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An Evaluation of the Ohio JOBS Student Retention Program

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The provision of welfare support services at the state level faces dramatic upheaval in the coming months and years. More and more of the burden of creating and implementing welfare-to-work programs will be in the states' hands, as will the necessity of evaluating the effectiveness of these programs in achieving desired outcomes. One likely component of the impending national welfare reform will be the imposition of a five-year time limit on the receipt of support services. With such a limited time frame, it will be extraordinarily important for the states to develop programs that encourage self-sufficiency through employment. The Ohio JOBS Student Retention Program (JSRP) was developed and implemented prior to this current rush to reform welfare, but it anticipated the necessity to improve welfare recipients' earnings potential via education. The State of Ohio should be commended for taking the lead in implementing programs with such potential for improving independence.

The W.E. Upjohn Institute for Employment Research received a contract from the State of Ohio to study the effectiveness of the JSRP process and to evaluate its outcomes. We are grateful to the State of Ohio for their financial support as well as to the many individuals in the various administrative offices in Ohio whose efforts facilitated the evaluation process, thereby contributing to the quality of the report. In particular, we would like to thank Marvin Miller of Columbus State Community College, State Director of JSRP, for his continued guidance and support. Steve Weaver of Marvin's staff helped us considerably with the JSRP administrative data. Also, we thank Robert Johnson of the Ohio Board of Regents and Joseph Hook of the Ohio

Department of Human Services for their assistance in guiding the project. Brenda Newsom and Bill Ennis of the Ohio Department of Human Services, helped us to obtain and navigate the CRIS-E data.

For making the process study possible, we thank the many respondents at the six sites at which we conducted on-site interviews. Their insight and generosity enabled us to learn much about the process of administering JSRP, as well as the provision of services. We thank the six site directors and their staffs for arranging Kevin Hollenbeck's interviews and providing assistance and considerable information during his visits to their campuses. These six directors are Virginia Moore of Belmont Technical College, Bari Ewing of Cincinnati State Technical and Community College, Sarah Jo Twitchell of ComTech-University of Toledo, Bobbie Gibson of Cuyahoga Community College, Dr. William Rothman of Hocking College, and Karen Witt of Sinclair Community College. We are also indebted to the ex-JSRP participants who responded to the survey for the follow-up study. Finally, we are grateful to Dennis Benson and the remaining staff at ASI for their professional administration of the surveys and their quality product.

Several members of the W. E. Upjohn Institute family contributed to the implementation of the evaluation as well as the production of the final report. Ken Kline organized the three complex data sets, prepared them for analysis, and conducted the empirical analyses. His professional demeanor and programming and organizing skills were instrumental to the study. Becky Jacobs provided some assistance in the empirical analyses. Claire Vogelsong, Sandra Schippers, and Ellen Maloney prepared the survey instruments used in the on-site interviews at the six sites. Claire and Sandra also prepared the many tables and the full report. We are grateful for their professional, quality product. We thank all of these individuals for their contributions

in all aspects of preparing this final report. Finally, the usual disclaimer applies—any remaining errors are the responsibility of the authors.

TABLE OF CONTENTS

TABLE OF CONTENTS
(Continued)

TABLE OF CONTENTS
(Continued)

LIST OF TABLES

LIST OF TABLES
(Continued)

LIST OF FIGURES

EXECUTIVE SUMMARY

The JSRP Program

This report presents findings from an evaluation of the Ohio JOBS Student Retention Program (JSRP). The JOBS program is a component of the federal Aid to Families with Dependent Children (AFDC) program and is required, in all states, for AFDC recipients who meet certain criteria. The Ohio JSRP is an activity that is pursued by some JOBS program clients in Ohio to fulfill their responsibilities in order to receive aid. The JSRP facilitates entry to and success in programs of study at two-year community or technical colleges. Approximately 17,000 individuals have participated in the Ohio JSRP program between its inception in 1990 and summer 1994. To put some perspective on that total, note that the average number of AFDC clients in Ohio ***in a month*** is about 245,000, and the average number of JOBS participants ***in a month*** is 56,000. Thus, the Ohio JSRP program serves only a small segment of welfare recipients in that state.

In many ways, Ohio's community and technical college system is a natural partner in an attempt to help welfare recipients in their transitions from public assistance to work. Historically, two-year colleges have served older and disadvantaged students, and so they have a tradition of providing the sort of individualized attention required to support successfully welfare recipients through to degree completion. Additionally, key support services are available at many two-year colleges, such as developmental education programs, financial aid access, and on-site child care.

Many JOBS and (federal) Job Training Partnership Act (JTPA) programs have made use of the support services of two-year colleges by contracting the delivery of (classroom) adult basic

skills training to community or technical colleges. But few local and state programs before Ohio's JOBS Student Retention Program recognized the role that two-year postsecondary programs and Associates' Degrees could play in helping clients achieve financial independence. As long as the successes achieved by welfare-to-work programs are constrained by clients' limited educational attainments, the lifetime earnings capacity of recipients is limited. The notion underlying the JSRP is that enabling a JOBS program participant to pursue a postsecondary program and earn a degree should overcome this constraint.

The intent of the JSRP is simple. It is intended to facilitate the success of JOBS clients in postsecondary settings. Some of the unique characteristics of the JSRP are as follows:

- Collaboration at the state level between the Ohio Department of Human Services and the Ohio Board of Regents
- Collaboration at the local level between County Departments of Human Services and local postsecondary institutions
- Three levels of support to the clients—initial, ongoing, and individualized
- Time limited assistance

The three levels of support for JSRP participants help clients overcome barriers to participation in higher education such as lack of self-esteem, lack of familiarity with postsecondary institutions and campus life, and lack of career direction (clients may lack direction or may have unrealistic expectations). The **initial services** of JSRP are intended to address these barriers. Either before enrollment, for new students, or concurrent with initial enrollment, for clients already enrolled, the initial services provide orientation to campuses, assessment and counseling, and life skills seminars.

Once a client has actually enrolled in classes, the **ongoing services** are intended to support the student with her/his early encounters with the system. JOBS clients have fragile support mechanisms and, early in their postsecondary educational careers, they are likely to experience academic or personal problems that are or are perceived to be of major proportions. Through group activities such as workshops, seminars, group counseling, or through individual counseling, ongoing services are geared at helping clients through these "crises."

Finally, **individualized services** give the JSRP the flexibility to support students who need more assistance than can be provided throughout the initial or ongoing services. The three types of activities that may be funded include summer school tuition, tutoring, or payment of course-related expenses.

The JSRP administrative rules place a strict limitation on the timing and duration of services. The initial and ongoing services are limited to two semesters/three quarters of a client's attendance. This clearly signals the transitional nature of the program. Help and support are available before and during the client's adjustment period to postsecondary schooling, but the JSRP cannot become a permanent prop or source of pressure. To complete her or his educational program, the AFDC client must become mature enough to succeed on her/his own.

The Evaluation

The programmatic philosophy of the JSRP is to facilitate, for a segment of the JOBS caseload, the transition from welfare to work through successful navigation of programs of study at two-year colleges. The main objective of the program evaluation is to determine if clients are, indeed, progressing successfully in their programs.

The evaluation that was undertaken consisted of four separate studies. The *process study* involved interviews with state officials, local County Department of Human Services (CDHS) staff members, college staff members, and clients. The purpose of the process study was to examine the "everyday" operation of the JSRP program to determine what elements of the program are working for whom under what conditions. At the same time, the process study identified relatively ineffective program features and captured stakeholders' opinions regarding potential improvements.

The *impact evaluation* focused on client outcomes. It answered the question of what impacts participation in the JSRP had on individuals. The objective of the JSRP is to facilitate success in two-year community and technical colleges and to help JOBS clients move toward self-sufficiency. Using administrative data from the JSRP programs, from the Ohio Department of Human Services CRIS-E data system, and from the Ohio Bureau of Employment Services (OBES) wage record reporting system, the impact evaluation analyzed systematically several client outcomes.

A *follow-up study* was conducted to supplement the formative and impact evaluations. A shortcoming of the formative evaluation was that it relied on interviews with current students to gather client perspectives about the JSRP. For the most part, these students were currently receiving assistance from the JSRP program. Furthermore, the colleges selected the students. To gather the opinions of individuals who were no longer receiving JSRP assistance, the follow-up study involved a telephone survey of a random sample of clients who had participated during the period July 1991 to June 1993. In addition, the follow-up study asked participants about

educational outcomes. This information supplements the impact study because the administrative data do not contain information about education attainment and schooling.

A *cost effectiveness study* was also conducted to gauge how efficient programs were in delivering services to program participants. This study was not as central to the contracted evaluation as the other three studies, so it just provides summary cost information on a per student basis that may be compared across colleges and over time.

Findings

At the state level, the JSRP is administered by a collaboration of three agencies: the Ohio Department of Human Services (ODHS), the Ohio Board of Regents (OBOR), and Columbus State Community College (CSCC). This collaboration appears to be operating smoothly with each agency serving a different administrative function. The OBOR appears to act as the executive of the tripartite team as its staff sets the overall direction and parameters for the colleges. The ODHS acts as the fiscal arm of the administrative team. CSCC, under contract to OBOR, operates the program and is responsible for its day-to-day functioning. The philosophy of the state is to set the direction, but to allow local colleges considerable autonomy and flexibility in the services that they can offer to participants.

The biggest challenge facing the state is the uncertainty about the future of the program if federal welfare reform were to result in a block grant approach. The state administrators are trying to tailor program operations in anticipation of block grants and in anticipation of statewide emphasis on employment outcomes of clients. A major thrust in the current year (1995-96) is focusing college programs on employment and skill outcomes.

The process study suggested that local programs were providing services that were impacting the lives of JOBS clients in a positive way. The sites were operating autonomously, but many program aspects were similar across sites. Staff were structured similarly: a director, one or more student advisors, and a secretary. Some sites supplemented the program with peer tutors or work study student counselors. Almost all programs had an organized, modular set of workshops for initial services. All sites offered tutoring and counseling as part of their ongoing services, although the programs varied substantially in terms of how aggressive they were in monitoring students. Most sites had a program newsletter, and some sites had an active advisory committee.

Students were quite satisfied with the JSRP programs and activities in which they had participated. They particularly praised the helpfulness of the staff. The programs were providing a considerable amount of information to students that was helping them with their educational and career planning. The programs were also providing clients with valuable counseling advice and help in traversing college programs of study. The programs seemed to be having success with retention, but graduation rates seemed modest.

The colleges have healthy relationships with the CDHSs that are referring clients to them. Collaboration was reported to be smooth, and problems were easily resolved at the local level. In fact, the JSRP programs facilitated significantly the case management of clients for CDHSs in addition to providing educational services to clients. The student advisors, in many instances, were much closer to clients than were the JOBS caseworkers (because of smaller caseloads and more exposure) and were able to track personal situations that may be affecting the clients' lives. In several sites, both the JSRP student advisors and the JOBS caseworkers recognized and

exploited this win-win situation. The JSRP student advisors were able to help clients address problems and therefore increase their likelihood of success in the college setting. The JOBS case managers were able to devote more time and resources to other cases trusting that the JSRP program was monitoring their client and would communicate any problems that arose.

The vision and leadership skills of the director of the program at the college seemed to be key factors in successful programs. Also aggressive monitoring of student grades and progress was undertaken at more successful programs, and well-organized initial services seminars seemed to set programs apart in terms of their effectiveness.

The major challenges that local programs face are low basic skills of participants and the many barriers that JOBS clients have in undertaking college programs of study. If students need to enroll in developmental course work, then they require more time to complete their programs. But since JSRP is time limited, and Pell grants have financial limitations, students in developmental courses run considerable risks that they will not have the resources to complete their programs. It is almost certainly the case that JSRP participants are more likely than the average student to have child care needs and transportation constraints. Furthermore, many of the participants reported that they lacked family support for their college endeavors.

Another challenge that local programs were facing was a declining number of referrals from County Departments of Human Services. Declining AFDC rolls and a tight labor market may explain the downward trend. However, it seemed to us that the State and local AFDC caseworkers could promote the program more aggressively to face this challenge.

The follow-up study confirms the positive results from the process study in many ways. The sample of former JSRP participants gave very high marks to the *process*. They found the

activities that they participated in to be very useful, particularly the orientation to college and assistance with registration, financial aid, and other forms. They were highly satisfied with the counselors and counseling that they received. Over 90 percent of the ex-clients indicated that they would recommend the JSRP program to a friend or acquaintance, and half indicated that they had recommended it within the last six months. The only negatives about the programmatic processes were that about 7-10 percent of the sample felt that they had encountered poor counseling or misinformation and a large share of the sample felt that the time limitations on services to a client should be relaxed.

What did the follow-up study say about the outcomes of the program? Here the results were less sanguine. In terms of retention, about two-thirds of the respondents felt that they would not have achieved as much education without the JSRP program. However, less than 15 percent of the sample had received a degree or certificate by the time of the follow-up survey; and 40 percent indicated that they were still enrolled in college at the time of the survey. This means that almost half of the sample had discontinued their college programs prior to receiving a degree or certificate. Clients *intended* to do better in the future. About three-quarters planned to continue their education at some point in the future, but it was hard to assess the likelihood of this occurring and give it much credibility.

Also about three-fourths of the respondents indicated that they felt that their postsecondary experiences improved their chances of getting and keeping a good job. However, during the two-year period from January 1993 to December 1994, only 40 percent of the respondents were employed for pay in any capacity—part time or full time. Furthermore, only 30 percent of the jobs held were reported to be related to the training that the clients had engaged in.

Other important outcomes for the JSRP program include welfare status and educational skill levels. On these fronts, the follow-up study showed that over 40 percent of the JOBS clients had currently closed cases, and the reading levels on JOBS assessments rose by over 50 percent.

The impact analysis examined the JSRP program using administrative data from the JSRP itself, CRIS-E, and the OBES wage-record file. The average number of credits earned per student was 33.04, and the average grade point average earned was 2.62, with 60 percent of students having earned grades in the A or B range. Defining program completion as having received services for three or more quarters, the data showed that 60 percent of participants in the most recent cohorts completed their JSRP participation.

Approximately 70 percent of program participants had some post-JSRP employment, and about 50 percent were employed in the most recent quarter of available data. For individuals who participated in the first two cohorts of JSRP, average quarterly earnings were substantial: $3,240 and $3,001 respectively. For individuals for whom we had earnings data both before and after JSRP participation, quarterly earnings growth ranged from $1,000 for the first cohort to $688 in the fourth cohort. Multivariate analyses helped to explain the factors that were correlated with post-JSRP employment and earnings for JSRP participants. Factors associated with higher earnings included having more education, being older, male, or white.

A net impact analysis contrasted JSRP participants with a comparison group. Individuals in the comparison group were more likely to be employed in the second quarter of 1995 (48 percent versus 46 percent), but JSRP participants received higher quarterly earnings. An earnings regression showed that JSRP participation boosts quarterly earnings by 8.45 percent. Participating

in JSRP for three or more quarters resulted in a 12.9 percent boost to quarterly earnings, once other factors are controlled. This is a very strong finding for the program.

The cost effectiveness study showed that the average direct cost per participant was approximately $1,120 and the total cost, defined as the direct JSRP cost plus state subsidies, averaged about $2,770 per student. There was substantial variation across colleges in these costs, which could be explained by types of services provided, types of courses that JSRP students pursued, institutional costs, and average number of quarters of participation. Systematically higher costs appeared for programs at four-year institutions.

Recommendations

The text of the report provides our reasoning and justification for the following programmatic recommendations:

- **State administrators should enhance the technical assistance and information about program services provided to local programs.**
- **ODHS should more effectively encourage local JOBS programs to refer clients to JSRP programs.**
- **ODHS and the Ohio Department of Education should improve the coordination of education and training services for JOBS clients.**
- **State administrators should promote a positive image to local programs and clients.**
- **All local programs should offer a modularized pre-enrollment set of workshops for initial services of at least five weeks in length that should be mandatory for all client referrals.**
- **The state should allow local programs to develop a new type of service called "pre-initial services" to accommodate students who miss the "cut-off" dates for initial services.**

- **CDHS JOBS caseworkers are critical to the success of the JSRP program. The local JSRP programs should foster collaboration with them. The ODHS should encourage their involvement with JSRP programs.**

- **The JSRP programs should evaluate their activities to determine their effectiveness in developing group cohesiveness among participants and in developing time management skills.**

- **The state administrators should provide the resources, and the local programs should provide adequate professional development opportunities for JSRP staff.**

Summary

The future of the JSRP program is not clear. Substantial changes may be expected at the federal and state levels. Nevertheless, this evaluation shows that the programs that operated between 1990 and 1995 had substantial positive effects on participants. Despite their substantial barriers to success, the JOBS clients in JSRP programs were able to make the transition into college programs and to earn good grades. Most important, the net impact analyses showed that JSRP participants earned more than individuals in a constructed comparison group. Many caveats need to be considered in interpreting the findings of this evaluation, but all in all, the evaluation suggests that the JSRP program is achieving success. It has many challenges to face, and we hope that the recommendations made herein and the findings that we have highlighted will be of use to the program as it moves forward.

1. INTRODUCTION

1.1 The JOBS Program and Welfare Reform

This report presents findings from an evaluation of the Ohio JOBS Student Retention Program (JSRP). The JOBS program is a component of the federal Aid to Families with Dependent Children (AFDC) program and is required, in all states, for AFDC recipients who meet certain criteria. The Ohio JSRP is an activity that is pursued by some JOBS program clients in Ohio to fulfill their responsibilities in order to receive aid. Approximately 17,000 individuals have participated in the OHIO JSRP program since its inception in 1990. To put some perspective on that total, note that the average number of AFDC clients in Ohio ***in a month*** is about 245,000 and the average number of JOBS participants ***in a month*** is 56,000.[1] Thus, the Ohio JSRP program serves only a small segment of welfare recipients in that state.

The JOBS program itself was initiated as part of the Family Support Act in 1988 and was touted to be a significant reform of the welfare system. Since the mid-80's, states have experimented aggressively with welfare policy initiatives. The federal government established, and encouraged, a process through which states could ask for various waivers of AFDC program regulations to experiment with alternate programmatic approaches. Two conditions that the federal administrators required were that programmatic changes be cost neutral to the federal government and that they be evaluated rigorously. Otherwise they allowed states wide latitude to experiment, and many states seized the opportunity to do so. Most of the states' changes were

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[1]Data are for (federal) FY 1993 and come from the publication *Employment and Training Reporter*, June 23, 1994, p. 986. Note that the data indicate that the monthly average number of clients **required** to participate in JOBS is about 110,000, but only about 50 percent actually did participate.

aimed at moving recipients to employment as quickly as possible, and the evaluation studies have become known as welfare-to-work demonstrations.

Many suggest that the JOBS program was a response to the numerous evaluations of welfare-to-work demonstration programs that showed that comprehensive programs providing education and training along with job readiness activities succeed in increasing earnings and reducing welfare dependency (Gueron and Pauly, 1991). For example, MDRC studied California's JOBS Program (GAIN) using an experimental design and found, at the most successful site, an annual earnings increase of $271 and an annual welfare payment reduction of $281 per recipient.

The JOBS program requires that each participant undergo an initial assessment and then be informed of all possible opportunities available to them and restrictions within the program. Each state's JOBS program must include the following services: (1) a variety of education activities, including basic and remedial education and English as a Second Language (ESL); (2) job skills training; (3) job readiness activities; (4) job development and job placement; and (5) supportive services.

AFDC recipients are required to participate in JOBS unless they are granted an exemption due to (1) pregnancy in second or third trimester; (2) having a child under the age of three (most states); (3) own illness or illness of dependent; (4) residing in an area not currently covered by JOBS; (5) being under the age of 16 or currently enrolled in primary, secondary, or vocational education; or (6) currently employed for 30 or more hours per week.

The JOBS program is funded through federal funds that require state matching. In 1992, only about two-thirds of available federal JOBS funds were distributed to states. Due to an

inability to meet the fiscal match requirements, many states were unable to obtain their maximum allocation (Overview of Entitlement Programs, 1993 Green Book).

Currently, welfare reform (including JOBS) is again at the forefront of the U.S. policy agenda, and it is likely to continue to be a primary policy concern for many years to come. There is wide consensus among policy makers from all points on the political spectrum that most public assistance programs are not working. A small but significant percentage of recipients are trapped, facing a lifetime of welfare dependency. The impression of the rising prevalence of welfare as a way of life has led to an increased focus on welfare as *temporary* assistance and as facilitating the transition to work and self-sufficiency. Thus, the policy trends seem to point toward shorter periods of financial support and toward emphasis on getting clients into the paid labor force as quickly as possible.

Contributing to the changing attitudes toward welfare recipients is the changing demographic makeup of the labor force. Overall female labor force participation rates have grown steadily since the end of World War II; therefore subsidizing poor mothers so they can stay at home with their children has become less popular with the public. This has led to the encouragement of work as a means of poverty reduction for this particular group. Evidence suggests that this strategy may work. In the early 1990s, over 80 percent of single mothers who worked full time did not live in poverty (Foley, 1992).

1.2 The Role of Postsecondary Education in the Training of Welfare Recipients

In many ways, the states' community and technical college systems are a natural partner in the attempt to help welfare recipients in their transitions from public assistance to work. Historically, the two-year college has served older and disadvantaged students, and so has a tradition in providing the sort of individualized attention required to support successfully welfare recipients through to degree completion. Additionally, key support services are available at many two-year colleges, such as developmental education programs, financial aid access, and on-site child care.

Many JOBS and (federal) Job Training Partnership Act (JTPA) programs have made use of the support services of two-year colleges by contracting the delivery of (classroom) adult basic skills training to community or technical colleges. But few local and state programs before Ohio's JSRP recognized the role that two-year postsecondary programs and Associates' Degrees can play in helping clients achieve financial independence. As long as the successes achieved by welfare-to-work programs are constrained by clients' limited educational attainment, the lifetime earnings capacity of recipients is limited. The notion underlying the Ohio JSRP is that enabling a JOBS program participant to pursue a postsecondary program and earn a degree should overcome this constraint.

