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ABSTRACT

Several social objectives influence government sponsorship of employment programs: (1) training for mobility to reduce disruptions caused by change; and (2) increasing skill levels to increase productivity. Evaluation of program effectiveness considers whether the program served its target groups, what activities were provided, and what the outcomes were. The Comprehensive Employment and Training Act (CETA) targeted disadvantaged groups and provided classroom training, work experience, on-the-job training, and job placement. Wide fluctuations in estimates of CETA's net impact make it difficult to determine participant outcomes and cost-effectiveness. CETA's restructuring as the Job Training Partnership Act (JTPA) added performance standards and decentralization, which may have limited the extent of services to mandated populations. Reviews of JTPA Titles II and III found some net gains, although those in most need are not always likely to receive assistance. Special youth programs such as the Summer Training and Education Program and JOBSTART have had modest positive outcomes. In general, the more effective programs for youth and disadvantaged adults are the more expensive ones. Government employment programs have served only a small proportion of their eligible population. Policy questions for future programs remain: Should they continue the same mix with more funds and participants? Serve fewer people more intensively or more people less intensively? or Should more attention be paid to matching individuals to the most appropriate programs and activities? (31 references) (SK)

10. THE EFFECTIVENESS OF GOVERNMENT TRAININC PROGRAMS

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The Commission on Workforce Quality and Labor Market Efficiency is charged with making recommendations for the Department of Labor and the nation to increase the excellence of the American workforce. Among the Commission's responsibilities is an examination of the roles and effectiveness of privately and publicly provided job training and education. This paper is designed to provide information on the effectiveness of government training programs for the Commission's deliberations.

INTRODUCTION

The federal government has provided support for public job training efforts for a number of years. During the 1960s most of the programs were offered under the Manpower Development and Training Act (MDTA). In the seventies, the Comprehensive Employment and Training Act (CETA) was the major vehicle and during the period since 1982, the Job Training Partnership Act (JTPA) has been the umbrella for most training activities. There have been additional programs directed toward specific groups--dislocated workers, individuals on public assistance, and youth.

Although the enabling legislation and the structures under which the programs have been offered have changed over the years, the

activities themselves have been fairly consistent. Classroom basic skills training, work experience, specific skills training, on-the-job training, and job search assistance have been a part of the federal government's training "arsenal" for most of the twenty-five year period. Therefore, an assessment of the effectiveness of training programs can stretch across different legislative initiatives. Likewise, even though the legislation has been targeted toward different groups, the characteristics of participants in the programs have been similar enough to allow comparisons to be made in terms of the effectiveness for specific groups.

This paper does not report on new evaluation research, but instead synthesizes the existing body of work for these sets of government programs. The emphasis is on how effectiveness relates to a set of objectives that the federal government might have in its pursuit of increased efficiency of the workforce. Consequently, the paper begins with a delineation of the alternative objectives that policymakers may have in developing and implementing training programs. Then several groups that are most likely to be in need of government-subsidized employment and training programs are identified. The third section of the paper reviews the literature on the effectiveness of training programs for the groups identified and relates the success to the objectives outlined in section two. The last section of the paper presents some public policy questions.

For most of the twentieth century increased productivity has been instrumental in the growth of the American economy. Denison (1979) and others have estimated that increased education and training have been major contributors to increased productivity and economic growth in the United States since 1930. Education and training are also associated with higher earnings and lower levels of joblessness for individual workers. Therefore, training is beneficial both to the individual and to society.

Training may be needed by workers at various points in their working lives--when the worker is preparing to enter the work force and when the worker is moving (or trying to move) from one job to another. The training that is needed may be basic skills training, such as reading and basic mathematics, or it may be technical training to perform a specific job or progress within a given occupation.

In the past, basic skills training has been seen primarily as the responsibility of the public school system. It has been expected that individuals would leave the school system with a basic grasp of reading, writing, mathematics and other subjects. The acquisition of job specific skills has varied. For certain occupations and for entry level jobs the worker has also been expected to acquire the skills outside of the workforce, either through private training programs paid for solely out of individual and family resources--in school or apprenticeships--or through education and training programs subsidized by public funds. Once a worker has obtained a job, further training can be provided on

the job or in formal training programs paid for by either the employer, the employee, or some combination of the two. The extent to which the employer is willing to pay is related to the proportion of the benefits from training that accrue to the company. If the training increases the likelihood that the employee will look for and obtain a job with a different employer, the current employer is unlikely to fund it.

The projections for the American workforce suggest that training provided to workers before they enter the workforce and over the course of their work lives will be critical to their performance in the U.S. economy and to the United States' performance in the world economy. Some of this training can be provided by the private sector, but clearly there is a role for the public sector in terms of planning and in terms of service delivery.

For the most part, the gains from education and training accrue to either the worker or the employer and, therefore, the two should be willing to bear the cost of the training. However, there are several social objectives that would lead the government to participate in the training process. When there are a sufficient number of skilled workers in the available labor pool, expansion in employment can take place with minimal disruption to production. However, when there is a shortage of skilled workers, production is disrupted and labor costs increase as employers bid up wages to attract the limited number of workers available. While much of the shortage may disappear in time, the economy suffers from lags in production and that affects domestic Gross National Product and reduces the United States' competitiveness abroad. Therefore, society would benefit if the government facilitated the

process by which workers upgraded existing skills and acquired new ones. This may be especially true if employment expansion is taking place in small firms which may not have the working capital or management cadre to provide training for their workers.

Another societal objective may be to assist individuals who could not otherwise obtain employment at wages high enough to make them self-sufficient. Individuals who lack basic or job-specific skills have difficulty obtaining moderate or high wage jobs. The society then bears a double burden. The productive work effort is lost and the government frequently pays costs in terms of public assistance income and through crime and other anti-social behavior. During the past fifteen years, workers who did not have basic skills and training to take new job opportunities were increasingly likely to leave the labor force. This group was disproportionately composed of workers with less than a high school education (Simms, 1986).

