were the wages?
Why did you leave that work?

Why did you choose to participate in Project Pioneer?

When you came into the program, where did you expect to be at this point?
What kind of job were you looking for?
What wage?

What are you doing now?

Do you consider your experience in Project Pioneer to be a success? Why?
What did you get out of it?

What are your plans for the future?

Do you think the skills that were taught in Project Pioneer were relevant?

What were the most useful skills?
What were the least useful skills?
What skills were left out?

What did you think about the way skills were taught in the project?

How would you have changed it?
What were your experiences like in high school?
Did you like it or dislike it? why?
How was Pioneer similar or different to your high school experience?
What did you think of the employee effectiveness training part?

Did you face particular difficulties in participating in the program and getting a job?

How did you deal with them?
Who helped you deal with them?
Did Project Pioneer help you with these problems? did the project make them worse?

How was it being in a class with both men and women?

Did you see a difference between the men and women in your class?
Why do you think these differences existed?
How would you address these issues (if they suggest any)?
A number of people have commented that they thought the men did worse in the program than the women. Why do you think this might have been?

Any other questions or comments

COMBINING QUANTITATIVE AND QUALITATIVE RESEARCH

An important aspect of this paper was the effort to combine quantitative and qualitative research methods. In general, I found this process to be a very rewarding experience. The use of both sources of information allowed for repeated cross checking of information and ideas, leading to the development of theories with more depth than would be allowed by a single method. For instance, a quantitative finding may lead to a search through the interview notes to provide explanations for the finding. These explanations then may lead to ideas to test the findings quantitatively in more subtle ways to evaluate competing hypotheses. Given the positive experience in this study, I felt it was important to share one method of analysis that did not provide important findings for this study but seems to offer promise for other studies and then to generally make some comments on possibilities for future research.

Residual analysis

One method that was explored in this study for combining the quantitative and qualitative information was residual analysis. The idea behind the residual analysis was to look at how well the quantitative regression model fit to those who were selected for the qualitative interview sample, in the process identifying factors that the quantitative data failed to account for. Following this idea, the values for each participant in the interview sample were plugged in to the estimated regression equation to see which outcome was predicted by the individual's quantitative information. Those predicted outcomes were then compared to the actual outcomes, identifying individuals who "went against the odds" by having an outcome that was different from what their quantitative data predicted. The interviews and other information on those participants were then analyzed to identify factors that may have contributed to their different outcome.

For the majority of interviewees, the regression estimates were actually quite successful in predicting their actual outcomes. Only nine of the participants in the interview sample had results different from their predicted outcome. Table 16 presents information on these nine participants. For three of these participants, it seems that the predicted outcomes were rather accurate but differed from the actual outcomes primarily because of the arbitrary choice of six months as a measure of success in employment. For the remaining six participants, their qualitative information particularly seems to point to the importance of substance abuse and mental issues as barriers to success that were not accounted for in the quantitative model.

These results were not included in the main body of the paper because the small numbers of participants and because the findings did not contribute strongly to explaining the gender differences in success rates. The method itself, however, proved to be quite interesting and I would recommend further use of this idea in future research.

Table 16. Residual analysis results.

	Predicted Outcome	Actual Outcome	Possible reason
Men	Employed	Dropout	Substance abuse
	Employed	Dropout	Substance abuse
	Employed	Completer	Social and/or mental issues. Also has lived at home all his life and has never had a legal job.
	Completer	Employed	Several efforts were made to keep at Pioneer, was eventually fired after the 6 month period. He had serious social interaction problems. ¹
	Dropout	Employed	Also fired after six month period, threatened co-workers. ¹
Women	Employed	Dropout	Transportation problems.
	Employed	Completer	Serious mental issues.
	Employed	Completer	Unsure (did not interview). Possible medical and transportation issues
	Employed	Completer	Was in an accident. Found a job after the six month period when she had recovered. ¹

¹ In these cases it seems that the numbers were in fact pretty accurate in predicting outcomes and that the difference was primarily the arbitrary choice of a six month time window.

General lessons

The nature of the data available and possibilities for data collection has a lot of impact on efforts to combine quantitative and qualitative research methods. The strength of combining these two approaches is the ability for findings in one area to direct investigation in the other. Ideally, both the quantitative and qualitative methods would allow an opportunity to revisit the program and collect further information as these new ideas arise, but this is rarely the case. In this study, there were several theories that arose in the interviews that would have been nice to test quantitatively but the appropriate data were not available. Conversely, there were unusual findings in the regressions, such as the strong impact of marriage, that would have been interesting to investigate in more detail in the interviews. In developing a study of this type, therefore, I would recommend as much as possible early periods of investigation into possible theories and preliminary results to help shape the quantitative and qualitative data collections and encompass as much relevant information as possible.

Overall, I believe that combining these two sources of data were a successful and valuable strategy. The crosschecking of information allowed for more subtle and interesting interpretations of the findings. I believe that future studies of this type will provide valuable

information regarding the impact and effectiveness of social policies and will be a compliment to the more traditional impact evaluations that are often conducted for these types of programs.

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