The Family Support Act, which initiated JOBS, allows states to support postsecondary education in appropriate cases, but there is substantial variability across states as to what is deemed appropriate. JOBS programs in all but four states permit participants to enroll in

postsecondary education. However, the bulk of states impose restrictions, such as time limitations of two years of support or institution type limitations.[2]

1.3 The Ohio JOBS Student Retention Program

The intent of the Ohio JSRP is simple. It is intended to facilitate the success of JOBS clients in postsecondary settings. In practice, this means that the program must overcome the barriers that AFDC recipients face to participate in postsecondary activities. Very few states have attempted this type of program. Ohio was first and has been most successful in assisting public assistance clients in navigating postsecondary programs.

Some of the unique characteristics of the JSRP are as follows:

- Collaboration at the state level between the Ohio Department of Human Services and the Ohio Board of Regents
- Collaboration at the local level between County Departments of Human Services and local postsecondary institutions
- Three levels of support to the clients—initial, ongoing, and individualized
- Time limited assistance

The JSRP was created in March 1990 by an interagency agreement between the Ohio Department of Human Services (ODHS) and the Ohio Board of Regents (OBOR). The implementation of the JSRP in such a short amount of time after the passage of the Family Support Act was facilitated by the financial incentives for interagency collaboration in the Act. These incentives existed because states could use as matching funds for JOBS their higher education

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[2]Some critics of JOBS assert that it has a built-in bias against postsecondary education. For example, one requirement of JOBS is that to be eligible for federal matching funds, a state is required to have a percentage of its JOBS participants enrolled in activities that last at least 20 hours per week. Individual states have had to undertake creative measures to overcome the fact that a student enrolled in 12 course hours at a community college must find some other JOBS-related activity to use up the remaining 8 required hours (Blumenstyk, 1992).

subsidies to public institutions for JOBS clients. But even though these financial incentives existed, the collaboration that resulted in the initiation of the JSRP program was noteworthy. It involved two agencies that had not historically worked together on many policy initiatives. Furthermore, most other states lack a program similar to the JSRP.

Besides the collaboration at the state level, another interesting aspect of the JSRP is the degree to which the County Departments of Human Services (CDHSs) interact with local two-year institutions. The CDHSs are responsible for all aspects of the AFDC program from eligibility determination to benefit payment to administration of JOBS. Caseworkers are the "faces" that clients associate with the AFDC system. The assessments done by JOBS staff and the marketing that they do to "sell" the JSRP are key determinants of the program's success. Staffs from the postsecondary institutions must support the CDHS and must be supported by the CDHS staff. Accurate and timely reporting and information flows must occur between the two agencies so that benefits and services are not denied.

Three types of services are supported by the JSRP. Among the barriers that AFDC clients must overcome through their participation in higher education are a lack of self-esteem, lack of familiarity with postsecondary institutions and campus life, and a lack of career direction (clients may lack direction or may have unrealistic expectations). The **initial services** of JSRP are intended to address these barriers. Either before enrollment, for new students, or concurrent with initial enrollment, for clients already enrolled, the initial services provide orientation to campuses, assessment and counseling, and life skills seminars.

Once a client has actually enrolled in classes, the **ongoing services** are intended to support the student with her/his early encounters with the system. JOBS clients have fragile support

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1.4 Evaluation of the JSRP

The programmatic philosophy of the JSRP is to facilitate, for a segment of the JOBS caseload, the transition from welfare to work through successful navigation of programs of study at two-year colleges. The main objective of the program evaluation is to determine if clients are, indeed, progressing successfully in their programs. It is easy to question the efficacy of assisting AFDC recipients with postsecondary education. Given the generally low educational attainment of public assistance recipients, one might ask whether the share of the caseload who might be able

to succeed in a postsecondary environment is large enough to warrant a program. Also, the majority of AFDC cases are on the rolls for a relatively short duration. It may not be sensible to expect the heads of such short-term cases to pursue courses of study that will take a minimum of two years to complete. Furthermore, the JSRP may have an adverse impact on case duration if it facilitates college attendance.[3,4] The notion that the objective of the JSRP may not be easily accomplished may explain why few states other than Ohio have implemented programs like the JSRP.

Aside from answering the basic question of whether this approach to education and training works for welfare clients, rigorous and objective evaluation of the JSRP is warranted for at least three other reasons. The changes to AFDC brought about by the JOBS program have not silenced the calls for systemic welfare reform. If anything, they have intensified. Critics contend that the participation rates in JOBS are too low,[5] that services are ineffective or duplicative of other programs, and that work requirements are too weak. The latter claim has resulted in proposals to reform AFDC (and JOBS) by de-emphasizing education and training and "pushing" work. Thus, it is important to evaluate the JSRP to provide evidence to policy makers about this type of approach. It might be the case that postsecondary education is an efficacious way to help some individuals move into self-sufficiency.

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[3]This is an adverse effect if one's objective is to minimize welfare caseloads and expenditures. But, of course, from the individual's and society's point of view, this temporary increase in duration may not be adverse.

[4]In the impact evaluation, we analyze the effects of the JSRP program on case duration.

[5]A recent GAO study documents that approximately 13 percent of the AFDC caseload has participated in JOBS.

A second justification for a rigorous evaluation is that scarce public funds are being used to support the program, and the state needs to be accountable for the impacts of these funds. Fiscal prudence in an era of tight budgets argues for program evaluation, so that scarce dollars can be spent efficiently. Finally, a rigorous evaluation involves examination of program operations. This part of the evaluation is referred to as the process study, or formative evaluation. It will result in recommendations to program administrators on how procedures or regulations might be changed to improve the program.

The evaluation that has been undertaken consisted of four separate studies. The *process study* involved interviews with state officials, local CDHS staff members, college staff members, and clients. The purpose of the process study was to examine the "everyday" operation of the JSRP program to determine what elements of the program are working for whom under what conditions. At the same time, the process study identified relatively ineffective program features and captured stakeholders' opinions regarding potential improvements.

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A *follow-up study* was conducted to supplement the formative and impact evaluations. A shortcoming of the formative evaluation was that it relied on interviews with current students to gather client perspectives about the JSRP. For the most part, these students were currently

receiving assistance from the JSRP program. Furthermore, the colleges selected the students. To gather the opinions of individuals who were no longer receiving JSRP assistance, the follow-up study involved a telephone survey of a random sample of clients who had participated during the period July 1991 to June 1993. In addition, the follow-up study asked participants about educational outcomes. This information supplements the impact study because the administrative data do not contain information about education attainment and schooling.

A *cost effectiveness study* was also conducted to gauge how efficient programs were in delivering services to program participants. This study was not a central focus of the overall evaluation, and so it just provides summary cost information to give the reader a sense of the level of resources being expended by the program.

The next four chapters of the report document the methods used and the findings from the four studies. The process study is presented in chapter two, whereas the follow-up study of JSRP participants from two sites is described in chapter three. The fourth chapter presents the impact evaluation of the Ohio JSRP, while the fifth chapter presents an abbreviated analysis of program cost effectiveness. Chapter six presents a summary of our findings.

2. PROCESS STUDY

The purpose of the process study was to observe the daily operations of JSRP programs in order to assess the *processes* (practices and procedures) that were being used to provide services to clients. Project staff visited several program sites and interviewed college staff members, County Department of Human Services (CDHS) staff, and clients. In addition, we interviewed state officials responsible for administering the program. This chapter documents the procedures we followed in collecting information and provides summaries of the stakeholders' perspectives about the program. The chapter contains several recommendations for program improvement for both state and local administrators.

2.1 Site Selection

The JSRP operates in a decentralized manner with few regulatory requirements. The administrative theory seems to be that local colleges, in concert with local CDHS staff, are in the best position to determine what services will best facilitate educational retention and success for students who are JOBS clients. The major "rules" imposed by the state are that the educational institution operating the program must be a two-year technical or community college; participants must be eligible for and participating in the JOBS program;[6] participants must have a high school degree or equivalent;[7] three types of services can be offered—initial, ongoing, and individualized;

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[6]For the college to receive reimbursement for services provided to an individual, the individual must be receiving AFDC and be participating in JOBS on the first day of the quarter or semester of service.

[7]When the program was first implemented, this requirement was absent. Most two-year institutions enroll and many financial aid vehicles are available to any individual who "has an ability to benefit," whether or not they have a high school diploma.

and participants can receive initial and ongoing assistance for at most one year. Beyond these restrictions, colleges are free to design and operate programs that work best for them.

The state sends out a request for proposals to all two-year institutions in Ohio each year to allow any institution the opportunity to compete for state financial assistance to operate a program. At the time of this evaluation, early 1995, there were 32 colleges with JSRP programs.[8] Limited resources precluded the possibility of visiting and observing operations at all of these sites, so the process study relied on a sampling procedure. In particular, we chose a sample of six sites. In addition to the six site visits, we also interviewed state administrators of the program from Columbus State Community College (CSCC), the Ohio Department of Human Services (ODHS), and the Ohio Board of Regents (OBOR).

Site selection was accomplished by developing a data base that included a number of indicators of program effectiveness and triaging the sites into those that are "most effective," those that are "moderately effective," and those that are "least-effective." The six colleges were allocated equally across these three categories, i.e., our intent was to visit two highly effective programs, two moderately effective programs, and two less effective programs. We selected sites within each of the "effectiveness" categories by choosing colleges in different locations across the state and colleges that were of different institutional types.

The statistics included in the data base included the following:

- Retention measure 1: Percentage of JSRP students receiving initial services in summer '93 still in JSRP in May '94 (data from college proposals)

[8]The number of programs is somewhat imprecise because some institutions have multiple campuses and offer JSRP services at more than one site.

- Retention measure 2: Percentage of students classified as ongoing in Summer '93 still enrolled in college (data from college proposals)
- Trend in JSRP initial services enrollments (data from Columbus State)
- Outreach measure: Ratio of total JSRP clients ever participated to 10/94 JOBS clients assigned to higher education in counties served by the college
- Subjective rating of services offered as described in '94 proposals
- Subjective rating of proposal effectiveness
- Subjective rating of program effectiveness by state office
- Does program use local name to promote interest? (Yes or No)
- Is program one of original five sites? (Yes or No)

An "effectiveness" scale with values from 1 to 10 was assigned to each college for each of these variables and a weighted average was calculated to determine an overall effectiveness rating. In fact, several different weighting schemes were used to calculate several different effectiveness scores (for example, the retention measures and the outreach measures were objective data, so in some of the weighted averages, we placed greater weights on those variables).

Two interesting aspects about these calculations emerged. First, the rankings of effectiveness were fairly robust with respect to the weighting schemes used. There was high correlation among the different items—institutions that rated highly on one factor tended to rate highly on the others. Second, the final rankings did not result in as much variation as we had expected *a priori*. We had expected that some colleges would emerge as clear outliers—either much more effective or much less effective than all others. However, this did not occur. Almost all of the colleges ranked nearly the same. The implication of this result is that each college is approximately as effective as all the others.

We selected one of the weighted average rankings to be our preferred indicator. Using the scale from 1 to 10, where higher values imply greater effectiveness, the preferred indicator ranged from 2.67 to 7.25. We used this indicator to rank the colleges from 1 to 26 (Kent

State—Salem and Trumbull; Lima Technical College; Ohio University—Chillicothe and Lancaster; and Washington State Community College were omitted from the calculations because they were too small or too new to qualify as sites for the process study). We (arbitrarily) called the nine colleges with the highest ratings the most effective programs (they were ranked 1 - 9); the nine with the next highest ratings the moderately effective programs (those ranked 10 - 18); and the eight with the lowest values the least effective programs (those ranked 19 - 26).

Using the criteria we had established for selecting colleges within each of the three classes of effectiveness, we selected the following six colleges for site visits, listed in alphabetical order:

Belmont Technical College
Cincinnati State Technical and Community College
Cuyahoga Community College
Hocking College
Sinclair Community College
University of Toledo-ComTech

The rankings of these six colleges in terms of effectiveness were 1, 3, 11, 14, 24, and 25 **(not in the order of the colleges listed above to maintain the confidentiality of the rankings)**. That is, the programs at two of the colleges in this list were among the most highly rated, using our effectiveness indicator; two of the programs were among the middle; and the other two were among the lowest rated programs.

2.2 Data Collection: Topics and Schedule

The process study relied on qualitative data collection. At each of the six sites, we interviewed the following individuals to collect information about day-to-day program operations:

- JSRP Program Director
- JSRP Program Staffperson

- JSRP participants (5 - 10 in a focus group)
- CDHS liaison (1 or 2 counties)
- CDHS JOBS caseworker (2 or 4)

The request for proposals (RFP) for this study specified three general topics to be focused on specifically in the process study: state policies and practices; program implementation and agency collaboration; and client and staff perceptions of program value. Not all of these issues were relevant for all of the study respondents, so in constructing the interview guides, we cross-listed relevant topics by respondent group as follows:

	State policies and practices	Program implementation; Agency Collaboration	Client and staff perceptions of program value
State director(s)	X	X	
Project director	X	X	X
Project staff		X	X
CDHS liaison(s)	X	X	X
CDHS caseworkers		X	X
Clients			X

Using this framework as a guide, we developed the interview forms that were used for the six respondent groups.

Most of the programs include participants from more than one county, so we visited two CDHSs at all of the sites except for Cuyahoga and Sinclair Community Colleges. In fact, it seemed to be the case that the majority of each college's JSRP students resided in the county where the college is located. The remainder of the JSRP students came from surrounding counties. In all cases, we interviewed staff from the local CDHS that sent the majority of

students. The second county was chosen by the program administrator for the sites where we visited a second CDHS.

The site visits took place on the following days:

March 15, 1995	Cincinnati State Technical and Community College Hamilton County, Clermont County
April 19, 1995	University of Toledo-ComTech Lucas County, Wood County
April 27, 1995	Belmont Technical College Belmont County, Harrison County
May 3, 1995	Sinclair Community College Montgomery County
May 4, 1995	Hocking College Athens County, Hocking County
May 9, 1995	Cuyahoga Community College Cuyahoga County

Before discussing the findings from the site visits, the next section of this chapter presents information from our interviews with state officials.

2.3 JSRP as Seen by State Administrators

2.3.1 Program History and Objectives

According to state officials, JSRP was born from a fiscal stimulus rather than a programmatic need. Shortly after the passage of the Family Support Act in 1988, administrators at the Ohio Department of Human Services realized that additional federal resources could be brought into the state to serve JOBS clients if state matching dollars could be located. The (state's former) Governor formed a task force to explore the possibility of forging interagency agreements that would leverage federal JOBS dollars with state in-kind contributions for programs being financed with state funding. In initiating the JSRP, the OBOR and ODHS collaborated on the first

such interagency agreement.[9] A "win-win" situation arose. If it could enroll JOBS clients into public postsecondary institutions, the ODHS could access additional federal dollars by using the state's tuition subsidy to meet fiscal matching requirements. The postsecondary institutions benefited from increased enrollments. Note that the JSRP was *not* initiated from a belief in the efficacy of postsecondary education for public assistance recipients, but, of course, it can be argued that these recipients benefited from the initiation of the JSRP as well.

The impression that we received from talking to state staff is that ODHS had numerous details to work out during the 1989-1990 period to get the JOBS program initiated and had limited staff resources to do so. Consequently, the agency gave the OBOR considerable autonomy to plan and implement the JSRP. ODHS staff participated in the planning process of the JSRP, but it was, and it continues to be, a Board of Regents program. The Board of Regents led the planning process and contracted with Columbus State Community College to be the fiscal agent for the program.

Five community colleges piloted the JSRP when it began in March 1990. These five were chosen because they had County Departments of Human Services that had active JOBS programs and because they had existing relationships with their CDHS or JTPA service delivery agency. Between 1990 and June 1995, the program expanded to over 30 colleges.

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[9]Other interagency agreements that followed were two agreements with the Ohio Department of Education for adult basic education (ABLE) and for vocational assessments, an agreement with the Department of Development, and an agreement for substance abuse rehabilitation services.

With the 1995-96 program year, the goal of the JSRP changed.[10] The emphasis of the program became facilitation of recipients' employment prospects. The individual programs at each college were expected to provide participants with work-based activities related to their educational programs. The development of employability skills, such as those developed by SCANS, was expected. Colleges were required to participate in consortia with private sector employers at the local level intended to assure that JSRP student programs build needed skills.

2.3.2 Governance

The governance of the JSRP at the state level involves three entities: the ODHS, the OBOR, and CSCC. The administration of the program is informal. No regularly scheduled meetings of staffs from the three agencies occur. As mentioned above, the philosophy of the administration of the program is to empower fully local programs, so relatively little interaction between the agencies even takes place.

Using a corporate analogy, the ODHS acts as the CFO (Chief Fiscal Officer), the OBOR acts as the CEO (Chief Executive Officer), and CSCC acts as the COO (Chief Operating Officer). Basically, ODHS acts in an advisory capacity on program decisions and operations, but its main role is to reimburse local programs for services. The CRIS-E management information system is used by ODHS to confirm the eligibility of students served by colleges; then ODHS issues payments to the local colleges. ODHS administers the JOBS program and issues rules and regulations for it that may influence the operation of the JSRP. (In the JOBS hierarchy, the JSRP is a particular type of education and training (E&T) service.) For example, ODHS instituted the

[10]The name of the program is even changing. The 1995 Request for Proposals used the name Work/Study Program, but indicated that a different name was forthcoming.

20-hour rule that was promulgated at the federal level, which requires ADC-U caregivers to spend at least 20 hours per week in classes or community work experience.

The Ohio Board of Regents facilitates rather than regulates the missions of the institutions of higher education and two-year technical and community colleges in the state. These institutions maintain considerable independence. It was natural, then, for the agency to play a similar "hands off" role for the JSRP program. As CEO for the program, the OBOR sets the major programmatic directions and monitors the contract with Columbus State. For example, the change in direction for the program that occurred during the present fiscal year emanated mainly from the OBOR. Specific functions of the OBOR staff are to help prepare the RFP that goes to the two-year colleges, to help select the programs to be awarded annual contracts and to negotiate those contracts, to handle fiscal matters that arise from Columbus State and from the local sites, and to be responsible to ODHS for fiscal matters.

Columbus State houses the state JSRP Office. That office is responsible for the annual solicitation, selection, and negotiation of local site contracts. Its staff maintains the JSRP management information system that contains automated data on all participants in the program and that is used by ODHS in conjunction with CRIS-E for verification of eligibility. It interacts with program directors at all the sites to answer questions and to encourage program performance. Staff from the state office occasionally visit sites, but there is no systematic monitoring system in place. The only systematic monitoring that occurs is for eligibility through the programmatic MIS and CRIS-E system. The state office has sponsored semiannual meetings of JSRP program staff in the past, but such meetings have not occurred in the most recent program year.

2.3.3 Collaboration

Collaboration between the three agencies is minimal. However, the personal relationships appear to be strong and open, particularly between ODHS and OBOR staff. All of the agencies share a strong commitment to use the program resources as efficiently as possible and have a commitment to serve the disadvantaged population.

Project staff asked the respondents for the factors that they felt were key in collaborating effectively at the state level. Their responses follow:

- partners have a shared vision or understanding of program objectives
- ongoing dialogue
- all partners are committed to assisting the eligible population
- trust and respect
- maintaining awareness of legislative initiatives that may affect program

2.3.4 Program Administration

The annual budget for the JSRP is $7.5 million, which covers state and local program administration and local program services. The state matching requirement is 40 percent, so the state must document that it subsidizes $5.0 million in tuition and fees for JSRP students.[11] This budget remained constant over the last two years.

It seemed highly incongruous to us to be asked specifically to investigate the clarity of program policies and regulations since there is no formal codified set of rules and regulations. Local sites are given directions in their annual RFP, which we were told by many respondents were the only written program guidelines or rules. Of course, local programs operate within the confines of the JOBS program and each college's regulations. These regulations are written and

[11]As documented in chapter 5, the state matches at a much higher rate than 40 percent. Tuition subsidies and state grants-in-aid total almost 50 percent more than federal expenditures, i.e., the state matching rate is about 60 percent.

accessible, but really have tangential impact on the JSRP. When we asked local college and CDHS staff about the clarity of policies and regulations, they responded that they felt that they had a clear sense of purpose and parameters under which to operate. In short, the state has issued few formal rules and regulations except for the annual RFP. Nevertheless, local programs felt they knew what was expected of their programs. Clarity of policies and regulations is not an issue.

The state provides virtually no technical assistance to local programs, except for help in transmitting program data electronically. In earlier years of the program, semiannual conferences were held (one for JSRP staff and one for JSRP and CDHS staffs) that had speakers and sessions on programmatic issues. However, these conferences have not occurred recently. It appeared to us that local programs were left with the task of developing their own programs and activities with little useful information from the state.

Finally, the state does little monitoring of local program activity. The automated data are examined and used for particular reports, but no systematic auditing or monitoring occurs.

2.3.5 Constraints and Successes

The state is rightfully, in our opinion, proud of developing a program that is operated relatively smoothly at over 30 colleges and that has served almost 17,000 JOBS clients. Staff at the state level see the commitment of the colleges as a success. Additionally, they also view the smooth collaboration between ODHS and OBOR as a success. These two agencies had little history of working together prior to the JSRP. The staff see the retention rates that are being achieved as a success. In many cases, the JSRP retention rates exceed the colleges' overall

retention rates. Another success is the enhancement of self-esteem that is occurring among clients who are able to label themselves as "college students."

To achieve these successes, the state has had to overcome many constraints. The biggest constraint facing the program now, according to the state staff, is the uncertainty about the future direction of welfare reform. As the block-granting of welfare approaches, it appears as if welfare/JOBS will have an even greater focus on employment outcomes of clients. OBOR has anticipated the former and pushed hard for the recent changes in the 1995 RFP that force local programs to emphasize work-based educational opportunities and employability skill development. The state staff recognize that this is a major change to the way that the programs have been operating locally, and they anticipate the problems associated with a learning curve. If a block grant financial system is legislated, then state officials will need to assess the value of the JSRP to Ohio and lobby appropriately for resources to be allocated out of the Ohio block grant "pie."