Adult workers can be divided into four groups--employed workers, displaced and unemployed workers, returning workers, new entrants with little or no prior work experience. Each group has different needs as far as training is concerned. The currently employed worker may not be in need of immediate training, but it is likely that he or she will need additional training over the course of the life cycle in order to perform the current job better and to prepare for other jobs. Displaced workers can be subdivided into those who have no reemployment problems, those who have good job skills but have poor job search skills and those who have fewer transferable job skills and/or have low literacy.

The problems of the low-skilled jobless also apply to those new entrants to the work force who have had little or no prior work experience. Women who are long-term welfare dependents fall into this group. Most have very little work experience and testing in several locations has verified that many have basic skills deficiencies (Nightingale and Burbridge, 1987). Youths are similar to this group in that they have no work experience. In addition, a substantial proportion of the noncollege youth population, especially those who have not completed high school, lack basic skills as well.

To summarize, the societal objectives in providing employment and training programs may include:

1. Training for mobility--both intrafirm and interfirm--in order to reduce disruptions associated with technological and structural change;
2. Increasing skill levels--current workers, new entrants, and returning workers, in order to increase productivity and raise income levels.

Identifying the appropriate public sector training programs for achieving either objective is dependent upon the evaluation of program performance for different subgroups in the population. Evaluation can take place on a number of levels. One measure of evaluation would be how well the program is carried out--is it efficiently run, does it have appropriate outreach, is it serving the target population? The next level of evaluation would be what effect it had on the participants--are individuals placed in the program that best fits their needs, does it have positive outcomes?

Answering the last question is not simple or straightforward. It is certainly possible to compare the situation of the participant before program entry with his or her situation after program exit, but this gross impact approach would not take account of the fact that the individual's situation might have changed even if they had not been in the program. If their employment and earnings situation would have improved, then using the gross impact as a measure would overestimate the impact of the program. On the other hand, it is possible that their situation would have deteriorated in the absence of intervention. In this case, the gross measure would underestimate the impact of the program.

To arrive at a measure of the net impact of a program it is necessary to have a group with which to compare the participants, a group that has many characteristics that are similar to those of program participants except for the fact that they do not receive treatment. It is possible to get a control group of this type by randomly assigning program applicants to treatment (admit to the program) and nontreatment (reject the applicant) groups. However, this approach is usually avoided by program operators because of the possibility that an individual would be denied access to a program that could substantially improve their lives (Heckman, et al., 1987). The alternative to random assignment has been the use of comparison groups, individuals who share many of the characteristics of the treatment group, but who have not received the treatment.[1] However, in this situation, there may be a number of differences that are not measured, such as motivation, etc. Researchers attempt to correct for these differences by the use of

various modeling and correction techniques to control for sample selection bias and other complicating factors (Barnow, 1987).

Finally, evaluating a program may also involve comparing the gains from the program--employment and earnings for the individual, increased tax revenues and reduced welfare and anti-crime costs for society--with the costs of the program--public expenditure outlays and foregone income by the participant and, possibly, displacement of other workers from jobs. Such a cost-benefit analysis would involve estimating the costs and benefits over a period of time, which would include an estimate of whether the program benefits decayed or were enhanced over time (Barnow, 1989; Bassi, 1983).

GOVERNMENT TRAINING PROGRAMS, 1962-1989

Following World War II, the interest in employment and training programs dates from the Manpower Development and Training Act of 1962. This program was originally designed to retrain individuals who were displaced from their jobs due to automation. In the early years of the program the majority of enrollees were unemployed family men who had been employed at least three years before their job loss. However the economic expansion of the mid-1960s and the interest in the War on Poverty led federal policymakers to change the program's focus. By 1966, the majority of enrollees were from disadvantaged groups with more basic employment problems. In 1973, MDTA was replaced by CETA, which was more explicitly designed to assist disadvantaged groups (Ginsberg, 1980; Levitan and Gallo, 1988; Barnow, 1989).

While two types of activities were possible under MDTA, formal institutional training and on-the-job training, CETA included a more diverse set of activities, reflecting the greater needs of the CETA target population. Under CETA, adult work experience was included to provide those with no prior labor market experience a familiarity with the "world of work." Classroom training was added for those who lacked basic skills and for those occupations in which the classroom was deemed the most appropriate setting for skill acquisition. So while MDTA included two types of activities, CETA provided four basic activities: classroom training, work experience and public service employment (PSE), on-the-job training (OJT) with a private employer, and direct job placement.

JTPA, which replaced CETA in 1982, provides all of the same activities that were available under CETA, except for public service employment. However, it does limit the use of work experience and stipends for participants are subject to a severe budget restriction. JTPA's primary target groups are disadvantaged youths and adults (especially welfare recipients), under Title II and displaced workers, under Title III.

In addition to these major programs, there have been other employment and training programs designed for or available to adults. These include the Work Incentive program (WIN) for welfare recipients (first adopted in 1967), the Community Work Experience Program (CWEP), "workfare", programs offered under the Trade Adjustment Assistance Act (TAA) and various local demonstration programs sponsored by both governmental and nongovernmental units. Youth have been included in the

major adult programs and have had summer employment and Job Corp programs available under both CETA and JTPA. In addition, several youth initiatives, including the Youth Employment Demonstration Program Act (YEDPA), have been tried in the past 25 years.

The framework for reviewing the programs is as follows: within each major program, the major target groups and their needs are identified. Then the program activities they participated in are summarized and the effectiveness is measured. Several factors are considered:

1. Did the program serve those it was designed to help and what percentage of the eligibles were served?
2. What types of activities did the participants have access to?
3. What were the outcomes?

Training Programs Under CETA

As indicated earlier, CETA was designed to be a program that targeted disadvantaged individuals. Over the nine years that CETA was in operation, the program standards and eligibility criteria were revised in order to restrict the program to individuals who were thought to be most in need of the type of assistance offered by CETA (Ginsberg, 1980; Bassi, 1983). A review of the characteristics of program participants indicates that, on many measures, participants met the "disadvantaged" standards set as one of the program goals. However, there are also some indications that during the early program years, CETA did not serve women at their levels of eligibility and that women

in CETA were underrepresented in nontraditional programs and in the higher wage programs such as OJT (Berryman, 1981; Simms, 1985). Some analysts have also asserted that the program took the best of the group eligible to participate (this is called "creaming") (Levitan and Gallo, 1988).

In order to facilitate the evaluation of CETA programs, the Department of Labor established a database which consisted of a sample of program participants. A comparison group was developed from the Current Population Survey to go with this Continuous Longitudinal Manpower Survey (CLMS). The original evaluation research on CETA was completed by Westat, Inc., which had developed a set of matching techniques for the comparison group (Bryant and Rupp, 1987). Later evaluations by other researchers relied heavily on the Westat comparison group, but varied in a number of other respects, such as the particular groups of CETA participants included in the evaluation, the matching procedures utilized, the postprogram period used for observing program impacts, and the statistical equations used for estimating the program effects (Barnow, 1987).

Estimating Benefits.

As a result of the differences in approach, the estimates for the net impact of CETA vary widely. (See the Appendix for a summary of the different techniques used and the impact estimates from major CETA evaluations.) Reconciling these very different estimates has been difficult to do. And determining which estimates (or magnitude of estimates) are closest to the true gain to participants has been

practically impossible. Some researchers (LaLonde and Maynard, 1987) have asserted that it is not possible to find estimation techniques that properly correct for all the differences between the participants and the control groups in the case of nonexperimental data--those that use comparison groups and not random assignment, but others have produced some evidence to the contrary (Heckman, et al., 1987).

Even though the true estimates for program gains have not been determined with precision, some patterns are consistent across research studies. The earnings gains from CETA were judged to be relatively modest, between $200 and $600 for program participation, although the gains from some CETA activities were estimated to be somewhat higher. Most evaluations found the program to be more effective for women than for men. In fact, few studies found consistent positive and significant gains for minority men. Public service employment and OJT were the programs most likely to show any significant positive effects for men (Bassi, 1983; Barnow, 1987). For the most part, the increased earnings appeared to be in the form of greater employment (more hours worked) and not in the form of higher wage rates. This would certainly help to explain the gender differences since women are more likely to be in the position of increasing the number of hours worked, while disadvantaged males may be more likely to be working before program participation but at chronically low wages (Burbridge, 1986).

Costs and Cost Effectiveness.

Program activities in the employment and training program vary widely in terms of costs. For low intensity programs such as job search

assistance, cost estimates are between $50 and $250. More intensive programs have costs ranging from $1500 (for classroom training) to $5,000 to $10,000 per participant for work experience, OJT, and PSE activities (Bassi, 1985; The Urban Institute, 1986).

The wide fluctuation in estimated net impacts makes it difficult to conduct cost-benefit analyses. Even if the direction of impact is judged to be fairly uniform, the inability to obtain a precise measure limits the ability to construct a cost-benefit ratio. Based on the findings for women, however, it could be argued that the more effective programs are the more costly ones. In order to judge this program cost effective, it may be necessary to prove that the benefits do not decay rapidly and therefore the present value of the benefit stream does exceed the costs for society. Bassi (1983) did estimate cost-effectiveness for the four major CETA programs for economically disadvantaged enrollees (who had higher gains than the nondisadvantaged) and found only classroom training and on-the-job training to be cost-effective, with benefit cost ratios of 1.05 and 1.11 when benefits do not decay for five years and 1.69 and 1.80 if the benefit stream lasts for ten years.

Training Programs Under JTPA

Criticism of the operation of CETA, especially the PSE component, led to the restructuring of the employment and training delivery system under the Job Training Partnership Act. In addition to reducing the amount of money available for job training, the new law decentralized the program, provided for more state oversight and introduced more

accountability. States were given more flexibility in the administration of the program and Service Delivery Areas (SDAs) were required to establish performance standards to hold service providers accountable for outcomes from the use of funds. While the regulations allow SDAs to set their own performance standards, within given parameters, the majority started the program with employment and earnings standards (Nightingale, 1985). Some of the early reviews of the implementation of JTPA asserted that these performance standards led to program structures that emphasized quick treatment and screened out the hard to serve. This appeared to be a particular problem for youth who were high school dropouts. Some program evaluators noted that youth were being asked to take literacy tests and were rejected if they did not read at a ninth grade level (Orfield and Slessarev, 1986; Levitan and Gallo, 1988). This tendency was aggravated by a reduction in funds that limited the percent of the eligible population that could be served. Consequently, it was argued, the program was not serving the mandated populations--youth and disadvantaged adults--to the extent that it should.

Is JTPA Serving the Target Population?

An analysis of JTPA participation by the National Commission on Employment Policy (Sandell and Rupp, 1988), disputed the argument that JTPA was not serving the mandated population by comparing data on JTPA participants in Program Years 1984 and 1985 (obtained from the Job Training Quarterly Survey) with estimates of the eligible population constructed from the March 1986 Current Population Survey. They defined

the true target population as those who met the JTPA eligibility standards and who were unemployed. The argument they developed was that a true indication of willingness and availability to participate in a JTPA program was to be unemployed (not employed and actively looking for work). By this definition, they concluded that JTPA was serving about 13 percent of the eligibles who were likely to volunteer for program participation. This is a rate substantially higher than other estimates, since it eliminates individuals who are either employed or not in the labor force (about 88 percent of the eligible population at the time) from consideration. Using their definition of the "active eligible", the researchers found that welfare recipients and minorities were served at rates comparable to their representation in the eligible population and youth were overserved. The only population they identified as being underserved was adult high school dropouts. While they were 38 percent of the unemployed eligibles, they were only 26 percent of the JTPA participants.