2.3.6 Summary and Recommendations about State Administration

In Columbus, the JSRP is operated by a tripartite of agencies: the Ohio Department of Human Services, the Ohio Board of Regents, and Columbus State Community College. The philosophy of the state is to set the direction, but to allow local colleges considerable autonomy and flexibility in the services they can offer to clients. The program is currently in the throes of a major refocusing of emphasis from college retention to employment as an outcome.

After reviewing our notes and analyzing our interviews and program observations, we have the following four recommendations for the state administrators to consider:

Recommendation 1: Enhance the technical assistance and information about program services provided to local programs. The management philosophy of local control is very clearly established and accepted by both state and local officials. However, local program staff

have been left with the tasks of developing effective services and delivering those services with relatively little information. More information needs to be shared across programs about subjects such as effective workshop topics and formats, accessible and useful assessment tools, special activities that are offered as ongoing services, and virtually all other aspects of program operations. At a minimum, the state should continue the semiannual conferences. But they might also consider a technical assistance contract or statewide newsletter.

The most recent RFP for localities strongly encourages work-based learning opportunities and activities that reenforce the SCANS employability skills. But the RFP gives no references to curricula or materials that would be useful in accomplishing these objectives. Furthermore, local programs could benefit from advice on technology and job development.

Under the same recommendation, we would suggest that the state office prepare quarterly management reports for each college from the data transmitted from the colleges themselves that provide outcome information and that might compare performance across programs.

Recommendation 2: ODHS should encourage local JOBS programs to refer clients to JSRP programs. Most local programs are worried about declines in the number of participants. In almost every locality that was visited, awareness and support of the JSRP was said to be highly varied across JOBS caseworkers. Furthermore, it seemed apparent that the college JSRP programs had considerable capacity to expand. ODHS is taking too much of a "hands off" approach. Since federal JOBS resources are financing the program, that agency needs to be more proactive in making sure that local CDHS's are aware of JSRP opportunities.

Recommendation 3: Improve the integration of education and training services. The Department of Education administers adult and vocational education in the state through the ABLE (Adult Basic and Literacy Education) program. The OBOR coordinates community college and higher educational institutions. Local JOBS programs and clients may get caught in between these two agencies. It is easy to envision clients who have a high school diploma and could benefit from a two-year program at a technical or community college, but who have relatively low basic skills. Similarly, some clients may have high basic skill levels, but no high school diploma. It would be worthwhile to have Department of Education staff involved in the JSRP program to facilitate integration of ABLE services with JSRP.

Recommendation 4: Promote a positive image. Bardach (1993), Behn (1991), and other researchers are showing that programs can achieve better outcomes when staff and administrators present a unified, positive image. The theory is that the program will succeed if its program staff think that it can succeed. Thus there is an argument that state administrators should publicize their belief in the program to achieve favorable employment outcomes. If colleges and CDHSs see publications and hear that administrators are touting the program, then they may begin to be more positive and to present the JSRP more positively to clients.

2.4 JSRP as Seen by Local Stakeholders

The discussion in this section of the chapter is based on the site visits to six colleges and ten CDHSs. This sample is too small to be statistically representative of all the JSRP programs and CDHSs, but we would point out that the programs and counties are widely dispersed across the state; in urban areas and rural areas; at relatively large institutions and small institutions; and in community colleges, technical colleges, and campuses of four-year institutions. Consequently, the picture that is drawn should be quite general.

2.4.1 Program Facilities and Staff

Two of the colleges that were visited were among the original five colleges that piloted the program beginning in 1990. The others started shortly thereafter in 1990 or 1991. Three of the colleges had a designated area or separate office space for JSRP that served only students in that program. This seemed like a benefit to those programs because it promoted an identity among the JSRP students and provided an area where the students could get to know each other and to know the program staff. The other three programs had office space for staff, but the space was co-located with other special programs or college offices. The University of Toledo-ComTech program, called the Deal Center, had the nicest program facility. It was an area off of the library that had been partitioned into office space for the staff, an area for students to congregate, and an area for structured study.

The programs were located bureaucratically, for the most part, within the colleges' offices of student or administrative services. The main functions that such offices have are admissions, financial aid, and academic counseling. The fact that the JSRP program was located in these offices probably facilitated their ability to provide preenrollment services. At Sinclair Community

College, the JSRP program was located in an office that served reentry students (which was part of the student services office). This seemed like a particularly apt location. At Cuyahoga Community College, the program was located in the Center for Training and Economic Development. Although this is not within the Office of Student Services, this programmatic location had the advantages that it was tied into JTPA training opportunities and also had employer contacts.

The staffing of the programs usually consisted of a director, one or more counselors/ advisors, and clerical staff. Three of the programs had student peer advisors who were usually ex-JSRP students, most often on work-study. Most of the staff were women, and a substantial share, perhaps 25-40 percent, were minorities. Apparently there is little turnover among the program directors. All of the program directors that we interviewed had been affiliated with JSRP since 1991, although one of them had moved to her present college less than a year before from a JSRP program at a different college.

Most of the program directors spent 100 percent of their time on JSRP. Their job duties included supervising staff, completing or overseeing fiscal reports, planning program activities and preparing the annual proposal, and being a liaison for the program with the CDHSs and within the college. The management and supervisory roles apparently left little opportunity for the directors to interact with students. Two of the directors indicated that they led one or more workshop session for students receiving initial services. Three indicated they conducted counseling or advising.

Two incidents occurred during the site visits that provide anecdotal evidence about the important role the program director plays in program effectiveness. We asked each of the

program directors to list all of their job duties. All of them mentioned completing paperwork, supervising staff, being the liaison with the CDHSs, and so forth. However, at the program that had the highest indicator of program effectiveness, the director indicated that part of her/his job duties included "visioning" and "positive public relations." At the other end of the scale, one of the CDHS liaisons for the JSRP program misidentified the program director as the person who was, in fact, the program secretary. This site was one of the two sites we had categorized as "less effective."

The counselors/student advisors serve as the "front line" staff for the programs. These are the staff members who tend to have the most interaction with students. They advise students, enroll students into the initial services seminars, lead seminars, arrange tutoring, and troubleshoot problems for the students. The primary job responsibility of the advisors is to act as counselors or advisors to ongoing students. They give academic advice to students or refer them to the appropriate sources of information, help solve financial aid or other institutional problems that arise for students, and, occasionally, refer students to personal counseling or other resources that might be available in the community when they become aware of significant problems. Whereas the types of advice were quite similar across programs, the assignment of clients and the case management methods differed. Some of the sites assigned a single advisor to each student (through an alphabetic or queuing system), and the advisors were responsible for their caseload. In other sites, students met with advisors as they were available, so that the students might encounter different advisors. The extent to which offices follow formal case management techniques also varies. Some programs have established quite formal procedures, and the student advisors have been trained in case management techniques. In other programs, advisors told

project staff that they try to make notes of contacts on clients' files, but at times, the number of contacts in a day or the informality of the contacts (e.g., they "run into" a student in the cafeteria) precludes formal notation.

The advisors also differed significantly in the extent to which they monitor grades and academic progress during a quarter or semester. Interestingly, the two "most effective" programs were very proactive in their monitoring. They both required one or more interim progress report from all clients for all of their courses. The other four programs that were visited tended to be less aggressive—they relied on student self-reports, they did not actively pursue interim progress reports from all students, or they waited until grades were determined at the end of a semester or quarter.

To give the reader a sense of the size of the advisors' caseloads, we note that the modal response when we asked advisors during our site visits to estimate their "active" caseloads was 100-150. Caseloads per advisor were larger at programs that had larger numbers of JSRP students. However, it is difficult to quantify consistently the caseloads across the program sites and even across advisors at a single site. As just described, the programs varied in the extent to which they were proactive in monitoring grades and progress. Also, advisors suggested that half of the students eligible for ongoing services did not need or want advising. That is, half of the students were assimilating into the college, were progressing satisfactorily, and were not encountering problems for which they needed an advisor's help. Finally, some of the advisors had responsibilities for other program activities and thus may have had lighter caseloads.

For example, at most sites, one of the advisors was responsible for organizing the initial services pre-enrollment workshops or seminars. This was a substantial task because it involved

arranging for classrooms or other meeting places, scheduling presenters, getting students enrolled, and developing the full content of five to eight weeks of seminars. The seminars usually involve presentations from many of the colleges' offices (for example, admissions, counseling, financial aid, developmental education, and student services). Other sites had active tutoring programs that were coordinated by an advisor. Furthermore, most sites held special activities on occasion, and these were often organized by the advisory staff. In short, the student advisors were the backbone of the programs.

2.4.2 Program Activities

The programs offer three types of services. *Initial services* are intended to facilitate a client's enrollment into the college and course of study. They usually take the form of workshops on topics such as financial aid, time management, study skills, testing and assessment, and college survival skills. *Ongoing services* are intended to support clients as they navigate the first year of attendance at the college. A panoply of activities may be offered as part of the ongoing services—counseling and advising, tutoring, lending libraries of textbooks, special "events," or loans of equipment (e.g., tape recorders). *Individualized services* include grants to pay summer tuition or other course-related expenses that a small share of JSRP students may need.

We found considerable differences in the initial services workshops across the six sites that were visited. One site did not offer preenrollment workshops at all. Another site had a fully developed program, but had only a small share of initial services students enroll. Other sites had well-organized courses that involved basic skills enhancement, vocational testing and counseling, and other subjects, and lasted up to eight weeks. The rural colleges tended to experience more difficulties in offering the initial services workshops than urban colleges. Respondents at the rural

sites suggested that clients did not want to bear the transportation or time costs for a preenrollment program.

The ongoing services were more consistent across sites. All of the programs had student advisors who monitored student progress (although the aggressiveness of the monitoring differed across sites and advisors, as discussed above). In addition to monitoring student progress, the student advisors also assisted students in resolving various financial aid or other administrative problems at the college. All sites also offered or arranged for tutors for students. Some of the colleges had tutoring programs for all students free of charge, and so the JSRP students accessed those services without cost to the JSRP. The other programs hired tutors for their students, as needed. Half of the sites had a textbook library that JSRP students used in order to reduce their textbook expenses. Three sites had study aid equipment such as tape recorders that were loaned to students.

The programs limit the number of students who are assisted with individualized services; but the students with whom we spoke who had received tuition or course-related expenses were extremely grateful. The main reason that the individualized services are necessary is because of Pell grant limits.

Besides direct support for students that can be categorized as initial, individualized, or ongoing services, the programs also sponsor various activities that benefit the program as a whole. Three of the sites published newsletters that are distributed to all students but also to all faculty in the college. Two of the sites had advisory committees that included other staff from the

college, staff from the CDHS, and staff from other community agencies.[12] Most of the sites had special activities on an occasional basis for their entire colleges. For example, the staff at Belmont Technical College were preparing for their annual fashion show at the time of the site visit.

The colleges that house the JSRP programs are supportive of them. The central administrators are aware of the programs and the objectives that the programs are trying to accomplish. Full-time faculty members are also aware of the JSRP programs through their own students or through newsletters or presentations. As might be expected from a group as diverse as faculty, there were reported to be some faculty members who were dubious about the JSRP, but the vast majority of faculty were said to be supportive. In one case, a student advisor told us that she had received a comment from a faculty member who said that JSRP students were far more serious and motivated than his average students. Most programs thought that adjunct or part-time faculty were unlikely to be aware of the JSRP, but this did not seem to pose any particular problems or issues.

2.4.3 Client Outcomes and Perspectives

The previous section makes it clear that colleges have established and staffed local programs, and that these programs are providing services to clients. The most important question that this evaluation attempts to address, however, is how successful the JSRP programs have been in improving the lives of clients. To get one perspective on this question, we asked clients and

[12]The RFP that was sent out in spring 1995 required programs to organize broad-based consortia, so that all programs will effectively have advisory committees.

staffs of the colleges and CDHSs directly whether the JSRP programs are successful in terms of client outcomes. This section presents their answers.

We first discuss the issue of barriers to success. The logic behind the JSRP is that JOBS clients have more barriers to success in postsecondary settings than typical students. If this were not the case, then all that JOBS offices would have to do would be to refer clients to postsecondary institutions. Clients would traverse the postsecondary institutions and succeed at the same rate as the general population. However, most of the individuals that we talked to felt that public assistance recipients needed additional support in order to succeed. The clients and staffpersons who were interviewed listed the following types of barriers that are faced by virtually all clients:

- lack of support from spouse or significant other for postsecondary education
- low self-esteem
- poor educational preparedness
- family demands (children or other dependents) in terms of time and care arrangements
- lack of reliable transportation

Many college students may face some of these barriers, but the fact that these clients are on AFDC implies that they all must lack spouse economic support, must have child care arrangements to worry about, and that they must lack reliable transportation. AFDC imposes a limitation on the value of cars owned by clients. Furthermore, their low incomes often result from limited educational preparation.

As a group, clients are quite satisfied with the JSRP programs and services that they have received. Interviews with over 40 clients did not prompt any complaints about program services or JSRP staffpersons. In fact, the reality was quite the contrary; the clients had many

compliments for and gratitude toward the JSRP programs and staffs. Most client complaints were targeted towards the colleges' administrative bureaucracies or to CDHS staff. As with clients, the program directors and staffs of the colleges and CDHSs recalled few, if any, complaints about the JSRP. There were, however, a handful of complaints. The respondents—both clients and staff—felt strongly that the time limitations on services were unrealistic. A few clients indicated that they were dissatisfied at first to find out that they had to participate in a preenrollment workshop for several weeks before they could enroll in the college and get JSRP support. However, all of these clients indicated that they realized the benefits and necessity of the workshops by the time they were over.

The services and activities that clients were the most favorable about included the following:

- tuition and course-related expense assistance
- textbook loans
- most aspects of the preenrollment workshops, but particularly the sessions on financial aid and time management
- the helpfulness and effectiveness of student advisors

The clients who had attended initial service workshops indicated that they had established friendships and support networks in these workshops that persisted throughout ensuing quarters.

To gauge the extent to which participation in JSRP activities was influencing clients' educational and career plans, we asked clients directly what their educational and career plans were and whether or not any JSRP activity had influenced those plans. We also asked the clients whether they felt that they would be able to complete college without further help from JSRP. The following quoted responses were typical:

Educational Plans

- I will be receiving an Associates in Mental Health Technology next Winter and I plan to pursue an RN after that. JSRP didn't help me decide what field to go in, but there was a quarter when I would have quit school altogether, but they went out of their way to help me. I wouldn't have been this close to completing my program without them.

- I will be finishing my Associate's degree next spring [in Mental Health Technology]. JSRP definitely influenced me because I was going into computer repair, but their tests showed that I had a better fit with health services.

- I haven't decided on a career field yet. I had an interest in being a teacher's aide or working in child care, but the program gave me information on these careers, and I can see that the pay scales are too low. [currently enrolled in initial services]

- I plan to get a Bachelor's at Ursuline College or Cleveland State University. The JSRP program gave me information about different careers and colleges and then I decided to go.

Career Plans

- I plan to be self-employed in HVAC (heating, ventilation, and air conditioning). The program had no effect on this plan.

- I plan to work in a hospital in a care position. It was my idea, but the program gave me the ambition to go as far as I can.

- I want to be a caseworker at a juvenile correctional facility. A contact that I made through this program has strongly encouraged me and arranged for an internship for me.

- I want to work in a chemical dependency treatment facility or do research in this area. My [JSRP] tutor helped me toward this goal.

Two important outcomes that the JSRP programs focus upon are retention and graduation. We have more information on retention and graduation in other chapters of this report; the impressions that we got through the process study were that the JSRP programs were achieving reasonable retention rates, but that graduation rates were modest. Two of the sites indicated that

they had done studies that showed that the retention rates of JSRP students were higher than the colleges' averages. Sites indicated that most losses occurred in a student's first quarter of enrollment. That is, if a JSRP student made it through his or her first quarter, then retention rates were quite high.

However, graduation rates don't seem to be reflective of high retention rates. Most programs have not tracked rigorously the educational outcomes of students after they complete the two semesters or three quarters of JSRP services. Three of the sites were in the midst of developing that capability. Because the data were not collected rigorously, we asked for *estimates* of the number of graduates. We received the following responses:

Responses from Program Directors

- We've had 164 graduates out of 645 total students (better than the overall college rate)
- We've had 50 graduates. (The Upjohn Institute estimates that this site had an unduplicated count of 1085 students through spring '94.)

Responses from CDHS Liaisons

- Maybe 50 clients have graduated up to this point. (This CDHS is the referral county for perhaps 90 percent of the program's students, and the Upjohn Institute estimates that this program had an unduplicated count of 945 students through spring '94.)

- I estimate that 30 percent will graduate.

2.4.4 Interactions with the CDHSs

The colleges work closely with the CDHSs on administrative matters, but not on content or program substance. The main interaction between the agencies occurs around the issue of eligibility determination. The colleges are a service provider to the CDHSs and, as such, only

get reimbursed for program expenditures for individuals who are on the JOBS rolls. They therefore need to get documentation from the CDHSs about the eligibility of all students. At most sites, the process that is followed is that colleges will request copies of three CRIS-E screens for each student who enrolls in JSRP.

A second type of interaction is that colleges verify hours for students. The JOBS program issues each student a form that indicates their assignment, required hours per month, and schedule. The clients are responsible for getting these verified, which in most instances, is done by the JSRP staff.[13] Three of the sites had arranged for monitored, structured study time for clients who needed to have verification of 20 hours of supervised activity.

A third type of interaction between the colleges and the CDHSs occurs occasionally when JSRP student advisors are asked by clients to investigate or to intervene in matters that arise between the client and the CDHS. A final type of interaction occurs with the annual application for program funding. These applications, which are submitted by the colleges, must have a copy of an interagency agreement with each CDHS that collaborates with the program. This argument must outline clearly the expectations required by both agencies.

All college staffpersons and CDHS staffpersons that we interviewed agreed that the relationships between the colleges and agencies were operating smoothly. The program directors suggested that some CDHSs seemed to be easier to work with than others, but there were *no*

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[13]One site that we visited had a particularly pernicious process in which the students were getting instructors to initial the students' work schedules when they attended class. The students did not like this procedure because it fostered stigma by revealing to the instructor and other students that they were on assistance. The students and instructors did not like the procedure because of the time and hassle. The JSRP staff were aware of these concerns but they were under the impression that the CDHS wanted this process followed. When we interviewed the JSRP liaison at the CDHS, she clearly indicated that the procedure was not necessary. She felt that there were other ways to get verification.

instances where the relationships had totally broken down.[14] The CDHSs appeared to vary substantially in terms of their belief in and emphases on education and training of clients. Where those beliefs were strongest, the relationships with the JSRP programs were also strongest.

Respondents generally agreed that it was most effective to have line staff (student advisors and JOBS caseworkers) resolve problems and issues. Collaboration at that level is most direct, and the individuals are most knowledgeable about the clients and problems that need to be resolved. Most problems get resolved through telephone communication at that level; occasionally the staff persons meet with each other to get an issue resolved. If issues are general or if the line staff cannot achieve a solution, then program directors and CDHS liaisons get involved. This seemed to be a rare event. When they did get involved, program directors and CDHS liaisons were able to resolve problems. No respondent could remember any instance when it was necessary to get someone from Columbus to resolve a problem.

We asked the college and CDHS staffpersons for their recommendations about how to achieve effective collaboration at the local level. They responded as follows:

- Recognize the differences in each county's program philosophy; one county is "laissez faire;" another is "CWEP or school."
- We recognize that JOBS programs are our customer.
- Involve CDHS from the beginning; share ideas; and it helps to have had prior program experience with them.
- Convey mutuality of objectives; step back occasionally and analyze situation—what is working, what isn't?
- Open and honest communication; don't point fingers and don't tell each other how to do our jobs.

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[14]There was one site where a relationship had soured in 1991. The CDHS refused to refer any clients to the college as long as a particular individual was affiliated with the program. The CDHS felt that certain activities and program practices that this individual was responsible for were unacceptable. The upshot of this incident was that the person was reassigned by the college to other (non-JSRP) duties, and the relationship between the college and this CDHS is now smooth.

- Understand how busy the JOBS caseworkers are. Be careful with requests for information.
- Honest communication; understand each other's goals; trust
- Remember that we are all serving the same person—so put turf issues aside. Communicate with each other, otherwise clients can play us off against each other. Network.
- Accessibility—return messages and call back. Be reasonable. Compromise.
- Respect each other and believe in each other's programs. Communicate openly. Don't say "no" immediately; work out constraints.

2.4.5 Problems

What are the major issues or constraints on program operations that local staff would like addressed? The three issues that were most often mentioned were the low educational abilities of students, downward trends in referrals from counties, and the time limitations on services.

As mentioned above, a major barrier to success for many of the students is low educational attainment and basic skills abilities. For many of the students, several years have passed since they were last in school, and it is often the case that school experiences have not been positive. Having been out of school for several years or having low basic skill levels obviously impedes progress at the postsecondary level. The colleges with JSRP programs have developed the capacity to deal with these problems, however, through services like tutoring, study skills classes, and developmental classes. The problems become time and financial support. Developmental education or study skills classes will generally extend the time it takes for a student to complete her program because she will have a reduced amount of time to fit in classes and because she may miss important prerequisite courses. Most JSRP students receive Pell grants to cover their educational costs, and the limitations on these grants make them insufficient to cover all terms of a program of study when delays occur.

The solution to this issue is to focus initial services on basic skills development as much as possible. Sinclair Community College and the University of Toledo-ComTech programs have excellent basic skills enhancement activities in their initial services. Presumably these types of activities should be optional since some clients may be able to succeed in college without them, but for other individuals they should be encouraged and be as rigorous as possible.

The colleges felt that the number of referrals from CDHSs was not sufficient and was trending downward. There did appear to be excess capacity at the programs that were visited. The counties had a number of reasons for the decline in referrals. Some staff indicated that the welfare rolls were declining due to a strong economy, and that the clients remaining on the rolls were the least employable and least able to benefit from the JSRP. Other staff felt that the directions that public assistance programs were going called for more emphasis on employment and much less emphases on education and training. They therefore tended to "push" employment first. Still other staff felt that the knowledge about the JSRP was varied among JOBS caseworkers and that some were unaware of the program altogether. It strikes us that each county needs to decide the extent to which they want to emphasize education and training and they need to communicate their decisions to the colleges. Also ODHS could significantly improve its support of and publicity for the JSRP program.

Many individuals felt that the time limitation on services was a problem. As currently designed, the JSRP programs are targeted on the entrance to college. Initial services are intended to facilitate the enrollment process and ongoing services are meant to track and facilitate the first terms of enrollment. Individuals acknowledged the importance of assistance in the early stages of enrollment. However, they suggested that students were often disadvantaged later on in the

college. Financial aid limitations may cause difficulties. Students may need financial assistance and help preparing for interviews and finding a job at the end of their two-year college experiences. Oftentimes, expensive tools or textbooks were required in the later courses in a program of study, after the JSRP program participation.

The obvious problem with relaxing the time limitation would be cost. If students participated in activities over more quarters, then fewer students could be served with the same level of resources. There is also a philosophical problem. The underlying reason for the JSRP program is that JOBS clients have special barriers to success in postsecondary institutions. The program activities are meant to overcome these barriers. At the end of a year of enrollment, it seems logical to think that most barriers have been addressed.

2.4.6 Summary and Recommendations

Project staff visited six college programs and all of them were shown to be having positive impacts on the lives of the JOBS clients they were serving. The sites were operating autonomously, but many program aspects were similar across sites. Staffs were structured similarly; a director, one or more student advisors, and a secretary. Some of the sites supplemented the program staff with peer tutors or work study student counselors. Almost all of the sites had an organized, modular set of workshops for initial services. All sites offered tutoring and counseling as part of their ongoing services, although the programs varied substantially in terms of how aggressive they were in monitoring student grades and progress. Most sites had a program newsletter and some sites had an active advisory committee.

Students were quite satisfied with the JSRP programs and activities in which they had participated. They particularly praised the helpfulness of the staff. The programs are providing

students a considerable amount of information that is helping them with their educational and career planning. The programs are also providing clients with valuable counseling advice and help in traversing college programs of study. The programs seem to be having success with retention, but graduation rates seem modest.

The colleges seem to have healthy relationships with the CDHSs that are referring clients to them. Collaboration was reported to be smooth, and problems were easily resolved at the local level. In fact, the JSRP programs are able to facilitate significantly the case management of clients for CDHSs in addition to providing educational services to clients. The student advisors, in many instances, are much closer to clients than are the JOBS caseworkers (because of smaller caseloads and more exposure) and are able to track personal situations that may be affecting the clients' lives. In several of the sites, we witnessed a recognition of this by both the JSRP student advisors and the JOBS caseworkers and exploitation of this win-win situation. The JSRP student advisors were able to help clients address problems and therefore increase their likelihood of success in the college setting. The JOBS case managers were able to devote more time and resources to other cases, trusting that the JSRP program was monitoring their client and would communicate any problems that arose.

In short, most aspects of the JSRP programs appear to be working well at the local level. Based on our observations of the programs, however, we would make the following recommendations about individual programs that we think will enhance their effectiveness even further.

Recommendation 1: All programs should offer a modularized preenrollment set of workshops for initial services of at least five weeks in length that should be mandatory for all client referrals. The JSRP students face many impediments to success at the postsecondary

level. Preenrollment workshops increase greatly their likelihood of success in overcoming these impediments. Furthermore, these workshops should act as a screening device. Individuals who will not attend regularly or who are not motivated enough to participate actively in these workshops are unlikely to succeed in two-year programs of study and should not receive further resources.

At a minimum, these workshops should include the following: orientation to the college, application and admissions processes, financial aid, introduction to all programs of study, academic advising, occupational aptitude testing and information provision, study skills and time management, and basic skills testing and remediation opportunities. Given the new emphases of the program, the workshops should cover employability and job search skills. At the end of the workshops, the clients should have an understanding of the notion that their success in the college environment depends on their own initiative and abilities. Furthermore, the clients should have selected a career option that is viable and should have an understanding of the educational experiences that will be necessary to achieve success in that career.

Five weeks seems to be the minimum length that will allow adequate coverage and that will act as a screen on client motivation. Two of the programs that were visited had workshops that lasted eight weeks. Both of these programs were able to include a considerable amount of time on study skills and basic academic skills that will undoubtedly be advantageous to their clients.

A small share of students in JSRP are self-initiated. These are JOBS clients who are in college before they find out about the JSRP program. Respondents at the various colleges estimated that 10-25 percent of the JSRP students were self-initiated. Since these students have enrolled, the workshops on topics such as applications and admissions are not meaningful. On the other hand, topics such as study skills, basic skill enhancement, and vocational counseling may be of value to them. Therefore, these students should be given the opportunity to attend the workshops and be counted as receiving initial services.

The rural colleges that we visited indicated that they had a difficult time offering preenrollment workshops because of transportation and time costs of clients. The clients did not want to bear the costs of attending the workshops without getting college credit. This argument is not convincing. The preenrollment workshops should significantly increase the likelihood of success for clients. They *may* increase the number of quarters that a client attends the college, but we argue that they are more likely to have no impact on length of time or to reduce it. Clients who succeed in a well-managed preenrollment program will become more directed and smarter about course sequencing. Furthermore, they will have established a network of supportive peers. We therefore urge ***all*** programs to develop a comprehensive initial services program.

Recommendation 2: The state should allow local programs to develop a new type of service called "pre-initial services" to accommodate students who miss the cut-off dates for initial services. The JOBS program has received criticism because of the number of clients who are put into the pending category. This is a particular problem for education and training services

because they usually follow a particular calendar. If a program operates an eight-week pre-enrollment seminar between weeks two to nine of a ten-week quarter, then anyone who is referred to the program after the third or fourth week will have to wait eight to ten weeks until the next quarter.[15] Obviously, a CDHS might place individuals who would miss the cut-off date for initial services into a CWEP site (or other service). But there may not be enough appropriate sites of a short-term nature.

Alternatively, or in addition to, a CWEP site, most clients would benefit from a set of pre-initial services at colleges with a JSRP program that might include self-paced, automated testing and learning programs. The objective would be for the colleges to develop easily administered services that would be of benefit to clients. At most, these services would last half of a quarter. The time limitation of the program would then need to be changed to allow for a half of a term of pre-initial services, a term of initial services, and up to three quarters of ongoing services.

Recommendation 3: CDHS JOBS caseworkers are critical to the success of the JSRP program. The local JSRP programs should foster collaboration with them. The ODHS should encourage their involvement with JSRP programs. In the current program environment, the knowledge of and support for local JSRP programs seems to be quite varied among JOBS caseworkers. Many caseworkers are very supportive of the programs and recognize their benefits for the clients and for themselves. However, our interviews with staff suggested that many other caseworkers have little knowledge about the JSRP program. The local JSRP programs should attempt to reach all caseworkers through invitations to visit the program, newsletters, and visits from the program director. In addition, the ODHS JOBS office should bear some of the outreach burden to the JOBS offices.

At a minimum, JOBS case managers should support clients who are participating in JSRP programs. We heard anecdotes from clients and from JSRP program staff about case managers who made client appointments during class periods and even during final exams and who were inflexible about changing them.

Recommendation 4: The JSRP programs should evaluate their activities to determine their effectiveness in developing group cohesiveness among participants and in developing time management skills. Respondent after respondent indicated that a major barrier for JOBS clients was the lack of family/significant other support. Most individuals who attend college have significant others (spouses or parents, for example) who want them to succeed. Many of the JOBS clients are said to have just the opposite situation. They have significant others who *don't* want to see them succeed. Consequently a major benefit to the initial services workshops is the development of friendships and networks of individuals who support each other. Local programs need to facilitate and reenforce these networks.

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[15]Most programs enroll clients who miss the start of a seminar by only a week or two.

Also, clients indicated that a major problem for them was time management. They have dependents who rely on them for attention and support. Also, they tend to be unemployed, so that they are not used to meeting schedules. They tend to underestimate the amount of work that it takes to succeed in college. For all these reasons, it is important to stress and develop good time management techniques in the JSRP activities.

Recommendation 5: Provide adequate professional development opportunities for JSRP staff. The JSRP directors and student advisors are well-trained individuals working in academic environments. They want to help clients be successful, and they want to maintain their stature among their colleagues. They therefore should get opportunities to study and reflect upon topics such as counseling techniques, labor market information systems, welfare reform, listening, occupational interest assessments, and so forth. We recommended above that the state office resume the semiannual conferences for staff. But, in addition, we suggest that local programs budget for professional development and that program directors work with each staffperson to plan and execute meaningful training.

3. FOLLOW-UP STUDY

We supplemented the process study by conducting telephone surveys of former clients at two of the case study sites. This study, which we entitle the follow-up study, has several purposes. First, it is a source of information about local programs from clients who have completed their participation. Furthermore, these clients were sampled randomly, so their perceptions of the programs and colleges should be completely general and unbiased. In the formative evaluation, program officials selected the client respondents. The second purpose of the follow-up study is that it is a source of information about the educational aspirations, experiences, and outcomes of clients. The CRIS-E data base has limited information about education and training activities, but only for clients who remain on the AFDC rolls. Furthermore, the information on CRIS-E does not have graduation status, or final fields of study and grade point averages. Finally, the follow-up study is a source of detailed information about the employment of former clients. The detail of the employment information is more exhaustive than is available in other sources of data.

The first section of this chapter documents the methodology used in conducting the follow-up study. The remaining sections of the chapter examine the background characteristics of JSRP clients, program experiences, program strengths and areas for improvement, postsecondary educational experiences, and employment and public assistance outcomes. The final section summarizes.

3.1 Follow-Up Study Methodology

Our original design of the follow-up study data collection proposed a random sample survey of students who had ever participated in JSRP at two of the process study sites—one from the most effective sites and one from the less effective sites (as measured by our indicators). We viewed the study as a supplement to the case studies, not as a stand-alone survey. We therefore limited the size of the sample to 100 students at each site and limited it geographically to two of the formative evaluation sites. The sites that we chose were University of Toledo—ComTech and Sinclair Community College. The JSRP programs at these two locations have been entitled The Deal Center and New Directions, respectively. At both sites, most clients reside in a single county—Lucas and Montgomery, respectively.

To focus the study somewhat, we decided to sample only students who first participated in JSRP during the two-year period between July 1991 and June 1993. Project staff randomly selected 200 individuals from each site from the students who entered during that time frame. We sent a listing of these students to each of the sites and requested that they send us their most recent addresses and telephone numbers. (When the actual survey was conducted, we contacted ODHS for contact information from CRIS-E in cases where the sites' information was out of date. Both sites and ODHS were very helpful in providing us with contact information.) The sample was surveyed by telephone until 100 calls were completed at each site.

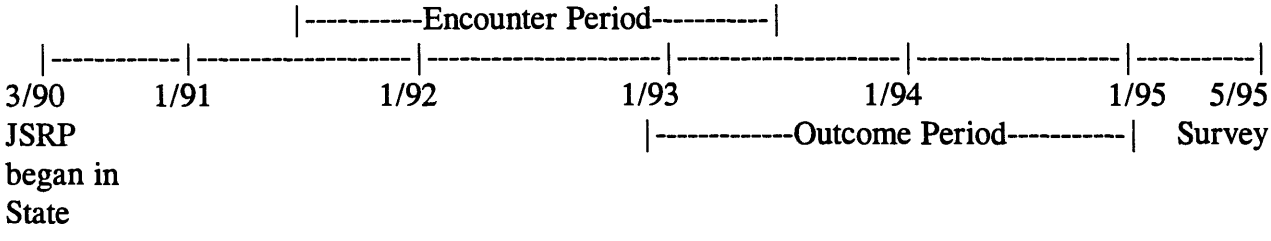
Development of the questionnaire was straightforward. We drafted it, performed a pretest of it using a small panel of students from Columbus State Community College, and finalized it accordingly. A particular feature of the survey is that it collected information about employment

through a (work) event history approach. Respondents were asked to provide information about all employment that they held during the two-year period from January 1993 to December 1994.

We merged data from the JSRP data base and the CRIS-E data base to the follow-up study data to analyze the information. Figure 3-1 presents a schematic to explain the reference time frames of the study. We have titled the two-year period from July 1991 to June 1993 the Encounter Period. By the design of the sampling plan, we know that the respondents first participated in JSRP during this period. Most of them probably completed their participation during this period as well, so that our analyses of the clients' experiences with the program pertain to this time period. We have titled the two-year period from January 1993 to December 1994 the Outcome Period. This is the period of time for which the employment event history data pertain, and it is also the reference period for some of the questions about educational experiences. The survey was conducted in May-June 1995.

Figure 3-1

Encounter and Outcome Periods for the Follow-Up Study



It would have been much cleaner analytically to have the Encounter Period totally precede the Outcome Period. However, we were concerned about respondent recall. We wanted the

length of time between the survey and the Encounter Period to be short enough so that respondents would have a fair remembrance of program activities and an Outcome Period long enough to capture college program completion and initial jobs. Nevertheless, for one quarter of the sample, there is overlap between the Encounter Period and the Outcome Period. However, with this design, we know that we have at least 18 months of follow-up data after a client's **first** JSRP encounter.

3.2 Background Characteristics of JSRP Clients

Table 3-1 provides descriptive statistics about the participants in JSRP. The first two columns describe the Sinclair Community College and University of Toledo-ComTech sites, respectively. The final column describes the entire sample. As would be expected, the participants are mostly female. About 90 percent of the follow-up samples at both sites are female. About one-third of the participants are African-Americans. About 38 percent of the respondents from Toledo are African-American, whereas 28 percent of the respondents from the Dayton area are African-American. The average age of participants at the time of enrollment into JSRP is around 30. At both sites, about one-fourth of the participants are over 35. Toledo has younger participants with about one-quarter of the respondents under 25 at enrollment. Only 7 percent of the participants of New Directions were under 25.

Most participants (around 80 percent) are ADC-R cases; the remaining 20 percent are ADC-U or Food Stamp only cases. The CRIS-E data set provides information about the clients that pertain to the dates of their assessments. At the time of the first assessment record, around

Table 3-1

Client Characteristics, by Site and Total Sample
(Entries are percent of sample with characteristic unless otherwise noted.)

Characteristic	Site		Total Sample
	Sinclair Community College	University of Toledo—ComTech	
Sex (n=202)			
Female	88.0%	93.1%	90.6%
Race (n=202)			
African-American, nonhispanic	28.0%	38.2%	33.2%
White, nonhispanic	72.0	58.8	65.3
Other	0.0	2.9	1.5
Marital Status[a] (n=195)			
Married	24.0%	14.1%	19.0%
Single, never married	32.3	49.5	41.0
Divorced	33.3	26.3	29.7
Other	10.4	10.1	10.3
Age, 1st Quarter of JSRP (n=202)			
< 25	7.0%	27.5%	17.3%
25 - 34	66.0	47.1	56.4
35 +	27.0	25.5	26.2
Type of Case (n=195)			
ADC-R	76.0%	83.8%	80.0%
ADC-U	13.5	12.1	12.8
Other	10.4	4.0	7.2
Education, highest level[b] (n=195)			
< Grade 12	35.4%	9.1%	22.1%
Grade 12	58.3	69.7	64.1
> Grade 12	6.3	21.2	13.8
Previous work experience[b] (n=195)			
0 months	28.1%	16.2%	22.1%
1-12 months	18.8	23.2	21.0
13-36 months	25.0	24.2	24.6
> 36 months	28.1	36.4	32.3
Mean	37.8 months	43.1 months	40.5 months

[a]At the time of first encounter with CDHS.
[b]At the time of first JOBS assessment.
Sample sizes noted for total sample. Each site accounts for approximately half, unless otherwise noted.
Columns may add to less than or greater than 100 percent due to rounding.

22 percent of the participants had less than 12 years of education; around 64 percent had exactly 12 years; and about 14 percent had more than 12 years. The educational attainment of respondents in Dayton is significantly lower than that of respondents in Toledo. In Dayton, over one-third of the respondents had less than a high school education at the time of their first assessment, and only 6 percent had more than a high school degree. These contrast with Toledo where only 9 percent had less than a high school education and 21 percent had more than 12th grade.

At the time of the first ADC assessment, the participants had, on average, 40 months of work experience. About 20 percent of the clients had no previous work experience (the percentage is higher in Dayton and lower in Toledo.) Marital status at the time of assessment is also presented in the table. Around one-fifth of the clients were married at that time—a lower percentage in Toledo and higher percentage in Dayton. In Toledo, almost half the clients were single and never married. In Dayton, this fraction is only about one-third.

In short, the "average" JSRP participant at these two sites is a single female with dependent children, is between the ages of 25-34, is receiving ADC-R, and has a high school degree but no further education at the time of her first assessment. About one-third of the participants in these locations are African-Americans, and the prior work experience of the participants varies significantly from none to several years. Relative to ComTech, the participants in the New Directions program at Sinclair Community College are less likely to be African-Americans, are older, have less education and work experience at the time of their initial assessment, and are more likely to be divorced and less likely to be never married.

3.3 Experiences with the JSRP Program

Table 3-2 shows that between one-half and two-thirds of the participants first learned of the JSRP program from a caseworker at their County Department of Human Services (CDHS). The fraction was slightly higher for participants of the New Directions program at Sinclair Community College than at The DEAL Center at the University of Toledo—ComTech. About two-thirds of the participants in Montgomery County (Sinclair) who first learned about the JSRP program from someone at the CDHS, heard about it from their income maintenance (IM) caseworker. In Lucas County, the source of information was more likely to be the JOBS caseworker. For participants at that site, only about 20 percent of the individuals who first learned of the program from someone at the CDHS heard about it from an IM caseworker; almost 80 percent heard about it from the JOBS caseworker.

Friends, relatives, and acquaintances was the third most frequent source of information (after the IM or JOBS caseworkers)—about one-seventh of the time. A little under 10 percent of the participants learned about the program from a counselor or staffmember of the college.

Interestingly, about one-third of the respondents indicated that they were already in college when they learned of the JSRP program. This percentage varied substantially across the two sites, however. At Sinclair Community College, the percentage was about 20 percent; at ComTech, it was closer to half.

Administrative data reported in the table show that about half of the JSRP participants who were surveyed participated in at least one quarter of initial services.[16] Over 90 percent of the

[16]Approximately 5 percent of these former participants received two quarters of initial services, according to JSRP program data.

Table 3-2

Sources of Information about JSRP and Overall Services Received, by Site and Total Sample
(Entries are percent of sample with characteristic unless otherwise noted.)

Characteristic	Site		Total Sample
	Sinclair Community College	University of Toledo-ComTech	
Sources of Information about Program[a] (n= 203)			
AFDC income maintenance caseworker	39.6%	10.8%	25.1%
JOBS caseworker	25.7	39.2	32.5
Counselor at college	7.9	9.8	8.9
Program participant	0.0	2.0	1.0
Friend, relative, acquaintance	7.9	19.6	13.8
Other	10.9	12.7	11.8
DK/DR	7.9	5.9	6.9
Already in School? (n= 203)			
Yes	20.8%	46.1%	33.5%
Number of Quarters, Initial Services (n=187)			
0	42.7%	53.1%	48.1%
1	52.8	40.8	46.5
2	4.5	6.1	5.3
Number of Quarters, Ongoing Services (n=187)			
0	5.6%	10.2%	8.0%
1	37.1	40.8	39.0
2	37.1	34.7	35.8
3-4	20.2	14.3	17.1
Credits Earned during Quarters in JSRP (n=202)(mean)	29.3 credits	39.9 credits	34.6 credits

[a]Question asks, "Do you recall where you first learned about the JSRP program?" DK= don't know, DR= don't remember.

Sample sizes noted for total sample. Each site accounts for approximately half, unless otherwise noted. Columns may add to less than or greater than 100 percent due to rounding.

respondents received at least one quarter of ongoing services. The largest share of participants, about three-quarters of them, were in ongoing services for one or two quarters. The table shows few significant differences between the two sites in terms of numbers of quarters of services. Students in the Dayton area were more likely to have participated in initial services than students in Toledo; which reflects the fact that Sinclair had a series of seminars at the time, but ComTech had not yet initiated their seminars.

During their quarters in JSRP, students earned an average of 35 credits toward their degrees. The mean is higher at ComTech than at Sinclair—40 versus 29. These credit levels represent about a third of degree requirements.

To supplement the administrative data about services received, we asked the survey respondents about the activities that they remembered engaging in while they were in the JSRP program. For some of these activities, we also asked the clients how useful they had found the activity. The entries in table 3-3 show the percentage of participants who reported that they had engaged in each activity. At least two-thirds of the respondents indicated that they had participated in or received the following: an orientation to the campus and college, financial aid workshop(s), financial assistance for course-related expenses, or assessment testing. Between one-half and two-thirds of participants indicated that they had participated in career planning workshops, a textbook exchange, had received financial assistance for transportation, or had been provided information about the availability of jobs in the area. Approximately one-third of participants participated in support groups, social events, employment preparation workshops, life skills workshops, or tutoring. About 20 percent of clients received financial help for summer school tuition.

Table 3-3

Self-Reported JSRP Activities and Perceived Usefulness,
by Site and Total Sample
(Entries are percent of sample who participated in activities
or who gave a usefulness rating.)

Activity	Site				Total Sample	
	Sinclair Community College		University of Toledo—ComTech			
Orientation to Campus/College	83.2%		72.5%		77.8%	
Financial Aid Workshop(s)	75.2%		63.7%		69.5%	
Very/Somewhat Useful		96.1%		96.9%		96.5%
Career Planning Workshop(s)	74.3%		41.2%		57.6%	
Very/Somewhat Useful		90.7%		97.6%		93.2%
Support groups	43.6%		18.6%		31.0%	
Very/Somewhat Useful		95.5%		100.0%		96.8%
Social events	36.6%		33.3%		35.0%	
Employment preparation workshops	37.6%		27.5%		32.5%	
Very/Somewhat Useful		89.5%		89.3%		89.4%
Life skills workshops	60.4%		22.5%		41.4%	
Very/Somewhat Useful		88.5%		95.7%		90.5%
Financial help w/transportation	60.4%		42.2%		51.2%	
Course-related expenses	69.3%		65.7%		67.5%	
Summer school tuition	15.8%		26.5%		21.2%	
Textbook library/exchange	53.5%		72.5%		63.1%	
Tutoring	24.8%		35.3%		30.0%	
Very/Somewhat Useful		92.0%		91.7%		91.8%
Assessment/Testing	83.2%		58.8%		70.9%	
Provided Information about jobs	48.5%		46.1%		47.3%	

Sample size for total sample for Activity is 203. Sample sizes for "usefulness" ratings is percentage who reported participating in Activity. Each site accounts for approximately half of the sample, unless otherwise noted.