There are some drawbacks to the Sandell and Rupp approach to defining the group of eligibles that are likely to enroll in JTPA. For youth the unemployment measure ("are you actively looking for work") is much more unreliable as an indication of interest in and willingness to participate in an employment and training program. The labor market status of youth is much more fluid, with movement in and out of the labor force being quite volatile. Moreover, since the goals of employment and training programs for youth are often broader than immediate postprogram employment, the concept that may work for adult males, will probably be less useful for youth. It may also be somewhat

problematic for women on welfare as well. The income likely to be generated by employment without skill enhancement would leave many welfare recipients financially worse off than they are on public assistance and the lack of affordable child care could also reduce their likelihood of actively seeking work. That may not mean that they are unwilling to participate in a training program that would increase their wage earning capacity, providing child care were available.

Evaluations of Title II Programs

When JTPA was initiated, the evaluation plan was to continue with the type of database that was available under CETA. However, a review of the CETA evaluations and other evidence led a Labor Department panel to recommend the abandonment of the Job Training Longitudinal Survey in favor of a random assignment experiment and research on structural modeling that would resolve the problem of selection bias (Stromsdorfer, 1987). That evaluation is currently underway. In the meantime, the data on the impact of JTPA is quite limited. The most recent national study of JTPA is the Department of Labor's Inspector General audit (DOL, 1988). In addition, several states have undertaken evaluations of their own programs. Two of these studies are reviewed here.

The Inspector General (IG) report is not a net impact analysis. Instead, it is a review of the characteristics of the participants and an analysis of the postprogram outcomes. The audit is based on 58 sites selected for review. No comparison or control group is included so that it is hard to say definitively how these outcomes compare with what would have happened in the absence of program participation.

The report's review of program participation led the Inspector General's Office to assert that the program has not been targeting the hard-to-serve population. An analysis of the age, educational attainment, work history, and receipt of public assistance of participants was conducted. The IG found that 60 percent of the participants had a high school education or better and the typical participant had prior work experience. One-half of the adults received nonoccupational training, the majority getting job search assistance. Of the one-half receiving occupational training, the group was almost evenly split between OJT and classroom training. The audit was fairly critical of the programs offered, asserting that 60 percent of the OJT participants would have been hired by the employer in the absence of a program and pointing to the fairly short periods of program involvement. Job search participants were only in the program for one month, remedial education participants for three months and occupational training enrollees for an average of six months.

While placement rates were fairly high, with 70 percent of program terminees entering unsubsidized employment, only 58 percent remained on the job in which they were placed for more than 4 months. Sixteen percent were in second jobs and 26 percent were unemployed. The vast majority (70 percent) were earning less than $5 per hour and only the participants who were under the age of 35 showed an increase in wages over pre-program earnings. Among youth, 50 percent of those not entering unsubsidized employment had other positive outcomes such as enrollment in other training (45 percent), attainment of other

employment competencies (34 percent), school completion (16 percent), and enrollment in apprenticeship programs or the military (5 percent).

Several states have undertaken evaluations of their JTPA programs, using guidelines similar to those issued by the National Commission on Employment Policy and reports from Indiana and Nevada are discussed here.

The state of Indiana conducted a net impact analysis evaluation of its JTPA program for individuals who were in the program between October 1, 1983 and March 31, 1984 (State of Indiana, 1986). The comparison group used for the analysis was Employment Service applicants. The two groups showed similar declines in earnings prior to application to the respective activities. However, there were differences in the demographic characteristics of the two groups. The Employment Service applicants were more likely to be white, more likely to be female; they were slightly older and less likely to be on welfare.

Unlike the CETA evaluations, the Indiana study found positive outcomes for all participant groups examined. For men who participated in 1983-84, the net income gain in 1985 (post-program year) was $1400 (in constant 1983 dollars). White women had net income gains of $1000 in the first postprogram year. No gains were calculated for minority women because of concerns about the dissimilarities between the participant group and the comparison group for minority women. Welfare recipients had increases in net income of $1200, an amount equivalent to their preprogram annual earnings. The welfare grant reductions were $105 per month, an amount that peaked approximately 12 months after program termination. This peak occurred because many welfare recipients

were able to move off welfare within two years without program intervention. The analysts attributed the large net gains for welfare participants to the fact that the comparison group is heavily weighted by WIN mandatory individuals who are required to register for work, but who are probably not extremely motivated.

The findings of positive impacts for males is somewhat surprising, given the fairly consistent findings of no gain under CETA. Moreover, while there were no significant differences by race or ethnicity, measured impacts were highest for Hispanic males, next highest for black males, and lowest for white males. Since minority males were least likely to have gains under previous programs, these findings raise several questions. The study cites the absence of stipends as a possible explanation, arguing that males who are enrolled in JTPA really have to be motivated while those who were in CETA programs were motivated primarily by the stipend. However, the choice of a comparison group may also have affected the findings. The black male JTPA participants were more likely to be high school graduates and were more likely to be veterans. Both factors should have made them more attractive to employers. On the other hand, the participants had a very large preprogram dip in earnings that began four years before program enrollment, while the ES applicants had dips two years prior to the enrollment period, which would suggest that intervention was necessary for the program participants to recover income. Given that Indiana is a state that underwent severe employment problems as a result of both cyclical and industrial change, it might be expected that males who may

have lost jobs in manufacturing industries would need a strong intervention to move them back onto a high and sustained earnings path.