There are substantial differences between the two sites in the percentages of respondents who engaged in the various activities. Reflecting the fact that more of the Sinclair Community College participants received initial services, these participants reported higher incidences of receiving an orientation to campus, financial aid workshop, career planning workshop, and life skills workshop. In addition, a higher percentage of participants at Sinclair indicated that they had been involved in support groups and received financial help with transportation. On the other hand, a higher percentage of participants at ComTech reported participating in a textbook exchange/library, receiving summer school tuition, and receiving tutoring assistance.

We asked the respondents to rate how useful the activities were. The entries in the table show the percentage of respondents indicating that they had participated in an activity who found them to be "Very" or "Somewhat" useful. In all the cases, these percentages were very high—virtually all of them at 90 percent or higher at both sites. Not shown in the table is the fact that the preponderance of these responses were "Very Useful."

The next table, table 3-4, displays summary statistics about the satisfaction levels of clients concerning the JSRP programs. At both sites, approximately two-thirds of the respondents rated the treatment that they received from JSRP counselors as "Excellent," and another quarter rated it as "Good." Together this means that around 90 percent of the clients felt that the treatment they received from counselors was excellent or good, the preponderance of which were the former. A similar question about their college instructors elicited slightly lower ratings from the respondents. At Sinclair Community College, just under half of the respondents rated their treatment by college instructors as "Excellent," and about one-third rated it as "Good." At ComTech, slightly less than one-third rated instructors' treatment as "Excellent" and about 43

Table 3-4

Client Satisfaction with JSRP Program, by Site and Total Sample
(Entries are percent of sample who reported indicator.)

Indicator	Site		Total Sample
	Sinclair Community College	University of Toledo—ComTech	
Treatment from JSRP Counselors			
Excellent	65.3%	62.7%	64.0%
Good	22.8	27.5	25.1
Fair/Poor	11.9	9.9	10.9
Treatment by College Instructors			
Excellent	47.5%	31.4%	39.4%
Good	36.6	43.1	39.9
Fair/Poor	15.9	25.5	20.7
Grade for College			
A	43.6%	31.4%	37.4%
B	37.6	43.1	40.4
C	12.9	14.7	13.8
D/F	3.0	3.0	3.0
DK	3.0	7.8	5.4
Grade for JSRP Program			
A	62.4%	57.8%	60.1%
B	19.8	34.3	27.1
C	11.9	4.9	8.4
D/F	4.0	3.0	3.5
DK	2.0	0.0	1.0
Grade for Influenced Life			
A	44.6%	50.0%	47.3%
B	29.7	26.5	28.1
C	12.9	12.8	12.3
D/F	9.9	5.8	7.8
DK	3.0	5.9	4.4
Would you recommend to a friend?	89.1%	93.1%	91.1%
Have you (in last 6 months)? (n=185)	41.1%	55.8%	48.6%

Sample size for total sample is 203, except as noted. Each site accounts for approximately half. Columns may add to less than or greater than 100 percent due to rounding.

percent as "Good." It should be noted that these are still high ratings that indicate substantial satisfaction with instructors.

We asked respondents to give a letter grade to assess the college, the JSRP program at the college, and the influence of the JSRP program on their lives. The grades given to the program closely reflected the ratings of counselors. Almost 90 percent of the respondents gave the JSRP program a grade of "A" or "B." (The largest share of the grades were A). The colleges received somewhat lower grades. About 80 percent of the grades given were A's or B's, with equal shares of the two grades. The grades that respondents gave about the influence of the JSRP program on their lives were in between the grades they gave to the programs and to the colleges. About three-quarters of the respondents assigned an "A" or "B" to the influence of JSRP on their lives. About two-thirds of these grades were "A" and the other third "B."

Another measure of client satisfaction was whether or not they would recommend the JSRP program to friends. Over 90 percent said that they would recommend it to friends, and almost half said that they had recommended it to at least one friend in the last six months.

The bottom line on client satisfaction is that they were extremely satisfied with the JSRP program. They indicated that they were treated well by program staff, they gave the program good "grades," and they indicated that they were willing to recommend the program to friends. In the next section, we discuss the answers to open-ended questions in which we asked the respondents to indicate what components of the JSRP programs they liked the best, why, and what improvements they might suggest.

3.4 Clients' Perceptions about the Strengths and Areas for Improvement of JSRP

The telephone survey used to collect the data for the follow-up study asked all respondents two open-ended questions about the JSRP program. The first question was what **one** aspect of the JSRP program or services they had found to be most helpful. The second question was what would be **one** change that they would suggest to improve the JSRP program. Tables 3-5 and 3-6 present a summary of the responses to these questions.

The first table classifies the responses to the question about most helpful aspects. The answers generally fell, almost in equal thirds, into comments about specific program services, comments about program staff and how the program was operated, and comments about how the program had affected the respondent. In considering the third category of items, we need to keep in mind that it must be the case that program services or program staff caused the positive effects on clients.

The single item that was mentioned most often by respondents to this question was the attention received from counselors. Almost a quarter of respondents listed it as the most useful aspect of JSRP. The individual comments mentioned the counselors' attentiveness, empathy, ability to resolve problems, and general effectiveness. Complementing the positive remarks about counselors was the item classified as "Courtesy and attitude of program staff." Another 9 percent of the respondents singled out the positive tenor of the overall program as the most useful aspect of the programs.

Among program services, the items that were rated as most useful were (1) assistance with administrative paperwork, in particular financial aid forms and registration, and (2) financial help

Table 3-5

What One Aspect of JSRP Was Most Helpful, Total Sample

Aspect	n=186	
	Number of Responses	Percentage of Responses
Program Services		
• Financial help w/books, course-related expenses, summer tuition, transportation	14	7.5%
• Child-care or dependent care related assistance	7	3.8
• Textbook exchange/loans	6	3.2
• Help with college administrative paperwork—registration, financial aid forms, course planning	26	14.0
• Tutoring	5	2.7
Program Staff and Attitude Toward Clients		
• Attention from counselors	41	22.0
• Program director	3	1.6
• Courtesy and attitude of program staff	17	9.1
Program's Effect on Clients		
• Improved self-esteem and motivation	30	16.1
• Eased adjustment to college; time management	33	17.7
• Helped with job or career preparation	6	3.2
• Other life skills	3	1.6
Other	2	1.1

Note: Number of responses exceeds sample size and total percentage exceeds 100 percent because seven respondents gave multiple responses.

Table 3-6

What One Change Would Improve JSRP Programs, Total Sample

Issue	n=117	
	Number of Responses	Percentage of Responses
Issues Concerning Statewide JSRP		
• Relax time limitation	24	20.5%
• Serve other populations besides JOBS; GA; low-income; other counties	6	5.1
• Initiate similar programs limited to males	3	2.6
Suggestions for Particular Sites		
• Need more staff; longer hours; more space	11	9.4
• More and better outreach to students	16	13.7
• Need more minority staff	2	1.7
Comments about Programming		
• Contact former participants	3	2.6
• Initial services curriculum; too short; too long; particular items covered not necessary	10	8.6
• More career planning	2	1.7
Complaints		
• Poor counseling practices; bad advice or bad attitudes toward clients	18	15.4
• Getting hours signed	4	3.4
Other	18	15.4

with textbooks, course-related expenses, and summer tuition. Together, these items were mentioned about 20 percent of the time.

Finally, about one-third of the respondents felt that the most useful thing about the JSRP program was a change that it made in themselves. About half of these respondents mentioned improved self-esteem or greater motivation. The remaining half noted that JSRP eased the adjustment to college through college "survival" seminars in which the students met similar students and learned time management skills.

Table 3-6 turns to program improvement suggestions made by the former clients. These have been categorized into issues that concern JSRP on a statewide basis, suggestions for the particular college sites, comments about aspects of the services that were received, complaints, and a residual "Other" category.

The single item that received the most comments was the time limitation on services. Over one-fifth of the individuals who responded to this question felt that the program should relax the one-year limitation on services. They felt that financial help for course-related expenses in subsequent years and help in career planning and job interviewing skills would be beneficial to them, for example. Other suggestions concerning the statewide program include (1) allowing the program to serve other populations besides JOBS clients—e.g., all low-income students, GA recipients, other counties' JOBS clients, and (2) establishing a program for men.

Among the positive suggestions for the two individual programs, were that more staff or longer hours of operation were needed because the students reported that they had considerable waits or could not get in contact with a counselor when they wanted one. Also a number of respondents suggested that the programs needed better outreach because they knew of fellow

students who were public assistance recipients who were unaware of the JSRP programs. A couple of respondents felt that the programs needed more minority staff.

Several of the former participants made comments about the initial services seminar that they had participated in (all of these were from Dayton, because The DEAL Center had not initiated an initial services seminar during the Encounter Period). It is hard to learn much or generalize from these comments, however, because they are idiosyncratic. Two respondents thought the seminars lasted too long and two thought that they were too short. Some of the respondents thought that particular subjects that were covered were unnecessary—e.g., nutrition—whereas others thought that these subjects were welcome. Three of the respondents felt that the programs should make an effort to stay in contact with former program participants, even though they couldn't provide services to them. Two respondents felt that the programs needed to provide more career planning.

A large share of the respondents to this question had specific complaints about the counseling services or counselors. In some cases, they felt that they had been given bad or wrong advice and in other cases, they cited bad attitudes toward clients. The other complaint that was mentioned by a few respondents was the hassle and embarrassment of having to get CDHS forms with hours signed by instructors or program staff.

3.5 Educational Experiences of JSRP Clients

Perhaps the most important issue that is addressed in this entire evaluation is the extent to which the JSRP programs actually affected the educational experiences of clients. After all, the primary objective of the program is to facilitate positive postsecondary experiences so that clients

will stay in college and complete their programs of study, which will result in "good" jobs and careers. The follow-up study is the only source of information on these postsecondary experiences. The JSRP management information system has detailed data on the courses of study and credits earned by clients, but only for the period of time that they received services funded by the program. The CRIS-E system has some educational information. Whenever clients are assessed or reassessed, they provide information about their education and training. However these data are available only for clients on assistance and only when clients are assessed or reassessed.

Part of the justification for the JSRP program is the notion that JOBS clients have significant barriers to success in college. We asked clients about six particular barriers. Table 3-7 shows that between one-half and two-thirds of the respondents indicated that child or other dependent care, time demands of family, and financial pressures were significant barriers to them. The other three barriers that we asked about—personal health problems, lack of encouragement or support from family, and transportation problems—were relatively minor for this group. Only about one-quarter of the respondents mentioned them. The responses to these questions about barriers differ only slightly across the two sites.

We first tried to gauge the effectiveness of JSRP in helping clients navigate college by asking them directly whether they thought that they would have achieved their educational level without the help of JSRP. Only about one-third of the respondents thought that they would have gotten as far as they had without the JSRP program. Or conversely, two-thirds of the respondents credited JSRP (to some extent) with helping them to achieve their current levels of education.

Table 3-7

Educational Experiences of Follow-Up Study Respondents, by Site and Total Sample
(Entries are percent of sample with characteristic unless otherwise noted.)

Characteristic	Site		Total Sample
	Sinclair Community College	University of Toledo—ComTech	
Problem Encountered -- (n=203)			
-- Child/dependent care	51.5%	52.9%	52.2%
-- Time demands of family	66.3%	67.6%	67.0%
-- Personal health	15.8%	18.6%	17.2%
-- Lack of encouragement from family	22.8%	27.5%	25.1%
-- Transportation	21.8%	25.5%	23.6%
-- Financial	51.5%	62.7%	57.1%
Achieve Education Without JSRP? (n=202)	37.0%	33.3%	35.1%
Number of Quarters (n=199) (mean)	5.4 quarters	6.7 quarters	6.1 quarters
Fields of Study (n=202)			
Business and related	17.0%	19.6%	18.3%
Computer information systems	8.0	5.9	6.9
Engineering related	5.0	1.0	3.0
Health related	35.0	22.5	28.7
Food service/home economics	3.0	6.9	5.0
Protective services	1.0	2.9	2.0
Social services	2.0	8.8	5.4
Other	29.0	32.4	30.7
Still Enrolled? (n=202)	29.1%	54.7%	41.9%
GPA, Self-Report (n=178) (mean)	2.85	2.73	2.78
Received Degree? (n=201)	14.0%	13.9%	13.9%
Type of degree (n=78)			
Certificate	28.6%	28.6%	28.6%
Associates	50.0	71.4	60.7
Other	21.4	0.0	10.7
Plan to Continue? (n=129)	74.7%	81.5%	77.5%
Improved Chances of Job? (n=203)	72.3%	73.5%	72.9%

Sample sizes noted for total sample. Each site accounts for approximately half, unless otherwise noted. Columns may add to less than or greater than 100 percent due to rounding.

What are those levels of education? On average, the respondents had completed over six quarters of college and had achieved an average GPA of 2.78 (which translates to about a B-average). The number of quarters completed at ComTech was higher than at Sinclair. This may be because ComTech is a part of the University of Toledo, and students were reporting total quarters at the university. The average GPA's were similar across the two sites.

The fields of study pursued by the students in the follow-up sample, according to administrative data, are categorized in table 3-7. The largest single field is health-related, which accounts for about 30 percent of the respondents (larger percentage at Sinclair than ComTech). Business and related technologies claimed about 20 percent of the students at both sites. Around 30 percent of the respondents were categorized in the residual "Other" category. This includes academic areas pursued for transfer purposes, miscellaneous technical areas, and undecided. The remaining 20 percent of the respondents were split among computer information systems, engineering-related fields, food service, protective services, and social services.

Is the JSRP facilitating retention and graduation? Only a small percentage of the respondents reported having completed their programs when we interviewed them. Only 14 percent had received a certificate or Associate's degree. However, a large share of respondents, around 40 percent, indicated that they were still enrolled and still working on their programs at the time of the survey. These statistics suggest that the follow-up period may be too short to capture the full educational attainment of these JOBS clients. We know that they received JSRP services between July 1991 and June 1993. By the time of the survey, May-June, 1995, only about one in seven of the students had completed a program and received a degree (most often an Associate of Arts). On the other hand, about 40 percent of the students were still enrolled.

Note that about three-quarters of the sample indicated that they planned to continue their education sometime in the future. However, it is hard to evaluate whether these intentions will be realized. Also, about three-quarters of the survey felt that their education had improved their chances of getting and keeping a "good" job. The next section examines employment outcomes during the Outcome Period.

3.6 Employment and Public Assistance Outcomes

Obviously an important goal of the JSRP is to get clients through school and into high-paying jobs with benefits so that they can leave welfare. We asked respondents about their employment experiences during the outcome period. Table 3-8 shows that only about 40 percent of the respondents were employed at all during the two-year Outcome Period (January 1993-December 1994). During the period, most respondents reported only a single job (or employer), but some of the clients worked in two or more jobs. All together, the 82 clients who held at least one job accounted for 122 jobs.

Among these jobs, only about 30 percent were said to be related to the courses of study that the jobholders were pursuing in their college programs. The clients averaged about 30 hours per week in these jobs, and the average wage was about $6.50. The respondents indicated that about 70 percent of the jobs that they held were for employers who offered health insurance coverage to some of their employees. But only about half of the clients actually were covered during their terms of employment.

The last set of outcomes that we analyzed for the follow-up sample was their public assistance status. Statistics from the CRIS-E data base are presented in table 3-9. The most

Table 3-8

Employment During Outcome Period, by Site and Total Sample
(Entries are percent of sample or percent of jobs, except as noted.)

Employment Indicator	Site		Total Sample
	Sinclair Community College	University of Toledo—ComTech	
Employment Rate (n=199)	40.0%	42.6%	41.3%
How many employers (n=82)			
1	56.4%	67.4%	62.2%
2	30.8	18.6	24.4
3-4	12.9	14.0	13.4
Related to Coursework (n=122 jobs)	30.7%	28.6%	29.6%
Average hours per week (n=122) (mean)	32.2 hours	28.0 hours	30.1 hours
Greater than 30	63.5%	44.3%	53.9%
Average wage (n=122) (mean)	$6.90	$6.00	$6.45
Health insurance coverage offered? (n=62 jobs)	85.7%	66.7%	70.3%
Health insurance covered? (n=32 jobs)	58.3%	42.9%	50.0%

Sample sizes noted for total sample. Each site accounts for approximately half, unless otherwise noted. Columns may add to less than or greater than 100 percent due to rounding.

Table 3-9

Public Assistance Characteristics of Follow-Up Study Respondents, by Site and Total Sample

Characteristic	Site		Total Sample
	Sinclair Community College	University of Toledo—ComTech	
Benefit, open (n=142) (mean)	$336.99	$308.08	$322.23
last (n=195) (mean)	$326.10	$327.07	$326.59
Duration (n=192) (mean)	1019.9 days	1063.6 days	1042.2 days
Closed cases (n=192)	44.7%	36.7%	40.6%
Education level, open (n=195) (mean)	10.4 years	12.0 years	11.2 years
last (n=175) (mean)	12.6 years	12.4 years	12.5 years
Reading grade level,			
open (n=95) (mean)	5.7	--[a]	5.7
last (n=95) (mean)	8.9	--[a]	9.0

[a]Not available at this site.

Sample sizes noted for total sample, except for reading grade level. Each sample accounts for approximately half, except for reading grade level.

striking statistic in the table is that over 40 percent of the cases are closed. The average benefit of these clients changed only slightly during the period of time. At the time of case opening, these clients average benefit was $322. At the latest time period, the average benefit was $326. If it were the case that a large share of clients were working part time during their participation in JSRP, then we would expect the average benefit to trend downward as benefits were reduced to reflect the receipt of wage income.

The last two items presented in the table come from the assessments and reassessments of AFDC clients. At the time that these clients were first assessed, they averaged 11.2 years of education and reading levels at grade 5.7. At the time of their most recent reassessment, the educational attainment had risen to an average of 12.5 years, and reading levels had increased by over 50 percent to a new average of grade 9.0. This represents increases of about 10 percent in educational attainment and 55 percent in reading levels. Presumably these significant changes will improve the employability of the clients.

3.7 Summary

The follow-up study confirms the positive results from the process study in many ways. The sample of former JSRP participants gave very high marks to the *process*. They found the activities that they participated in to be very useful, particularly the orientation to college and assistance with registration, financial aid, and other forms. They were highly satisfied with the counselors and counseling that they received. Over 90 percent of the former clients indicated that they would recommend the JSRP program to a friend or acquaintance, and half indicated that they had recommended it within the last six months. The only negatives about the programmatic

processes were that about 7-10 percent of the sample felt that they had encountered poor counseling or misinformation, and a large share of the sample felt that the time limitations on services to a client should be relaxed.

What does the follow-up study say about the outcomes of the program? Here the results are far less sanguine. In terms of retention, about two-thirds of the respondents felt that they would not have achieved as much education without the JSRP program. However, less than 15 percent of the sample had received a degree or certificate by the time of the survey; and 40 percent indicated that they were still enrolled in college at the time of the survey. This means that almost half of the sample had discontinued their college programs prior to receiving a degree or certificate. Clients *intended* to do better in the future. About three-quarters plan to continue their education at some point in the future, but it is hard to assess the likelihood of this occurring.

Also, about three-fourths of the respondents indicated that they felt that their postsecondary experiences improved their chances of getting and keeping a good job. However, during the two-year period from January 1993 to December 1994, only 40 percent of the respondents were employed for pay in any capacity—part time or full time. Furthermore, only 30 percent of the jobs held were reported to be related to the training that the clients had been engaged in.

Other important outcomes for the JSRP program include welfare status and educational skill levels. On these fronts, the follow-up study showed that over 40 percent of the JOBS clients had currently closed cases, and the reading levels on JOBS assessments rose by over 50 percent.

4. IMPACT ANALYSIS

4.1 Purpose

The purpose of the impact analysis is to try to understand the impact that JSRP has had on program participants. We initiate this exercise using an evaluation technique called *gross impact analysis*. Gross impact analysis tracks the outcomes that resulted from participation in the program without regard to a counterfactual set of circumstances. That is, it answers questions like how many JSRP students became employed, or how many JSRP students left the welfare rolls. Gross impact analysis is commonly used by evaluators to provide a systematic description of program outcomes. In addition, comparisons across sites or among participant characteristics can be made to determine particular attributes that contribute positively to participant success. Most of our analyses in this chapter are in the form of gross impact analysis.

It was infeasible to use an experimental design (i.e., randomly assigning eligible individuals into JSRP or a control group) to evaluate the impacts of JSRP. However, we did use CRIS-E data to construct a comparison group of college students against whom we could compare and contrast JSRP students. This permits us to undertake a *net impact analysis*. Net impact analysis attempts to answer the question of how the outcomes for JSRP participants differ from the counterfactual of what would have happened **if it had been the case that the JSRP program did not exist.** It answers questions like how many JSRP students became employed **because** of their participation in JSRP. The net impact analysis makes the assumption that the comparison group individuals are otherwise identical to the program's participants except for participation in the program.

The chapter first presents the gross impact analysis followed by the net impact analysis. The former begins with a description of client characteristics. We present a statistical picture of their demographic characteristics, college experiences while in JSRP, and types of public assistance. The gross impact analysis then turns to a description and analysis of participants who completed three or more quarters of JSRP. Next, we look at the employment and earnings of clients after they participate in JSRP. These analyses use both a simple descriptive statistical approach and multivariate analyses. The last section of the chapter turns to the net impact analysis. There we contrast JSRP participants to our comparison group and perform analyses of the employment and earnings differences between them.