The Nevada evaluation also used Employment Service applicants as a comparison group, and they found similar earnings gains for males (Hanna and Turney, 1988). This study covered JTPA participants, aged 22 to 65, enrolled in Nevada programs between July 1, 1985 and June 30, 1986. The researchers estimated the net income gain based on three quarters of postprogram wage data. The comparison group included only those ES applicants who were economically disadvantaged, but it was difficult to find a match group. Even after adjustment, the female JTPA participants appeared to be more disadvantaged than the comparison group. The annualized estimates of net gains for males ranged from $1436 to $1726, depending on the program. It appears that OJT may have been more successful than classroom training. Women had gains between $632 and $926, with most of the gains coming from increases in time employed and not increases in wages. Gains for men did show a wage effect.

Displaced Workers (Title III).

The General Accounting Office (GAO) recently conducted a review of the services provided to displaced workers under JTPA (GAO, 1987). They estimated that approximately 7 percent of the eligible displaced workers were served by Title III programs between the beginning of JTPA and June of 1986. The vast majority of those receiving services (84 percent) were provided with job counseling and two-thirds were given job search assistance. Only about one-quarter had classroom training and 16 percent were placed in OJT slots. A mere 6 percent received remedial

educational services. Title III programs had a high placement rate, with 69 percent of program terminees having jobs at the end of the enrollment period. , The average wage rate of $6.61 was lower than previous wages and below the $8.52 average for private sector workers, but above the rates for terminees from other employment and training programs.

The relative success of the JTPA program must be judged against its shortcomings. Although the Department of Labor had not set performance standards for displaced workers programs, about 80 percent of the states did, and most of these were placement standards. These standards may have been a factor in the selection criteria used by service providers, causing them to screen out harder-to-serve applicants. The participants in Title III programs were predominantly white males between the ages of 22 and 44, with at least 12 years of education. When compared with the profile of the typical displaced worker during that time period, it appears that older workers and those with less education were less likely to be served by JTPA than would be expected, given their representation in the population of displaced workers. GAO found this was especially true if the service provider screened entrance into the program. These findings suggest that those individu ls who are most in need of assistance have been the ones least likely to receive it under JTPA programs for displaced workers.

Structuring and evaluating programs for youth has been a more difficult task than for adults. In many cases, the purpose of an employment and training program goes beyond immediate postprogram employment. At the upper end, the expectation is that program intervention will place the youth participants on a different life track leading to further education and training, increasing long-run earnings curves, reducing criminal and other anti-social behavior, and decreasing the incidence of early parenting and long-run welfare dependency. Clearly, for most youths, a work experience program is too limited to have such a large impact on an individual's life. Increasingly, policymakers and policy analysts are pointing to the one program that has been widely judged a success for youth, the Job Corps, as a model for youth programs. The Job Corps was designed as a massive intervention into the lives of high school dropouts. The individuals who enrolled in the Job Corps were taken to residential sites away from what was considered to be a negative urban environment and offered a fairly lengthy curriculum that included both basic skills and occupation-specific training. In addition, participants were provided with counseling and health services and a broad range of other support services. An evaluation of the Job Corps by Mathematica Policy Research, Inc. (Mallar, et al., 1980) indicated that the program not only increased employment and income,[2] but resulted in youths seeking more education and training, being more likely to enroll in the

military, and being less likely to engage in criminal activity or be dependent on welfare.

These findings, in combination with some concerns about the ability of JTPA, as originally structured, to assist the youths most in need of help, led to the development of several programs that combine JTPA activities with additional services. Two programs that are currently in place are the Summer Training and Education Program (STEP) and JOBSTART.

STEP is a program that was developed as a demonstration by Public/Private Ventures of Philadelphia (Sipe, et al., 1988). The program was introduced as a demonstration at five sites (Boston, Fresno, San Diego, Seattle, and Portland) in 1985. Participants in the program, which combines a government-subsidized summer job with remedial reading and mathematics and life skills instruction, are 14 and 15 year olds who are eligible for the Summer Youth Employment and Training Program (SYETP) under JTPA Title IIb. Youths who are targeted for the program are low achievers who are high dropout risks but who are still enrolled in school.

The STEP program consists of two summers of work experience and classroom activities and support services during the intervening school year. The program evaluation used SYETP enrollees as a comparison group and the gains that were measured included 1) net math and reading gains for the first summer; 2) retention in school the following year; 3) gains in math and reading during the second summer; 4) changes in sexual and contraceptive behavior. In the four years of the

demonstration, approximately 4500 individuals have been followed and postprogram evaluation will continue until 1992.

The rationale for the program was based on findings that jobs alone (as was tried under YEDPA) were not sufficient to prevent at risk students from dropping out of school. Instead, stronger interventions that improved basic skills and changed behavior were needed (Berlin and Sum, 1988). In-program and postprogram data indicate that the program does have modest impacts on basic skills. STEP participants had significant net gains in reading and math during the first summer. While the control group lost skills over the course of the summer, program participants in 1987 gained and the difference between the two groups was 0.5 years for reading and 0.6 years for math. The impact of the life skills course was less apparent the first summer. While their k· ·ledge of contraception increased, not all program cohorts had i ed the use of contraception and few changes in sexual behavior were reported. During the school year, modest impacts were seen for individuals who had strong support services. Second summer gains were also recorded for reading and math, but only two cities followed the control group, so the net impacts are not clear.

JOBSTART is another program that combines regular JTPA programs with additional activities, including both education and skills training (Auspos, 1987). The program, which is being evaluated by the Manpower Demonstration Research Corporation, began in August 1985 and includes 16 sites, 13 demonstration sites and three nonresidential Job Corps programs. Participants in this program are high school dropouts who would not normally be recruited for JTPA since they were reading below

the 8th grade level. The emphasis is on longer term, more intensive training than the JTPA system usually provides.