The data to be used for these analyses have been drawn from three different data sources. The first is the JSRP administrative data. The second is the CRIS-E data, and the third is the Ohio Bureau of Employment Security (OBES) wage-record data. Matching data across these three different data sources was complex, and a visual description of the data sources is given in figure 4-1.

4.2 JSRP Program Participants

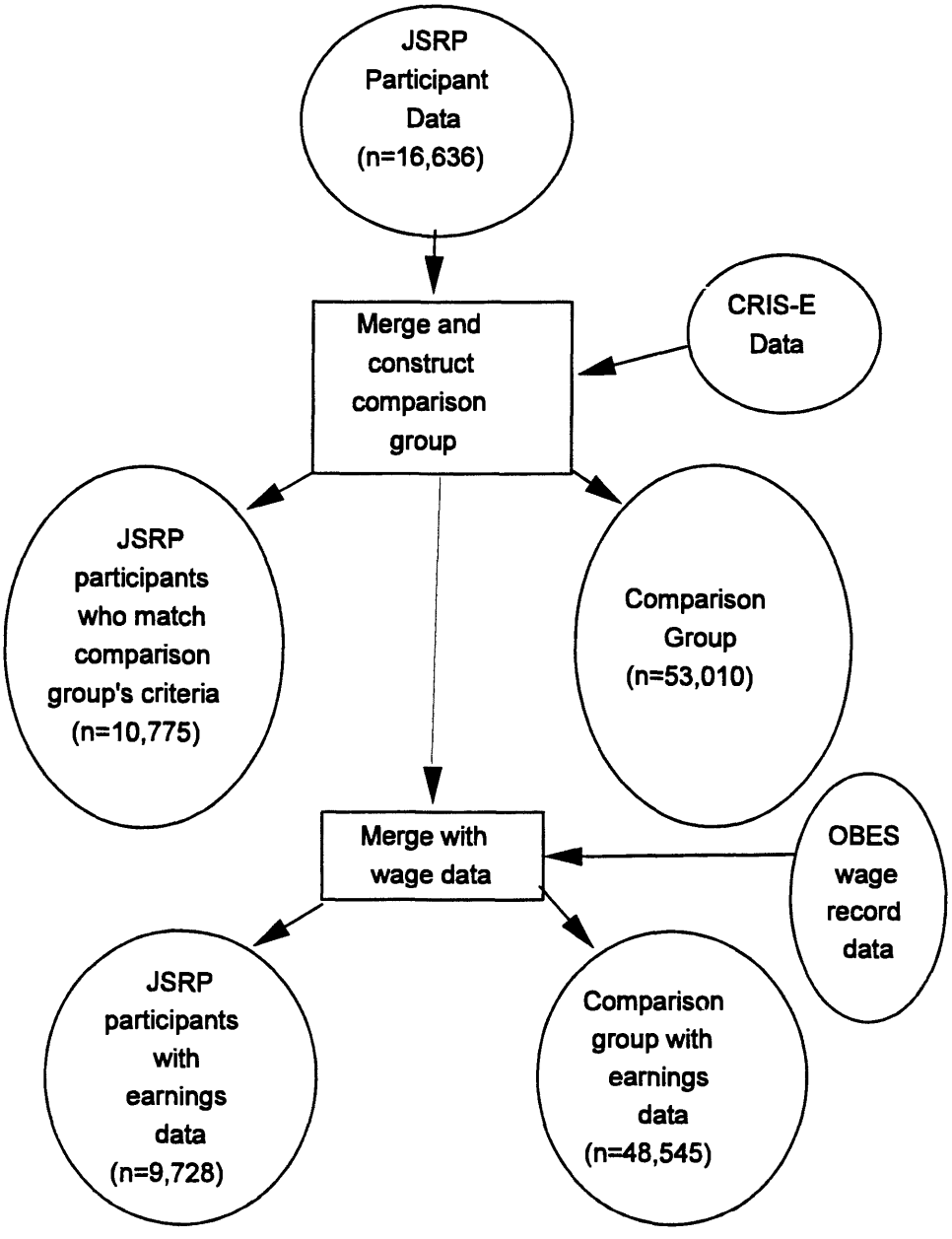
This section of the chapter provides a quantitative description of program participants. It first looks at demographic characteristics and college experiences during JSRP participation for the state as a whole. Then it examines participants by college and by type of assistance.

4.2.1 Participant Demographic Characteristics and College Experiences

Average personal characteristics for JSRP participants are given in table 4-1. Through spring 1994, there were a total of 16,636 JSRP participants. On average, they were 29.75 years

Figure 4-1

Data Sources for Analyses



of age at the start of JSRP, with approximately 85 percent of participants in their twenties or thirties. Twenty-one percent of the participants are African-American, while 1.9 percent are Hispanic. Reflecting the preponderance of females on the welfare rolls, most (almost 90 percent) participants are females; 12.2 percent of the participants are male.

Analyzing all 16,600 plus JSRP participants in any further detail is problematic because the sample contains a group of individuals who entered JSRP recently, and thus is likely to participate in program activities in quarters after our data ends. This group of individuals has had less opportunity to earn college credits and has had fewer program dollars spent on it. Therefore, it is more informative to examine the data excluding this group of individuals. In order to identify this group, all participants are divided into cohorts, based on dates the individuals received JSRP services. If the individual received JSRP services in more than one cohort, that individual is assigned to the latest cohort. The cohorts are listed below and variable means, by cohort, are given in table 4-2.

Cohort 1: received services between 3/90 and 6/91.
Cohort 2: received services in summer 91 or academic year 91-92.
Cohort 3: received services in summer 92 or academic year 92-93.
Cohort 4: received services in summer 93 or academic year 93-94.
Cohort 5: JSRP participation incomplete at end of previous cohort.

The number of JSRP participants has gone up each year of the program starting with 1,288 participating in the first cohort, 4,033 in the second, 4,979 in the third, and 5,298 in the fourth and final complete cohort. From the program's inaugural year to the present, the percentage of participants who are African-American has fallen slightly from 21.35 percent to 20.46 percent, and the percentage male has fallen as well, from 15.60 percent to 10.59 percent. Additionally,

Table 4-1

Variable Means for JSRP Participants
(standard deviation in parentheses)

Variable	Full Sample	Sample of Complete Cohorts[a]
# of individuals	16,636	15,597
Age at start of JSRP	29.75 (6.98)	29.80 (6.98)
% African-American	21.2 (40.8)	21.3 (40.9)
% White	76.3 (42.5)	76.1 (42.6)
% Hispanic	1.9 (13.5)	1.9 (13.8)
% Male	12.2 (32.7)	12.1 (32.6)

[a]JSRP participants excluding final, incomplete cohort.

participants in the most recent complete cohort are over one year younger than participants in the first cohort. The age trend may be explained by several factors. ADC clients may be becoming eligible for JOBS at a younger age; counties may be referring younger clients; or perhaps the college programs are marketing and reaching younger students.

Analyses from this point on in this chapter exclude cohort 5. Eliminating this group excludes 1,039 individuals from the analyses, leaving 15,597 program participants. With these observations eliminated, the racial and gender composition of the JSRP participant group is nearly identical to that of the original, full sample. Mean characteristics for this sample of 15,597 are given in the second column of table 4-1. The average age continues to be approximately 30.

Table 4-2

Variable Means by Cohort
(standard deviation in parentheses)

Variables	Cohorts			
	1	2	3	4
# of individuals	1,288	4,033	4,979	5,296
Age at start of JSRP	30.40 (7.04)	30.02 (6.85)	29.99 (6.97)	29.30 (7.04)
% African-American	21.4 (41.0)	22.7 (41.9)	20.9 (40.7)	20.5 (40.3)
% White	77.3 (41.9)	74.5 (43.6)	76.5 (42.4)	76.7 (42.3)
% Hispanic	1.0 (9.6)	1.8 (13.2)	2.1 (14.3)	2.1 (14.5)
% Male	15.6 (36.3)	12.8 (33.4)	12.4 (32.9)	10.6 (30.8)

And, there is a fairly narrow range of ages reported. Approximately 50 percent of the students are in their twenties at the start of JSRP, while 38 percent are in their thirties.

Table 4-3 provides descriptive information about the college experiences of JSRP participants. As of the last quarter of receiving JSRP support, the average number of credits earned for the entire sample is 29.32. This average is understated, however, because 11.6 percent of the students' records report only one credit hour. This is due to a combination of missing data and early program dropouts. Recalculating the average number of credits, excluding the observations with only a single credit, yields an average number of credits of 33.04. The range

Table 4-3

College Credits and Grades, by Cohort

Characteristic	Cohort 1	Cohort 2	Cohort 3	Cohort 4	All[a]
Credits[b]	24.01	34.52	34.48	32.64	33.04
	(15.98)	(17.00)	(15.62)	(14.20)	(15.77)
GPA	2.60	2.63	2.62	2.64	2.62
	(0.87)	(0.82)	(0.87)	(0.88)	(0.86)
Grade Distribution					
Percentage with					
-- GPA ≥ 3.50 (A)	16.7%	17.6%	18.9%	19.6%	18.6%
-- 2.50 ≤ GPA < 3.50 (B)	44.9	44.1	42.4	42.4	43.1
-- 1.50 ≤ GPA < 2.50 (C)	26.5	29.6	27.4	27.1	27.8
-- 0.50 ≤ GPA < 1.50 (D)	10.4	7.9	10.0	9.4	9.2
-- GPA < 0.50 (F)	1.5	0.9	1.2	1.4	1.2
Percentage with GPA = 4.00	3.4%	4.2%	4.4%	5.6%	4.7%

[a]JSRP participants through summer '94, excludes final, incomplete cohort.
[b]Excludes observations where credit equals one.

of values for earned credits is fairly wide. One-third of the students report earning fewer than 25 credits, while one-third report earning more than 40 credit hours. There is some clustering of credit hours. For example, 12.2 percent of the JSRP participants report earning 14-16 credit hours. And, 14.9 percent report earning 27-32 credit hours.

The average earned grade point average (GPA) is 2.62.[17] The percentage of each cohort falling in each grade range (based on earned GPA) is also shown in table 4-3. Overall, nearly 19 percent of the students earn an average grade in the A range. Notice that the percentage of each

[17]This calculation excludes the 42 percent of the participants for whom the GPA is recorded as zero. Clearly, many GPA's are simply not reported in the JSRP data files.

cohort earning grades in the A range has risen slightly but steadily from cohort to cohort. About 43 percent of the students earn an average grade of B, which means that over 60 percent are earning A's or B's. Only about 10.5 percent earn an average grade of D or F.[18] As the table shows, a small percentage of the students earn straight A's—a 4.0 grade point average. This percentage has risen from 3.4 in the first cohort up to 5.6 in the final, complete cohort.

Table 4-4 presents data on enrollment and grades, by program of study. JSRP students appear to cluster in a limited number of programs. These are (with the percentage of JSRP participants reporting each): Allied health (17.3 percent), Business and office (10.9 percent), Health sciences (10.9 percent), Business and management (7.5 percent), Liberal/general studies (7.1 percent), Computer and information systems (5.2 percent), Engineering-related technologies (4.3 percent), and Protective services (3.9 percent). Looking at GPA for the different programs (and excluding the zero GPA's again), yields mean GPA's for these same programs (in the same order) of: 2.68, 2.63, 2.65, 2.69, 2.70, 2.58, 2.62, and 2.61.

Finally, the table presents average GPA by program of study and cohort. By the final cohort, the mean GPA's range from a low of 2.48 (public affairs) to a high of 2.83 (liberal/general studies). There is no significant shift in GPA's by program across cohort. It is not possible to determine precisely what would cause the small differences in GPA's by program of study. It could be that better students are getting the better GPA's, and those better students tend to choose specific programs. Or, it could be that some programs tend to be associated with more generous grading, yielding a relatively higher percentage of high grades.

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[18]These averages might be overstated somewhat because the zeroes have been excluded.

Table 4-4

Enrollment and Grades, by Program of Study and by Cohort

Program of Study	COHORTS				All
	1	2	3	4	
Enrollment Percentage					
Business & management	8.6	8.2	6.5	7.7	7.5
Business & office	15.9	12.2	10.1	9.6	10.9
Computer & information systems	3.8	5.2	5.2	5.7	5.2
Education	2.0	3.0	2.6	2.6	2.6
Engineering - related technologies	5.4	4.6	3.9	4.1	4.3
Allied health	15.7	17.7	17.3	17.5	17.3
Health sciences	7.8	10.4	11.7	11.4	10.9
Law	1.6	1.8	2.1	2.3	2.0
Liberal/general studies	9.0	5.1	6.4	8.8	7.1
Protective services	5.0	3.6	4.1	3.5	3.9
Public affairs	1.4	2.1	2.7	3.2	2.6
Average GPA					
Business & management	2.74	2.69	2.70	2.66	2.69
Business & office	2.66	2.69	2.57	2.63	2.63
Computer & information systems	2.61	2.54	2.69	2.51	2.58
Education	2.56	2.67	2.54	2.64	2.62
Engineering - related technologies	2.76	2.65	2.62	2.54	2.62
Allied health	2.54	2.68	2.65	2.73	2.68
Health sciences	2.65	2.70	2.65	2.62	2.65
Law	2.19	2.52	2.54	2.57	2.52
Liberal/general studies	2.40	2.42	2.76	2.83	3.70
Protective services	2.94	2.67	2.52	2.55	2.61
Public affairs	2.45	2.50	2.63	2.48	2.53

4.2.2 Participant Characteristics, by College

There are substantial differences across colleges in the demographic characteristics and college experiences of JSRP participants. The means of key JSRP variables, by college, are given in table 4-5. The number of participants at each college is given, showing that some colleges have had too few participants for the averages to be meaningful. In these few cases, those means are not included in the discussion that follows.

The average age of the JSRP student body across colleges is in the range of 27 to 31. The racial composition differences across colleges are probably the most dramatic. The percentage African-American ranges from zero in two colleges up to 68.9 at one college. The percentages of the JSRP participants who are male range from 4.4 to 21.7. Those colleges falling in the higher portion of that range must be serving relatively more ADCU clients.

Table 4-5 also includes three items relating to college outcomes: credits, GPA, and the percentage completing three terms of program participation. For average credits earned, the colleges range from approximately 20 to 42. And, the average GPA's range from 2.4 to 2.9. This is a relatively narrow range, reflecting a letter grade range of C+ to B. On average, colleges appear to be assisting students whose GPA's are quite strong. Presumably, JSRP is contributing to these strong academic performances.

Completion rates, defined as participating for three or more quarters, vary widely across colleges as well. The bulk of the colleges have percentage completion rates in the 40's, 50's, and 60's, but the extremes are 19 to 67. Recall that overall completion rates are quite low in the first cohort. However, those colleges with low completion rates do not tend to have disproportionately more of their students participating in that first cohort.

Table 4-5

Personal Characteristics and College Experiences, by College

College	Students	Age at start	% White	% African-American	% Male	Credits	GPA	% Complete
Belmont Technical College	522	30.3	96.9	2.7	18.8	36.9	2.9	57.1
Central Ohio Technical College	344	29.2	94.5	2.3	12.2	34.1	2.8	67.4
Central Ohio Technical-OSU/ Newark	40	27.5	97.5	2.5	12.5	34.9	2.4	60.0
Cincinnati State Technical and CC	408	27.9	30.6	68.9	4.4	39.0	2.4	43.4
Clark State CC	642	30.1	82.2	15.6	11.2	30.8	2.4	61.7
Columbus State CC	840	30.0	54.9	42.1	5.0	31.0	2.6	51.2
ComTech-Univ. of Toledo	901	29.2	46.3	49.1	7.5	38.9	2.4	67.5
Cuyahoga CC	1376	30.2	35.8	58.8	6.1	31.1	2.5	55.8
Edison State CC	212	30.5	97.2	1.9	17.9	34.1	2.6	56.6
Firelands College-BGSU	262	30.0	71.0	24.8	9.5	21.6	2.4	24.8
Hocking College	1056	30.0	99.3	0.0	21.7	34.1	2.8	51.4
Jefferson Technical College	404	29.1	81.2	18.8	10.4	39.6	2.8	63.4
Kent State Univ.-Salem	69	30.4	100.0	0.0	10.1	28.8	2.4	18.8
Kent State Univ.-Trumbull	7	31.1	57.1	42.9	14.3	19.7	2.6	0.0
Lorain County CC	844	28.9	68.8	21.1	7.7	26.0	2.5	61.8
Marion Technical College	272	29.7	98.2	1.8	11.4	31.2	2.6	55.1
Muskingum Area Technical College	959	31.1	92.6	6.8	18.5	31.9	2.7	50.6
North Central Technical College	457	30.0	85.1	13.8	12.5	33.4	na	61.7
Northwest Technical College	280	29.4	93.9	0.4	10.4	33.1	2.6	55.0
Ohio University-Chillicothe	27	29.8	100.0	0.0	11.1	22.4	2.7	3.7
Ohio University-Southern	415	29.9	97.8	1.9	15.9	39.6	2.6	52.0
Owens CC	522	29.7	79.7	12.5	13.2	27.4	2.6	41.4
Rio Grande CC	339	29.6	95.6	3.5	15.0	35.8	2.7	56.6
Shawnee State University	1191	29.4	95.2	4.0	18.0	32.3	2.5	63.4
Sinclair CC	1081	30.7	65.4	34.1	9.1	34.0	2.6	62.6
Southern State CC	553	30.7	97.8	2.2	13.7	33.8	2.9	55.7
Stark Technical College	454	30.4	74.0	22.9	16.3	30.8	2.9	65.6
Terra Technical College	380	29.6	85.5	7.1	17.6	32.5	2.6	61.6
Univ. of Cincinnati-Clermont	442	28.6	96.8	2.9	6.3	29.8	2.7	66.7
Univ. of Cincinnati-University	298	26.9	34.9	63.4	5.4	41.7	2.6	67.1
TOTAL	15,597	29.8	76.3	21.2	12.2	33.0	2.6	57.2

4.2.3 Participant Characteristics, by Type of Assistance

JSRP participants differ substantially by the type of assistance they receive: ADC-R (AFDC regular, i.e., single parent), ADC-U (AFDC for a two-parent family with an unemployed parent), and FS (food stamps) only. Variable means for individuals in these assistance types are given in table 4-6. The asterisks indicate a statistically different mean for a given variable comparing ADC-R versus ADC-U, and then ADC-R versus FS. It is clear that the three program types are comprised of very different demographic groups. All the differences described here are statistically significant. The ADC-R individuals are more likely to be African-American than the FS only group, but three times more likely to be African-American than the ADC-U participants. Nearly one-half of the ADC-U recipients are male. ADC-R individuals score lower on the math exam given at the time of the AFDC file is opened.

Interestingly, ADC-U recipients are more likely to have been sanctioned (23 percent) than the FS group (13 percent) or the ADC-R group (18 percent). This is probably because the requirements to prove job search for the ADC-U recipients are more stringent than any requirements faced by ADC-R or FS recipients. As expected, ADC-R recipients have received welfare support a longer time than the other two groups, and have fewer months of previous work experience.

ADC-U recipients have considerably more work experience, on average, than do recipients of the other two types of assistance. Furthermore, they have worked more hours per month. Finally, the ADC-U recipients have a far greater likelihood of having their own vehicle.

Table 4-6

Variable Means Across Program Type

	ADC-R	ADC-U	FS
Personal Characteristics			
Age	28.36	29.85*	28.74
% White	69.87	90.85*	76.70*
% African-American	28.10	6.45*	21.55*
% Male	2.54	47.88*	15.32*
% Married	10.52	83.75*	36.32*
% Divorced	31.29	4.08*	24.07
% Single	44.08	7.66*	29.54*
Educational Background			
Years of education completed at time of AFDC opening	11.47	11.50	11.54
Math grade level equivalency	6.30	6.81*	6.79*
Family and Case Characteristics			
Current # children	1.79	2.06*	1.79
Welfare duration (days)	1,038.07	881.05*	779.38*
% LEAP	1.48	0.77*	2.08
% Sanctioned	18.29	23.36*	13.23*
% Transit. medicaid	18.20	20.44*	22.65*
% Own vehicle	45.58	71.06*	57.62*
Employment (prior to or while on assistance)			
Hours worked per month	115.52	126.50*	118.62
Months previous work experience	39.16	55.71*	45.50*
College/JSRP Experience			
College credits, as of latest JSRP Quarter	34.08	33.62	30.42*
GPA	2.62	2.70*	2.61

*Indicates that the mean for the JSRP ADC-U (or FS) variable is statistically different from the mean for the corresponding JSRP ADC-R variable.

4.3 Who "Completes" JSRP?

The JSRP offers support for three college quarters, and we would expect to see the maximum impact accruing to those who participate for all three quarters. So, we use participation in JSRP for three or more quarters as an indicator of program completion. It is important to keep in mind that eligibility for the program is determined by welfare eligibility, so potentially some program "dropouts" actually are continuing with their schooling but have simply become ineligible for JSRP due to an improvement in personal living conditions, perhaps due to employment or marriage. Neither of these can be considered negative outcomes. The percentages of JSRP participants completing the program by cohort are given in table 4-7. As can be seen in the table, after some relatively low levels in the first cohort, completion rates are quite high in the following cohorts. For cohorts 2-4, they are approximately 60 percent.

Table 4-7

Percentage of JSRP Participants with Three or More Quarters, by Cohort

Cohort	Percent Completing
1	25.1%
2	59.2
3	62.0
4	58.8

Descriptive statistics are given in table 4-8 for completers versus noncompleters. The two groups are of the same approximate age, but the completers are more likely to be white (77 percent versus 75 percent) and less likely to be male (10 percent versus 14 percent). This is likely

to be explained by the fact that males are most likely to be in the program due to short-term unemployment, and so are more likely to gain new employment, thereby losing JSRP eligibility.