Individuals were enrolled in JOBSTART on a random assignment basis so the control group would be comparable on most dimensions and sample selection bias would be eliminated. Enrollees received basic education and occupational training over an average of six months, either sequentially or concurrently (Auspos, et al., 1989). In addition support services and life skills courses were available at some sites. Individuals in sequential programs received more basic education, but significantly less occupational training. On average individuals participated in the program activities for over 400 hours. Young mothers were the only group that had significantly lower hours of participation. Those who did receive training were most likely to be in moderate skill level programs. The interim followup findings indicate that all subgroups had positive outcomes, with the treatment group being more likely to receive GED certificates, but less likely to be employed than the control group. However, since most were in JOBSTART for much of the time between enrollment and the followup interview, this is not unexpected.

POLICY ISSUES

This brief summary of recent experiences with government-subsidized employment and training programs reveals that many of the programs have had positive effects, but the effects have been quite modest. Evidence also exists to indicate that the more effective

programs for youths and for adults with serious labor market problems are the more expensive ones.[3] In general the programs have served only a small proportion of the eligible population. Under JTPA, estimates of the percent of the eligible population served has ranged from 5 to 13 percent. Moreover, under JTPA, some of the most disadvantaged--older workers, high school dropouts, etc.--have not been served at rates proportionate to their representation in the eligible population. While some findings indicate that JTPA has had positive outcomes for those who need low intensity services, the regular JTPA programs have not done very well at achieving the objective of reaching the hardest to serve. Evidence from demonstration projects such as JOBSTART indicate that the system can, in fact, be adapted to meet this goal.[4]

These findings suggest several important policy questions:

1. Given that past programs have been able to serve only a small proportion of the population, should future programs:
   a) continue to have the same mix of activities with more funds and more participants?
   b) change the mix of programs to serve fewer participants more intensively or more participants less intensively.
2. Should more attention be paid to the assignment of individuals to specific program activities, to ensure that individuals get the most appropriate service and does doing this infringe on the participants' choices in an unreasonable way?

Answering these questions within the current budgetary climate will not be easy.

NOTES

1. One problem that frequently arises with the use of comparison groups is that members of the comparison group have, in fact, received the treatment but they are not identified as such.

2. The only group that did not have significant increases in income was women with children.

3. These findings are supported by findings from demonstration projects such as the National Supported Work Demonstration and work-welfare demonstrations conducted by the Manpower Demonstration Research Corporation.

4. Several program models in the work/welfare system show that JTPA is also playing a large role in delivering services to welfare recipients. See Burbridge and Nightingale, 1989.

APPENDIX

Summary of Selected Evaluations of CETA

Source: Burt S. Barnow, 1987

Table 1
Summary of Estimated CETA Impacts on Earnings

	Westat (1981) FY 76	Westat (1984) FY 76	Westat (1984) FY 77	Bassi (1983)	Bassi et al. (1984) Nonwelfare Disadvantaged Adults	Bassi et al. (1984) Welfare	Bassi et al. (1984) Youth	Bloom & McLaughlin (1982)	DJW (1984) Adults	DJW (1984) Youth	Geraci (1984)
OVERALL	+	0	+ +	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
White women	+ +	+	+ +	+ +	+ +	+ +	0	n.a.	n.a.	n.a.	n.a.
White men	+	0	+ +	n.a.	0	+ +	− −	n.a.	n.a.	n.a.	n.a.
Minority women	+ +	+	+ +	+ +	+ +	+ +	0	n.a.	n.a.	n.a.	n.a.
Minority men	+	0	+ +	0	+	0	− −	n.a.	n.a.	n.a.	n.a.
Women	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0	0	n.a.
Men	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	− −	− −	n.a.
PSE	+	0	+ +	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
White women	+ +	n.a.	n.a.	+ +	+ + +	+ + +	+ +	n.a.	n.a.	n.a.	n.a.
White men	0	n.a.	n.a.	n.a.	+	+ + +	0	n.a.	n.a.	n.a.	n.a.
Minority women	+ +	n.a.	n.a.	0	0	0	−	n.a.	n.a.	n.a.	n.a.
Minority men	0	n.a.	n.a.	0	0	0	−	n.a.	n.a.	n.a.	n.a.
Women	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	+	0	+ + +
Men	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	− −	−	−
WE	0	−	+	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
White women	0	n.a.	n.a.	−	+ +	+ +	−	+ + +	n.a.	n.a.	n.a.
White men	−	n.a.	n.a.	n.a.	+	+	− −	−	n.a.	n.a.	n.a.
Minority women	+	n.a.	n.a.	+ +	+	+ +	−	+ +	n.a.	n.a.	n.a.
Minority men	0	n.a.	n.a.	−	+	0	− −	+	n.a.	n.a.	n.a.
Women	n.a.	n.a.	n.a.	n.a.	n.a	n.a.	n.a.	+ + +	− −	0	+
Men	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0	− −	− − −	− −
CT	+	+	+ +	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
White women	+ +	n.a.	n.a.	0	+	+	−	+ + +	n.a.	n.a.	n.a.
White men	+	n.a.	n.a.	n.a.	− −	−	− −	+	n.a.	n.a.	n.a.
Minority women	+ +	n.a.	n.a.	+ +	+	+	−	+ + +	n.a.	n.a.	n.a.
Minority men	+ + +	n.a.	n.a.	+ +	0	−	− −	+	n.a.	n.a.	n.a.
Women	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	+ + +	0	0	+ + +
Men	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	+	−	− −	+
OJT	+ +	+ +	+ + +	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
White women	+ +	n.a.	n.a.	+	+ +	+	0	+ + +	n.a.	n.a.	n.a.
White men	+ +	n.a.	n.a.	n.a.	+ +	+ + +	+	−	n.a.	n.a.	n.a.
Minority women	+ + +	n.a.	n.a.	+ + +	+	+ +	+ +	+ +	n.a.	n.a.	n.a.
Minority men	+ + +	n.a.	n.a.	+ + +	+ +	+ +	0	+ + +	n.a.	n.a.	n.a.
Women	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	+ +	0	+ +	+ +
Men	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	+	−	−	+ +
MUL	+	+ +	+ + +	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
White women	+	n.a.	n.a.	+ +	+ +	+ + +	+ +	n.a.	n.a.	n.a.	n.a.
White men	0	n.a.	n.a.	n.a.	+ +	+ + +	− −	n.a.	n.a.	n.a.	n.a.
Minority women	+ + +	n.a.	n.a.	+ + +	+ +	+ +	−	n.a.	n.a.	n.a.	n.a.
Minority men	−	n.a.	n.a.	− − −	0	+ + +	−	n.a.	n.a.	n.a.	n.a.
Women	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Men	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Coding scheme: − − − Less than −$1,000 + + + Greater than $1,000 0 Between −$199 and $199
− − Between −$500 and −$999 + + Between $500 and $999
− Between −$200 and −$499 + Between $200 and $499