Table 4-8

JSRP "Completers" versus "Noncompleters"[a]

Characteristic	Completers	Noncompleters
Personal Characteristics		
Age	29.87	29.71
% White	77.02*	74.89
% African-American	20.35*	22.51
% Male	10.45*	14.37
Educational Background		
Years of education completed at time of AFDC opening	11.34*	10.96
Math grade level equivalency	6.62*	6.06
Family and Case Characteristics		
No. of children @ AFDC opening	1.67*	1.57
Age youngest child @ AFDC opening	5.0*	4.9
AFDC Monthly benefit, 1st payment	$328.09*	$321.19
AFDC Monthly benefit, last payment	$321.05	$313.15
% own vehicle	62.0	49.0
Employment		
% employed while on AFDC	27.06	26.92
Hours worked per month	118.4	116.3
Hourly wage	$5.80	$5.44
College/JSRP Experience		
College credits, as of latest JSRP Quarter	41.25*	18.02
GPA	2.68*	2.50

[a]Completers aare defined as participants for three or more quarters.

For educational background, completers tend to have a significantly higher average years of education at the time of the opening of the CRIS-E record (11.34 versus 10.96 years of

education). And, completers have a higher initial math grade level equivalency, exceeding noncompleters by more than half a year (6.62 versus 6.06).

Next, the table turns to differences in family and public assistance case characteristics. Completers tend to have slightly more children on average than noncompleters, and the youngest child of completers tends to be slightly older at the time of the opening of the CRIS-E record (5.00 years old versus 4.92). Although the difference is small, this makes sense, given the increased ease of focusing on an academic program if children are older. However, completers tend to have slightly more children on average. Completers receive slightly more in monthly AFDC payments at the opening of the AFDC record, as well as at the most recent AFDC record. However, the averages for both groups fall from the opening to the most recent.

For those reporting some employment in the CRIS-E file, program completers report working more hours per month (118 versus 116) and working for a higher hourly wage ($5.80 versus $5.44). Those completing the JSRP are three percentage points more likely to have access to their own transportation. Finally, the table turns to college experience. Program completers report a larger number of college credits while in JSRP (46.25 versus 18.02), and also report a higher average grade point average (2.68 versus 2.50).

Overall, it appears that the program completers enjoy somewhat of a labor market advantage, particularly given their increased access to transportation and higher wages. Consistent with this, they tend to be better students, having more education from the beginning of the AFDC record, testing better in math, and then performing better in school while in JSRP.

4.4 Employment and Earnings

As discussed above, important measures of program outcomes are the employment and earnings of JSRP participants. This section of the chapter analyzes these measures. We need to remember, however, that these are not the only measures of success; some students not employed may instead be pursuing further higher education, also a positive outcome.

4.4.1 Employment and Earnings

Earnings and employment outcomes for JSRP participants by cohort are given in table 4-9. The first column reports the percentage from that cohort who are employed in any quarter following their JSRP program participation. The employment rate for a cohort is the number of participants having earnings in some quarter following their JSRP participation divided by the total number of participants in the cohort. This employment rate is nearly 70 percent across all cohorts, and over 80 percent for the first cohort. Employment rates would be expected to be higher for the earlier cohorts given that they have had more time after their participation in JSRP to gain this employment.

Table 4-9

Post-JSRP Employment and Quarterly Earnings,
by JSRP Cohort

Cohort	(end date)	% w/any post-JSRP Employment	Average Most Recent Post-JSRP Earnings	% Employment in 95:2	Average Earnings in 95:2
1	(91:3)	81.8%	$2,484	56.0%	$3,240
2	(92:3)	77.9%	$2,351	56.5%	$3,001
3	(93:3)	70.1%	$2,130	52.7%	$2,654
4	(94:3)	54.9%	$1,868	43.7%	$2,240
TOTAL	--	67.9%	$2,159	50.9%	$2,689

The second column shows the levels of earnings that the employed participants received. It gives the average post-JSRP quarterly earnings for those JSRP participants who become employed. For those individuals with more than one quarter of employment after JSRP, the most recent quarter of employment is used. Quarterly earnings are the highest for the earliest cohorts ($2,484 and $2,351 for the first and second cohort, respectively), reflecting wage growth over time. On average, the quarterly earnings exceed $2,000. A previous table indicates that JSRP program participants work, on average, around 117 hours per month and earn about $5.50 per hour. These averages correspond to average quarterly earnings of $1,930. Post-JSRP earnings that exceed $2,000 indicate that workers are exceeding 120 hours per month or $5.50 per hour, on average.

The third column indicates the percentage of each cohort employed in the most recently available quarter of wage data (1995, quarter 2). This is distinct from the previous columns because many of those JSRP participants observed working at least once after exiting the JSRP program are not employed in the most recent quarter. This employment rate is one way to gauge the employment retention of program participants. Nearly one-quarter of JSRP participants who became employed sometime after they completed JSRP are not employed in the three months that comprise 95:2. Of course, the flipside is that a substantial percentage of each cohort is also employed in this most recent quarter. For Cohort 1, 56.0 percent are employed, and the rates generally fall throughout the cohorts down to 43.7 percent employed in the most recent cohort.

Finally, the fourth column shows the average earnings in the most recent quarter of data available in the wage-record data, 1995 quarter 2. Again, see that the highest wages are earned by the earliest cohorts. These average quarterly earnings range from a high of $3,240 for the first

cohort to $2,240 for the most recent complete cohort. Overall, the average quarterly earnings is approximately $2,700. This would correspond to an hourly wage of $7.50 for individuals who average 120 hours per month.

4.4.2 Earnings Growth

Table 4-10 shows the change in quarterly earnings received by JSRP participants from before their participation to after exiting the program, broken down by cohort. In other words, it shows how much earnings have grown from pre-JSRP to post-JSRP employment. For the first cohort, for individuals who have been out of JSRP for the longest period of time, earnings grew by $1,092 from the earnings received prior to participating in JSRP to earnings received after exiting JSRP. This increase reflects nearly a 50 percent increase in earnings. In the following cohorts, this amount of earnings growth remains high but is somewhat lower, reflecting the increasingly shorter time period following program completion. Still, even in the most recent cohort, this increase represents nearly a 35 percent increase in earnings.

Table 4-10

Earnings Growth, by Cohort

Cohort	# of individuals	% Change in Earnings from Pre- to Post-JSRP
1	534	$1,092*
2	2,232	945*
3	2,890	730*
4	2,154	688*

* Statistically significant at the 5 percent level.

4.4.3 Employment and Earnings by Program of Study and College

An interesting issue to examine is the employment rates by cohort for the most popular programs of study to determine if any programs are linked to noticeably higher employment rates. Table 4-11 shows these employment rates. For the most part, each program is associated with approximately 60-80 percent employment, when employment in any quarter after participating in JSRP is considered. When employment in the most recent quarter is considered, there is more variability in employment rates across programs. For the first cohort, the programs associated with the highest employment in the most recent quarter are Public affairs (77.8 percent), Health sciences (59.0 percent), Allied health (56.9 percent), and Protective services (56.3 percent). The programs associated with relatively low employment retention are Law, Education, and Liberal/general studies. These two programs probably require additional schooling to find field-specific employment. Therefore, perhaps some of the participants in these programs have continued their schooling and so do not report being employed. In the more recent cohorts, not enough time has passed for the employment retention measure to be meaningful. Note that there is less variability in these measures in the more recent cohorts.

Finally, employment outcomes are given in table 4-12. The percentage of each college's JSRP participants who are employed in the second quarter of 1995 (the most recently available data) ranges from 32 to 62. However, more than two-thirds of the colleges fall in the 40 to 50 percent range. It seems that despite the wide differences in demographics and credits earned, the employment outcomes don't vary substantially. This is confirmed by turning to the average quarterly earnings by college in the same quarter. While average earnings range from $1,561 to $3,076, most colleges fall approximately in the area of $2,500. This reflects more variability than

Table 4-11

Post-JSRP Employment by Program of Study and by Cohort

Program of Study	Cohort 1		Cohort 2		Cohort 3		Cohort 4	
	% with any empl	% with recent empl	% with any empl	% with recent empl	% with any empl	% with recent empl	% with any empl	% with recent empl
Business & management	76.6	49.5	76.2	51.2	72.3	48.9	59.5	42.4
(# of individuals)	111		332		325		408	
Business & office	81.0	52.7	81.3	52.1	67.4	45.5	53.1	36.7
(# of individuals)	205		492		503		507	
Computer & information systems	81.6	51.0	83.7	53.4	66.3	45.2	50.7	35.0
(# of individuals)	49		208		261		300	
Education	88.5	42.3	82.5	54.2	72.4	49.6	50.0	36.8
(# of individuals)	26		120		127		136	
Engineering-related technologies	84.3	54.3	79.0	46.2	68.2	45.8	58.4	42.9
(# of individuals)	70		186		192		219	
Allied health	86.6	56.9	80.1	54.2	69.8	44.7	54.2	39.6
(# of individuals)	202		712		859		927	
Health sciences	87.0	59.0	77.8	50.5	73.4	49.1	55.1	39.3
(# of individuals)	100		418		582		603	
Law	95.0	45.0	87.5	51.4	70.2	46.2	55.8	38.3
(# of individuals)	20		72		104		120	
Liberal/general studies	85.3	46.6	80.2	52.7	68.3	44.8	53.0	36.7
(# of individuals)	116		207		319		466	
Protective services	92.2	56.3	78.9	42.9	74.3	54.9	61.1	41.1
(# of individuals)	64		147		206		185	
Public affairs	94.4	77.8	70.9	54.7	64.0	39.7	60.4	42.6
(# of individuals)	18		86		136		169	

Table 4-12

Post-JSRP Employment and Earnings, by College

College	Post-JSRP Employment	Employed in 1995:2	1995:2 earnings
Belmont Technical College	62.8	34.9	2645
Central Ohio Technical College	60.5	41.3	2324
Central Ohio Technical-OSU/Newark	77.5	50	2598
Cincinnati State Technical and CC	81.9	57.8	2774
Clark State CC	74.6	52	2929
Columbus State CC	65.0	45.8	2224
ComTech-Univ. of Toledo	69.8	46.6	2364
Cuyahoga CC	71.7	45.6	2891
Edison State CC	78.3	53.3	3057
Firelands College-BGSU	83.2	62.6	2594
Hocking College	65.1	42	2837
Jefferson Technical College	57.7	35.6	2536
Kent State Univ.-Salem	55.9	31.9	1561
Kent State Univ.-Trumbull	0	0	0
Lorain County CC	65.9	45.5	2958
Marion Technical College	73.5	51.5	2964
Muskingum Area Technical College	72.0	47.2	2663
North Central Technical College	71.3	50.1	2591
Northwest Technical College	80.7	58.9	3076
Ohio University-Chillicothe	51.9	37	1316
Ohio University-Southern	50.6	28.9	2613
Owens CC	71.5	48.5	2972
Rio Grande CC	52.5	31.9	2690
Shawnee State University	59.0	36.7	2638
Sinclair CC	68.8	44.9	2632
Southern State CC	69.4	47.7	2993
Stark Technical College	67.2	47.6	2554
Terra Technical College	80.5	56.8	2836
Univ. of Cincinnati-Clermont	65.4	45	2369
Univ. of Cincinnati-University	71.5	49	2085
TOTAL	67.9	45.2	2689

appears in the employment rates, but the distribution still reflects relative uniformity of employment success.

4.4.4 Employment and Earnings, by Completion Status

As was mentioned previously, not completing the JSRP program cannot be viewed strictly as a program failure, since there are positive circumstances under which an individual might choose to end his or her participation in the program (getting a good job) or positive circumstances under which an individual might become ineligible for program participation (via marriage, for example). Nevertheless, it is interesting to compare the employment outcomes for completers versus noncompleters. Table 4-13 shows that about 65 percent of program completers are observed working at least once after completing JSRP (post-JSRP), while a large percentage of program noncompleters, 71 percent, are observed working after exiting JSRP. Therefore it seems likely that many of the JSRP program participants who exited prior to program completion did leave the program to take a job.

Table 4-13

Summary of Most Recent Post-JSRP Wage

	Completers		Noncompleters	
Cohort	% Employed	Earnings	% Employed	Earnings
All	65.4%	$2,233.46*	71.3	$2,067.39
1	84.8	3,123.17*	80.8	2,259.44
2	77.1	2,478.37*	79.1	2,170.99
3	68.6*	2,201.96*	72.5	2,019.26
4	51.4*	1,841.38	60.0	1,900.09

* Statistically significant at the 5 percent level.

However, those exiting JSRP before completing the program do not tend to be higher wage earners. On average, program completers earned $2,233.46 a quarter in the most recent quarter after their exit from JSRP, while program noncompleters earned only $2,067.39 a quarter. This difference reflects a statistically significant 8 percent higher earnings for the program completers, despite the fact that we might expect that those with higher wage offers would be more likely to drop out of the program early. On the other hand, those with the highest potential wage tend to continue in school beyond the completion of JSRP. The table also shows the percentage employed and average earnings by cohort. The earlier cohorts have had more time after exiting JSRP to have been employed, so their employment rates are higher. Also, due to their greater work experience post-JSRP, their wages tend to be, on average, higher.

4.4.5 Multivariate Analyses

The gross impact analyses presented so far have been univariate; that is, they have examined participant characteristics and outcomes a single variable at a time. A more meaningful analysis compares characteristics or outcomes while simultaneously controlling for differences in another characteristic. This is called multivariate analysis, and one form of this is called regression analysis.

For the purposes of the gross impact evaluation, two empirical issues can be addressed using regression analysis. The first issue is to determine the factors that can explain employment; i.e., why some JSRP participants are observed working in the wage-record file while some are not. The second issue is to identify the factors that can help to explain the level of earnings observed.

To determine the factors that explain why some JSRP participants match to the wage-record file (i.e., were observed working), we estimated a regression with a dependent variable that is discrete and has only two values. That is, the dependent variable reflects the answer to the following yes/no question: Is the JSRP participant observed to be working after JSRP participation is complete? Thus, the dependent variable (Employment) equals the value of 1 when the answer to that question is yes, and equals 0 when the answer is no. Estimating an equation with a 0-1 dependent variable requires a special estimation technique to transform this 0-1 dependent variable into a continuous variable reflecting the probability that the variable takes the value of 1.0. The technique we use is called Probit regression. Because the length of time that has elapsed between JSRP completion and the most recent work effort observed might influence success in the workforce, these regressions include dummy variables for the different cohorts. (This equation was also estimated separately by quarter, but the results were virtually identical to the findings described here, and the jointly estimated results are less cumbersome to discuss.)

One might imagine that many factors affect the probability that a JSRP participant will be observed working following their participation in the JSRP program. Based on economic reasoning and data availability, we selected the following variables: 0-1 variable that equals 1 to indicate LEAP participation; current number of children (total); last GPA; total credits earned; age at end of last term; 0-1 variable that equals 1 for nonwhite; 0-1 variable that equals 1 if male; 0-1 variable that equals 1 if ever sanctioned; 0-1 variable that equals 1 if received transitional Medicaid health insurance coverage; education grade level at the last assessment; and the average county wage. The latter is included to control for the strength of the local economy on the

individual's likelihood of gaining employment. Note that the policy variables are LEAP participation, Sanction, and Medicaid dummies.

This regression can be written in summary form below.

$$\begin{aligned} \textit{Probability of Post-JSRP Employment} = \quad & \alpha_0 + \alpha_1 LEAP + \alpha_2 KIDS + \alpha_3 GPA + \\ & \alpha_4 CREDITS + \alpha_5 AGE + \alpha_6 NONWHITE + \\ & \alpha_7 MALE + \alpha_7 SANCTIONED + \alpha_8 MEDICAID + \\ & \alpha_9 EDUCATION + \alpha_{10} COUNTYWAGE \end{aligned}$$

Table 4-14 shows the signs of the Probit coefficients as well as their statistical significance. The sign of the Probit coefficient indicates whether the variable in question has a positive or negative effect on the probability of having post-JSRP employment. Having been in LEAP prior to JSRP has a positive effect on the probability of employment, but this effect is not statistically different from zero. Having more children has a negative effect on the probability of employment, as does having earned a higher GPA or more credits while in JSRP. The latter two probably affect employment negatively, because those students are more likely to remain in school. (Unfortunately, school enrollment after JSRP is not observed in our data.) The same outcome is found for those with higher levels of overall education—they are less likely to be employed. And, older students are less likely to be employed.

JSRP participants who are nonwhite or male are more likely to be employed, as are those who had been sanctioned at least once while receiving public support. And, those who have transitional Medicaid coverage available, so that they can continue to receive coverage during

Table 4-14

Results from Employment Probit

Variable	Coefficient Sign	Level of Significance
INTERCEPT	+	1%
LEAP	+	No
# KIDS	-	1%
GPA	-	1%
CREDITS	-	5%
AGE	-	1%
NONWHITE	+	1%
MALE	+	1%
SANCTION	+	1%
MEDICAID	+	1%
EDUCATION	-	1%
COUNTY WAGE	+	1%

Note: Cohort dummy variables were also included but none were significant.

their first months of work, are more likely to be employed. Finally, living in a county with a higher average wage positively affects the probability of employment.

Next, an earnings regression equation was estimated. We estimated this equation with a basic regression technique called Ordinary Least Squares (OLS). This technique is crucial to gaining an understanding of what factors are most likely to be contributing to the program's successes and failures, and permits the examination of the effect of specific JSRP program factors on JSRP program outcomes, while simultaneously controlling for other relevant program and individual factors.

Earnings is defined as the most recent post-JSRP quarterly earnings. The factors to be controlled are: MILLS[19]; age at end of last term; educational grade level, last assessment; math grade level, last assessment; reading grade level, last assessment; 0-1 variable that equals 1 if nonwhite; 0-1 variable that equals 1 if male. This regression technique estimates the impact of the independent variables on the dependent variables.

This regression equation can be written in summary form below.

$$Earnings = \beta_0 + \beta_1 AGE + \beta_2 EDUCATION + \beta_3 MATH + \beta_4 READING + \beta_5 NONWHITE + \beta_6 MALE + \beta_7 MILLS$$

As can be seen in table 4-15, being older, having more overall education, or better math skills are all associated with higher wages. Surprisingly, having higher reading skills is associated with lower wages. As is commonly observed in aggregate data, being male is associated with having higher earnings, even after controlling for other factors thought to influence wage levels. And, being nonwhite is associated with having lower wages, also a standard finding. Both of these results are either due to omitting important variables in the wage equation or to discrimination.

[19]Using the results of the Probit regression, a special variable called MILLS is constructed. This variable is useful for its statistical ability to control the effects of having any earnings at all on the level of earnings. That is, because earnings regressions can be estimated only for those having some positive earnings, in conjunction with the fact that those with low potential earnings are less likely to work at all, this variable helps to eliminate any bias that might arise from this estimation using earners only.

Table 4-15

Results from Quarterly Earnings Regression Equation

Variable	Coefficient Sign	Level of Significance
INTERCEPT	+	No
MILLS	-	1%
AGE	+	1%
EDUCATION	+	1%
MATH	+	1%
READING	-	5%
NONWHITE	-	1%
MALE	+	1%
R-SQUARED	.0452	

Note: Cohort dummy variables were also included but none were statistically significant.

4.5 Net Impact Analysis

The analyses in the previous sections examine JSRP participants only. To attempt to gauge the impact of JSRP on participant outcomes, we turn to a net impact analysis.

4.5.1 Contrasting JSRP Participants to a Comparison Group

The most important decision that we had to make in constructing a comparison group was who to include. The object was to select a population that is as close as possible to JSRP participants in personal characteristics, except that members of the comparison group did not have the benefit of JSRP services. The group that we selected were JOBS clients who had at least 12 years of schooling and were assigned to higher education as their JOBS component. To increase comparability, we deleted from the JSRP sample individuals who had less than 12 years of education prior to JSRP. (The Appendix to this chapter compares and contrasts JSRP participants

in the first four cohorts who do and do not have at least 12 years of schooling prior to participation.) The bottom line is that we assume that the difference in employment and earnings outcomes between JSRP participants (who had at least 12 years of schooling) and the comparison group can be **attributed** to JSRP.

Mean values for the selected group of program participants, plus the comparison group, are given in table 4-16. While nearly every variable has a statistically different mean value, the absolute magnitude of those differences are not very large in most cases. The main point of examining the differences and similarities between these two groups is to determine how appropriate it is to use the comparison group to compare employment outcomes with the participant group. If they were virtually identical, the comparison group would be a good approximation to an experimental control group. If they are somewhat similar, then the comparison group is still useful for describing an approximation of the net impact of program participation. The most important thing to look for is "relative disadvantage." That is, does one group appear to be better suited for success in college or employment than the other group? Or does one belong to a broad demographic group typically associated with more success in college or employment, for uncertain reasons?

The JSRP participants appear to be more "relatively advantaged" because they are more likely to be white (74 percent versus 61 percent), less likely to be single, and more likely (by 9 percent) to have access to their own transportation. Finally, JSRP participants had completed more years of education at the time their AFDC case files were opened, and scored higher in math

Table 4-16

Variable Means for JSRP Participants
and the Comparison Group

	JSRP	Comparison Group
Personal Characteristics		
Age	28.66*	28.91
% White	74.1*	60.9
% African-American	23.8*	36.4
% Hispanic	0.02	0.02
% Male	11.4*	14.6
% Married	25.3*	24.1
% Divorced	26.0*	20.8
% Single	36.6*	42.1
Educational Background		
Years of education completed at time of AFDC opening	11.47*	10.83
Math grade level equivalency	6.43*	5.46
Family and Case Characteristics		
No. children @ AFDC opening	1.61*	1.55
Age youngest child @ AFDC opening	4.76*	4.88
Current no. children	1.84*	1.79
AFDC Monthly benefit, 1st payment	320.95*	311.34
AFDC Monthly Benefit, last payment	320.20*	314.07
Welfare Duration (days)	987.48*	879.67
% LEAP	1.4*	2.2
% Sanctioned	18.7*	21.1
% Transit. Medicaid	19.0*	20.0
% Own vehicle	50.9	41.9
Employment		
Hours worked per month	117.43	121.74
Hourly wage	5.71	5.66
Months previous work experience	42.57	45.90

* Statistically significant at the 5 percent level.

testing at that time. These differences may indicate the possibility of some creaming; that is, selection of welfare clients into JSRP could be based in part on perceived potential of success. However, it is just as likely that the students themselves are steering themselves into JSRP versus other JOBS programs based on their own interests and own perceived probabilities of success in college.