PSE = Public Service Employment, WE = Work Experience, CT = Classroom Training, OJT = On-the-Job Training, MUL = Multiple Activities.

See Table 2 for description of the studies and Table 3 for dollar amounts. DJW is Dickinson, John, and West (1984).

Table 2
Summary of Studies Reviewed

	Westat (1981)	Westat (1984)	Bassi (1983)	Bassi et al. (1984)	Bloom & McLaughlin (1982)	Dickinson, Johnson, and West (1984)	Geraci (1984)
Program entry	7/75–6/76	7/75–6/76 (A) 7/76–6/77 (B)	7/75–6/76	7/76–9/77	1/75–6/76	1/76–12/76	7/75–7/76
Postprogram period	1977	1977 (A) 1978 (B)	1977, 1978	1978, 1979	1976, 1977, 1978	1978	1977–1979 average
CETA participants included in analysis	Ages 14–60 Enrolled in CT, PSE, OJT, WE or MUL Over 7 days in program Prior year earnings less than $20,000 Prior year family income less than $30,000 Terminated from program by 12/76 Valid SSA match on 3 of 5 criteria	Same as Westat (1981) except family income excludes participant's earnings	Same as Westat	Welfare recipients and others economically disadvantaged ages 18–65, youth ages 13–22 No other restrictions	Ages 25 to 60 Enrolled in CT, OJT, or WE only Over 7 days in program	Ages 16–64 Not in summer youth program Complete or close SSA match Not in program in 1978	Same as Westat (1984 except over age 22)
CPS individuals eligible for comparison group	Same age, earnings, income and SSA match In labor force 3/76 or worked in 1975	Same as Westat (1981)	Same as Westat (1981)	For ages 18–65, on welfare or economically disadvantaged For youths 13–22, used Westat (B)	Ages 25 to 60 Earned less than SSA maximum from 1970–75 1975 family income less than $30,000	Adults in labor force in 3/76 Youth in labor force in 3/76 or who worked in 1975	Same as Westat (A)
Matching procedure	Cell matching for 1972–74 earnings groups • For low earners: Exact match on sex, race, and age. Collapsing permitted on education, family income, labor force experience, family head status, 1975 SSA earnings, change in SSA earnings 74–75, change in SSA earnings 73–74, poverty status, private sector employment. • For intermediate earners: Exact match on sex, race, 1975 SSA earnings, change in SSA	Cell matching for each activity. Exact match on sex, 1975 SSA earnings (for A) or 1976 SSA earnings (for B), change in SSA earnings for two prevoius years (1973–74 and 74–75 or 74–75 and 75–76), and race. Collapsing permitted for match on age, education, family income, prior year labor force experience, family head status, and poverty status.	Same as Westat (1981)	All economically disadvantaged and welfare recipients 18–65 included in adult study For youth 13–22, used Westat (1981) youth match groups	All CPS individuals who met the above criteria were included	Weighted nearest-neighbor match based on SSA earnings in 1970–75, square of 1975 SSA earnings, black, Hispanic, other minority, age, age^2, age^3, family head status, 7 occupational categories, public sector employment, poverty status, AFDC recipient, UI recipient, percent of time worked in 1975, percent of time worked in 1974, CPS re-	Same as Westat (A)

Table 2 *(Continued)*

	Westat (1981)	Westat (1984)	Bassi (1983)	Bassi et al. (1984)	Bloom & McLaughlin (1982)	Dickinson, Johnson, and West (1984)	Geraci (1984)
	earnings 74–75; collapsing permitted on other variables. • For high earners: Same as intermediate earners except family income given less priority in cell collapsing.					ported earnings for those at SSA maximum, 15 interaction variables Match groups formed overall and by activity.	
Regression procedure	Weighted least squares Separate regressions for each race-sex-earnings group	Weighted least squares Separate regressions for each activity	First differences OLS Separate regressions by sex-race status	First differences OLS Separate regressions by race-sex-welfare status	Fixed effects OLS Model with individual time trends and correction for earnings drop for participants	Ordinary least squares Separate regressions by age-sex-activity status	Two-step procedure: (1) Probit for positive earnings (2) Weighted least squares for positive earners separate analyses by sex
Regressors	Family head status, education, prior work in private sector, 1973 SSA earnings, 1974 SSA earnings, proxy for cyclical unemployment, family income, prior labor force status, age, educational disadvantage and status (age 16–18 only), veteran status (males only), presence of children under 6 (females only), presence of children 6–18 (females only)	Same as Westat (1981)	Age, age^2	Age, Age^2	Age, Age^2, education, education^2, family size, minority status, head of household status, current marital status, past marital status, presence of children under 4, presence of children 4–6, presence of children 7–18	Same regressors as used for matching	Age, Age^2, education, marital status, head of household status, economically disadvantage status, minority status, presence of children under 6 (females only), presence of children 6–17 (females only), interaction terms for experience and education.

Table 3
Impact Estimates

	Westat (1981) FY 76	Westat (1984) FY 76	Westat (1984) FY 77	Bassi (1983)	Bassi et al. (1984) Nonwelfare Disadvantaged Adults	Bassi et al. (1984) Welfare	Bassi et al. (1984) Youth	Bloom & McLaughlin (1982)	DJW (1984) Adults	DJW (1984) Youth	Geraci (1984)
Overall	300*	129*	596*	—	—	—	—	—	—	—	—
White women	500*	408*	534*	740*–778*	705*–762*	840*–949*	(68)–(23)	—	—	—	—
White men	200	(4)	500*	—	17–136	578–691*	(576)*–(515)*	—	—	—	—
Minority women	600*	336*	762*	426*–671*	779*–810*	659*–703*	(201)–(77)	—	—	—	—
Minority men	200	(104)	658*	117–211	116–369	(273)–69	(758)*–(681)*	—	—	—	—
Women	—	—	—	—	—	—	—	800*–1,300*	13	185	—
Men	—	—	—	—	—	—	—	200	(690)*	(591)*	—
PSE	250*	117	654*	—	—	—	—	—	—	—	—
White women	950*	—	—	614*–701*	1,049*–1,229*	1,558*–1,563*	882*–990*	—	—	—	—
White men	100	—	—	—	302–305	1,218*–1,307*	(180)–(81)	—	—	—	—
Minority women	650*	—	—	259–815*	1,605*–1,623*	1,648*–1,673*	1,125*–1,196*	—	—	—	—
Minority men	(50)	—	—	(213)–(23)	8–161	(32)–274	(396)–(314)	—	—	—	—
Women	—	—	—	—	—	—	—	—	464*	52	1,121*
Men	—	—	—	—	—	—	—	—	(836)*	(403)	(217)
WE	(150)	(234)	490	—	—	—	—	—	—	—	—
White women	50	—	—	(293)–(120)	760*–862*	505–854*	(333)–(315)	1,400*	—	—	—
White men	(450)	—	—	—	56–438	202–724	(1,021)*–(872)*	(300)	—	—	—
Minority women	300	—	—	872*–1,023*	361–400	825*–874*	(320)–(185)	900*	—	—	—
Minority men	0	—	—	(391)–(310)	370–389	(299)–249	(983)*–(912)*	300	—	—	—
Women	—	—	—	—	—	—	—	800*–1,300*	(522)*	(21)	267
Men	—	—	—	—	—	—	—	(100)	(526)*	(1,108)*	(588)*
CT	350*	267*	740*	—	—	—	—	—	—	—	—
White women	550*	—	—	63–205	295–354*	315–451*	(332)*–(288)*	1,300*	—	—	—
White men	400	—	—	—	(543)*–(457)	(440)–(120)	(962)*–(818)*	300	—	—	—
Minority women	500*	—	—	426–633*	245–301	206–369*	(342)*–(247)	1,100*	—	—	—
Minority men	200	—	—	582–773	102–185	(571)–(99)	(872)*–(845)*	300	—	—	—
Women	—	—	—	—	—	—	—	800*–1,400*	0	117	1,201*
Men	—	—	—	—	—	—	—	300	(343)	(565)*	372
OJT	850*	531*	1,091*	—	—	—	—	—	—	—	—
White women	550*	—	—	80–382	701*–724*	190–318	(127)–12	1,200*	—	—	—
White men	750*	—	—	—	616*–756*	995–1,231*	452–463	(200)	—	—	—
Minority women	1,200*	—	—	1,368*–1,549*	223–244	564–587	861*–877*	800*	—	—	—
Minority men	1,150*	—	—	2,053*–2,057*	772*–812*	454–750	(260)–(58)	1,500*	—	—	—
Women	—	—	—	—	—	—	—	700*–1,100*	35	996*	882*
Men	—	—	—	—	—	—	—	300	(363)	(348)	612*

Note: All estimates are in postprogram year dollars except for Bloom & McLaughlin estimates, which are in 1980 dollars. DJW is Dickinson, Johnson, and West (1984). Numbers in parentheses are negative impact estimates. An * indicates that the estimate is statistically significant at the .05 level. PSE = Public Service Employment, WE = Work Experience, CT = Classroom Training, OJT = On-the-Job Training, MUL = Multiple Activities.

Table 3 *(Continued)*

	Westat (1981) FY 76	Westat (1984) FY 76	Westat (1984) FY 77	Bassi (1983)	Bassi et al. (1984) Nonwelfare Disadvantaged Adults	Bassi et al. (1984) Welfare	Bassi et al. (1984) Youth	Bloom & McLaughlin (1982)	DJW (1984) Adults	DJW (1984) Youth	Geraci (1984)
MUL	350	530	1,077*	—	—	—	—	—	—	—	—
White women	450	—	—	433–602	754*–764*	2,459*–2,700*	493–636*	—	—	—	—
White men	150	—	—	—	551–615	1,208–1,553*	(657)–(484)	—	—	—	—
Minority women	1,400*	—	—	1,195*–1,599*	683*–747*	928*–978*	(387)–(315)	—	—	—	—
Minority men	(300)	—	—	(2,171)*–(1,654)*	(43)–137	995–1,147	(472)–(239)	—	—	—	—
Women	—	—	—	—	—	—	—	—	—	—	—
Men	—	—	—	—	—	—	—	—	—	—	—

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