4.5.2 Employment and Earnings Outcomes

The main point of the net impact analysis is to compare the post-JSRP earnings to those of the comparison group. Without this comparison, it is not possible to determine if the employment and earnings outcomes experienced by program participants are in any sense "good." Mean employment rates and earnings levels for JSRP versus the comparison group are shown in table 4-17. The first two rows relate to the most recent job held by members of both groups, but for the JSRP participants, these are jobs held after exiting the JSRP program. This explains the lower employment rate for JSRP participants. While 92 percent of the comparison group appear

Table 4-17

Employment Outcomes for JSRP Participants
and the Comparison Group

	JSRP	Comparison Group
% with earnings (post-JSRP for JSRP)	68*	92
Amount of earnings	2091.86*	1776.90
% with 1995 quarter 2 earnings	46*	48
Amount of earnings	2575.89*	2484.01

* Indicates that the JSRP variable mean is statistically different from the comparison group mean.

in the employment data at some point, only 68 percent of JSRP participants have become employed after participating in JSRP. Despite the lower employment rates, the JSRP participants earn on average higher quarterly earnings, $2,092 versus $1,777. This reflects an 18 percent difference in quarterly earnings.

The second two rows refer to employment in the year 1995, quarter 2. This is the most recent earnings data we were able to obtain. Notice that JSRP participants have slightly lower employment rates (46 percent versus 48 percent). However, JSRP participants earn higher quarterly earnings, $2,576 versus $2,484. This is a 3.7 percent difference in earnings. This is the best comparison between the two because all the JSRP participants have exited the JSRP program, and nearly all of the comparison group have completed at least some higher education. At this point, the JSRP participants enjoy more labor market success than the comparison group members (as measured by earnings).

Recipiency of any welfare support (of any program type) using the most recently available data (1995, quarter 2) is an additional program outcome that can be contrasted with the comparison group. Summary figures are given in table 4-18. Almost 40 percent of JSRP participants are receiving some form of welfare support according to the administrative data, while approximately 1.6 percent more of the comparison group are still receiving such support. The JSRP participants who are on the rolls are receiving a larger dollar value ($347.71 versus $336.99) but this is mainly due to the slightly larger family size for the JSRP participants. For those individuals observed working in the most recent quarter, significantly fewer JSRP participants continue to receive welfare support than the comparison group (23.1 percent versus

Table 4-18

Welfare Recipiency and Employment:
JSRP versus the Comparison Group

	JSRP	Comparison Group
% currently receiving welfare support	39.42*	41.00
AFDC Amount	$347.71*	$336.99
For those currently working:		
% currently receiving welfare support	23.10*	27.14
AFDC Amount	$327.04	$323.75

* Statistically significant at the 5 percent level.

27.1 percent). Finally, the average amount of the AFDC cash benefit received by workers does not differ statistically between the JSRP participants and the comparison group.

4.5.3 Multivariate Analyses

Multivariate analysis is the most rigorous way to estimate the importance of program participation on employment and earnings. Earnings data for the JSRP participants were combined with the comparison group, and regressions much like those described earlier were estimated. By combining these two groups, the effect of JSRP participation (and completion) on employment and earnings can be estimated.

Using the same basic list of variables just described in section 4.4, Probit employment equations and OLS earnings regression equations were estimated by quarter. One additional variable, for JSRP participation, was included in both regressions. This variable was defined in

two ways, and each regression was estimated twice. First, it was set equal to 1 for any program participant and set to 0 for the comparison group. Then, it was set equal to 1 for any JSRP participant who completed the program (i.e., participated for at least three quarters) and set to 0 for noncompleters as well as for the comparison group. These variables, once other factors are controlled in the regression, show the impact of program participation on earnings. Each quarterly regression was estimated using the first definition, and then re-estimated using the second definition.

A second modification to the estimation was to redefine the earnings variable. Recall that in the previous estimations, we used post-JSRP quarterly earnings for JSRP participants. This new regression exercise combines JSRP participants with a comparison group. For the latter group, we do not have any data concerning calendar dates of postsecondary education participation or completion. Therefore, for each quarter, we combine all available post-JSRP earnings with all earnings for the comparison group.[20] Now, however, earnings are converted to the natural logarithm of earnings. As a consequence of this conversion, the coefficient associated with the JSRP variables is a direct numerical estimate of the boost to earnings accruing as a result of JSRP participation. For example, if the coefficient associated with JSRP participation were equal to 0.05, this would imply that program participation increases earnings by 5 percent. The estimates of program effects resulting from these earnings regressions are given in table 4-19.[21]

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[20]The implication of this is that the earnings for the comparison group, at least in the earlier quarters, may or may not be observed after participation in postsecondary education.

[21]The employment Probit results are not presented in tables, but in general are consistent with the earlier findings. And, participants in JSRP are less likely to be employed.

Sixteen quarters of regressions are presented, starting with the third quarter of 1991 and finishing with the second quarter of 1995. As can be seen in the table, results for the first five quarters are inconclusive for both definitions of the JSRP variable. However, from the fourth quarter of 1992 through the end of the data (11 straight quarters), the coefficients associated with both JSRP variables are significantly positive, implying that JSRP participation (or completion) is associated with higher earnings. Considering just the final 11 quarters and using the first JSRP variable definition (just program participation), the average boost to earnings across quarters accruing to program participants is 8.45 percent. As anticipated, using the more restrictive JSRP variable definition (program completion), results in a larger estimated boost to earnings of 12.91 percent. Converting this percentage to an approximate dollar figure implies that program completion is responsible for, on average, $288 of program completers' quarterly earnings. Both of these estimates are quite large, and imply that participation (or completion) of the JSRP program has substantial affects on the individual students' earnings capacity. This implies that the welfare rolls would be reduced and tax payments would increase.[22]

These regressions might overestimate the actual boost to earnings accruing to JSRP participants. This overestimation occurs because of a deficiency of the data. As was mentioned previously, for the JSRP participants, we can identify exact dates of program participation. We cannot determine if participants continue with their postsecondary education beyond the time frame of the JSRP, but we know for sure that each post-JSRP earnings observation is indeed observed **after** participation in the JSRP. For the comparison group, however, we do not know

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[22] Using all 16 quarters of estimates, the average of both estimates of the earnings impact would be 3.72 percent and 8.94.

Table 4-19

Ln Earnings Regressions—Estimate of Program Effects, by Quarter

Year:Quarter	JSRP1[a]		JSRP2[b]	
	Coefficient	Significance	Coefficient	Significance
1991:3	-0.10	no	0.15	no
1991:4	0.02	no	0.08	no
1992:1	-0.16	10%	-0.05	no
1992:2	-0.09	no	-0.18	10%
1992:3	-0.005	no	0.01	no
1992:4	0.12	1%	0.18	1%
1993:1	0.07	10%	0.13	1%
1993:2	0.11	1%	0.15	1%
1993:3	0.06	5%	0.10	1%
1993:4	0.06	1%	0.12	1%
1994:1	0.11	1%	0.18	1%
1994:2	0.08	1%	0.12	1%
1994:3	0.08	1%	0.13	1%
1994:4	0.07	1%	0.10	1%
1995:1	0.10	1%	0.15	1%
1995:2	0.07	1%	0.06	1%

[a]Defined as any participation in JSRP.
[b]Defined as JSRP completion (i.e., participating in JSRP for three or more quarters).

precise dates of participation in postsecondary education. In other words, whereas we have identified a comparison group that undertakes (at some point) schooling comparable to that of the JSRP participants, we cannot determine if any given quarter of earnings observations are observed before, during, or after the schooling takes place. Economic theory suggests that investments in human capital (i.e., improving one's education) lead to improvements in earnings, but for the comparison group, we cannot determine if that investment took place prior to any specific quarter of earnings data. However, there is no reason to expect that the comparison group would be experiencing its higher education later in the data than do the JSRP participants. That is, it is likely that the comparison group is stratified into the same general "time cohorts" as the JSRP participants, with regard to the timing of the participation in the postsecondary education. So it is likely that there is very little, if any, overstating of the program effects estimated by these regressions.

One way to mitigate this possible overstatement of the program effect on earnings is to focus on the later quarters of the earnings regressions. As the table shows, the large estimated boost to earnings persists throughout every quarter from the 6th quarter to the end. However, by focusing on the later quarters of earnings, one is observing more and more earnings observations for JSRP participants that take place several quarters after program completion. That is, many participants have been out of the program (and possibly working) for several quarters. Previous economic studies of the earnings effects of human capital investment have shown that the boost to earnings from schooling affects the first earnings received immediately after leaving school, but also affects the rate of growth of that earnings. So, for JSRP participants who participated in the earlier cohorts, one would expect their earnings to be higher than individuals who have

participated in postsecondary education but who have not been working very long. Again, there is no reason to expect that the JSRP participants will have been out of school longer than the comparison group. In any event, if it is the case that the JSRP participants complete their schooling earlier, thus enter the labor market earlier and enjoy more on-the-job wage growth, this effect might itself be a positive outcome from the JSRP. That is, perhaps participation in JSRP has improved the time it takes a college student to complete his/her schooling.

4.6 Summary of Findings

This chapter analyzed the JSRP program using administrative data from the JSRP itself, CRIS-E, and the OBES wage-record file. The average number of credits earned per student is 33.04, and the average grade point average earned is 2.62, with 60 percent of students earning grades in the A or B range. Defining program completion as having received services for three or more quarters results in the finding that 60 percent of participants in the three most recent full cohorts have completed their JSRP services.

Approximately 70 percent of program participants have some post-JSRP employment, and about 50 percent are employed in the most recent quarter of available data (1995 quarter 2). For the first two cohorts, average quarterly earnings are $3,240 and $3,001 respectively. For individuals in the four complete cohorts who are observed working both before and after JSRP participation, quarterly earnings growth ranges from $1,000 for the first cohort to $688 in the fourth cohort. The multivariate analyses help to explain the factors important to post-JSRP employment and earnings for JSRP participants. Factors associated with higher earnings include having more education, being older, male, or white.

In the net impact analyses, JSRP participants are contrasted with a comparison group. Individuals in the comparison group are more likely to be employed in 1995 quarter 2 (48 percent versus 46 percent), but JSRP participants receive 3.7 percent higher quarterly earnings. The earnings regression show that JSRP participation boosts quarterly earnings by approximately 8.5 percent. Completing JSRP causes a 13 percent boost to quarterly earnings, once other factors are controlled.

Appendix

Derivation of the Comparison Group and Comparable JSRP Participants

Our intent in constructing the comparison group from the CRIS-E file was to include individuals who were assigned to be in higher education. We operationalized this as having a JOBS assessment record showing 12 or more years of education followed by an ETWA JOBS assignment record. Subsequent assessment and employment records for the case could be of any type; but all other record types had to be of the program group ADCR or ADCU. We allowed for assessment and employment records other than ADCR or ADCU to avoid excluding anyone who was likely to be in higher education.

Of those JSRP participants having data on the CRIS-E history file, only 76.4 percent meet the selection criteria imposed on the control group in terms of education and record types. A comparison of JSRP observations who do and who do not meet the selection criteria is given in table A-1. The asterisks identify variable means that are statistically different from the full JSRP sample means.

Note that 11,581 JSRP participants meet the selection criteria, while 3,586 do not. Those meeting the control's criteria tend to be younger on average, more likely to be African-American, more likely to be single, and more likely to have longer ADC durations. Additionally, those matching the criteria, on average, have more education at the first assessment as well as the last assessment. However, the difference in mean education between the two groups narrows between the two assessments. Those matching the control's criteria are 25 percent more likely to have received transitional Medicaid benefits. Finally, this group earned more credit hours during JSRP and received a higher grade point average.

Table A-1

Variable Means for JSRP Participants in First Four Cohorts, by Whether they Meet Selection Criteria

Variable	Full JSRP (Criteria=0)	Full JSRP that meets controls criteria (Criteria=1)
Personal Characteristics		
Age	29.57	28.53*
% White	0.83	0.74*
% Black	0.15	0.24*
% Hispanic	0.02	0.02
% Male	0.15	0.11*
% Married	0.36	0.25*
% Divorced	0.26	0.26
% Single	0.26	0.37*
Educational Background		
Years of education completed at time of AFDC opening	10.28	11.41*
Math grade level equivalency	6.25	6.43*
Family Characteristics		
No. of children @ AFDC opening	1.69	1.60*
Age youngest child @ AFDC opening	5.60	4.70*
Current no. of children	1.88	1.83*
AFDC Monthly benefit, 1st payment	337.58	318.88*
AFDC Monthly benefit, last payment	312.91	322.09*
AFDC Duration	875.11	981.29*
LEAP	0.02	0.02
Sanctioned	0.19	0.18
Transit. Medicaid	0.15	0.19*
Has own vehicle	0.52	0.51
Employment		
Hours worked per month	117.98	117.34
Hourly wage	5.46	5.68*
Months previous work experience	39.51	43.29*
College/JSRP Experience		
Total Credits Earned	30.21	33.66*
GPA	2.56	2.66*

* Statistically significant at the 5 percent level.

5. COST EFFECTIVENESS

General conclusions that may be drawn from the process and follow-up studies are that JSRP staff and student participants sense that the individual college programs are delivering valued support and services, but there is a question as to whether JSRP is favorably impacting retention and degree completion. The net impact analysis implies that JSRP is improving earnings outcomes for JOBS clients. Furthermore, the improvements are larger and more significant for individuals who participated in JSRP for at least three quarters. The question remains as to whether these positive outcomes warrant the public investment in JSRP funding. In other words, can the state make a case to taxpayers that the program is cost beneficial? This chapter presents some data that address the issue, although our study cannot answer this question definitively.

5.1 Cost Analyses Framework

The ideal analysis that could be undertaken in a program evaluation to address the question of whether or not the program is cost efficient would be a benefit-cost analysis (BCA). A BCA is conducted by enumerating *all* of the benefits that might be attributed to a program and estimating their value. The analysis also enumerates all of the costs that are associated with the program and collects complete information about them. Total benefits are then compared to total costs, usually by calculating the ratio of benefits to costs. The percentage by which benefits exceed costs (assuming that they do) represents the return on investment for each dollar spent on the program. For example if the ratio of benefits to costs for a particular program is 1.22, then we would say that the program returns $.22 in benefits beyond every dollar spent.

Oftentimes a program's benefits will accrue to different individuals from those who bear the costs. Consequently, benefit-cost analyses are done for different populations. For example, a benefit-cost calculation might be done for participants in the program, for the agency administering the program, and for all society (including taxpayers).

The data requirements to conduct a BCA are severe. Program benefits often flow far into the future, so the analyst has to estimate future benefits and has to be able to value them in current dollars. Furthermore, benefits may be nonpecuniary. For example, JSRP may result in better grades for participants or in a higher likelihood of completing a college program. These benefits would have to be monetized to be included in a full-blown BCA. Cost data may also present problems. Some costs may be in-kind contributions, so they are not easily measured or valued. Costs may come from different sources and may not be easily disentangled. In short, benefit-cost analyses are the ideal, but they often cannot be conducted because of a lack of data.

This is the case with the JSRP program. We have some information about program benefits in the form of increased earnings of participants, but we do not have systematic information about educational outcomes or other important benefits of the program. Furthermore, we do not have access to all program costs.

The next best alternative is to conduct a cost effectiveness study. This type of study compares the costs of different methods for accomplishing a program objective. The approach that meets the objective at the lowest cost is most cost effective. The most important assumption that is made in a cost effectiveness study is that the program alternatives being compared do, in fact, achieve the same objective. In comparing two programs, we could not draw any conclusions about cost effectiveness if the more expensive program is also accomplishing more.

In this chapter, we present and analyze JSRP cost data. The data come from two sources: college proposals and JSRP administrative data on individual participants. The analyses may be thought of as modified cost effectiveness comparisons. We present per student costs by college and by cohort. In one sense, we can legitimately compare costs across colleges and over time because the costs are achieving the same thing: delivery of JSRP services. However, we need to recognize that colleges vary in how those services are delivered.

5.2 Estimated Budgets from College Proposals

Collated from the colleges' 1994 proposals, table 5-1 presents the projected cost and projected number of students to be served by the three types of service for all sites for the 1994-95 program year. Most sites allocated their costs across the types of services fairly arbitrarily, so it is not clear how comparable the per capita costs are when broken down by type of service. Furthermore, the projected numbers of students to be served are estimates. A final caveat is that the number of students served is not an unduplicated count. Each JSRP student may receive more than one type of service in a year. For example, a student may participate in initial services and two quarters of ongoing services. Another student may participate in ongoing services for a quarter and receive individualized services (summer tuition, for instance) for a quarter.

The per student costs presented in table 5-1, then, may be interpreted as the estimated cost of services to be provided to a JSRP student in a given quarter. The final column of the table represents the programs' estimates of the answer to the following hypothetical question: If we went to a site and selected a JSRP student at random at a random time during the year, how much

Table 5-1

Projected Number of JSRP Students and Costs per Student in 1994-95 Program Year, by College

College	Projected # of students in initial services	Projected cost per student in initial services	Projected # of students in ongoing services	Projected cost per student in ongoing services	Projected # of students in individualized services	Projected cost per student in individualized services	Projected cost per student
Belmont Technical College	120	$300.40	280	$297.95	110	$121.09	$260.38
Central Ohio Technical College	130	630.00	385	233.27	150	229.90	310.07
Cincinnati State Tech and CC	100	857.58	250	327.59	145	114.65	372.28
Clark State CC	150	576.01	380	339.02	220	230.91	354.70
Columbus State CC	300	365.41	580	283.51	490	165.34	259.18
ComTech-Univ. of Toledo	240	498.67	585	197.66	630	151.83	227.47
Cuyahoga CC	350	573.59	625	320.86	385	179.31	345.83
Edison State CC	63	530.32	110	341.45	39	182.05	368.25
Firelands College-BGSU	125	630.22	135	448.23	175	322.31	500.53
Hocking College	260	460.76	600	392.00	875	108.69	259.42
Jefferson Technical College	145	251.92	295	161.84	77	131.17	182.54
Kent State Univ.-Salem	75	339.00	75	384.00	75	125.00	282.67
Kent State Univ.-Trumbull	115	257.00	150	246.00	150	241.88	247.56
Lorain County CC	300	530.30	425	380.34	195	111.28	372.22
Marion Technical College	50	681.96	140	561.59	35	164.14	526.58
Muskingum Area Technical College	155	432.46	480	246.81	35	557.14	305.97
North Central Technical College	80	870.90	320	304.99	80	200.00	381.81
Northwest Technical College	80	698.00	180	310.00	80	104.06	352.84
Ohio University-Chillicothe	145	442.26	160	383.93	213	119.72	242.39
Ohio University-Lancaster	80	487.78	90	306.80	135	86.67	256.84
Ohio University- Southern	80	1201.22	147	759.82	70	374.85	787.98
Owens CC	245	667.01	355	460.29	125	154.37	477.40
Rio Grande CC	120	614.90	205	359.94	147	106.90	345.95
Shawnee State University	220	583.25	715	538.39	450	261.67	455.61
Sinclair CC	240	643.28	585	229.02	250	110.44	293.93
Southern State CC	180	501.45	305	442.72	340	170.29	339.15
Stark Technical College	235	422.00	358	293.00	261	86.55	265.41
Terra Technical College	120	537.00	205	299.00	97	68.56	313.71
Univ. of Cinn.-Clermont	220	271.00	504	347.00	504	123.02	241.46
Univ. of Cinn.- University	100	645.88	281	428.75	401	163.01	320.25
TOTAL	4723	534.96	9905	379.79	6939	159.23	342.81

was being spent on this student during this quarter? The overall average of this estimate across all sites is $342.81.

Columns two, four, and six provide the average quarterly costs that colleges budgeted for initial, ongoing, and individualized services. The average initial services budgeted cost per student statewide is $534.96. Note that these range from $252 (at Jefferson Technical College) to $1,201 (at Ohio University-Southern Campus). The average ongoing services budgeted cost per student served per quarter is $379.79. These costs ranged from $162 (at Jefferson Tech) to $760 (at Ohio University-Southern Campus). The average projected expenditure for individualized services per enrolled student is $159.23.

It is difficult to convert accurately these budgeted cost data to budgeted expenditures per capita (that is, using an unduplicated count of students) because students participate in activities for more than one quarter, and because the timing of their participation crosses over more than one program year. One way of ***estimating*** the cost per capita would be to make assumptions about how many quarters of activity the average client participates in. So, for example, if we believe that about two-thirds of JSRP clients participate in initial services, that each JSRP client participates in ongoing services for an average of one and a half quarters, and that about one-fourth of clients receive individualized services, then we would estimate that the budgeted average cost of JSRP per client served would be $966.13. Note that these costs are the direct, reimbursable costs from grants provided by the JSRP program through Columbus State Community College.

5.3 Cost Data from JSRP Administrative Data

The JSRP administrative data that were used in the impact analyses contain information about program costs for each individual participant. These data represent actual payments to colleges done on a quarter-by-quarter basis, so they are more accurate than the projected costs given in the colleges' proposals. In addition to providing actual program costs, the administrative data include information on the state's share of costs through subsidization of course work at the colleges and through the state's OIG grants-in-aid to students.

In our analyses here, we focus on four cost concepts: (1) direct program costs that are reimbursed to colleges (we have titled this COST1); (2) course subsidies (COST2); (3) OIG grants-in-aid (COST3); and (4) total costs (TOTCOST). Table 5-2 provides descriptive data for these costs by cohort. To construct this data, we added together each quarter's data for an individual for all of the quarters that he or she participated in JSRP. This gives the precise per student cost (as opposed to the estimates provided in the previous section). We have deleted the last (incomplete) cohort from the table because many of those students will participate in JSRP for quarters that go beyond our last observation period. Their cost data would be therefore systematically biased downward.

Notice that the direct program cost per participant (COST1) averages around $1,120. This is about 15 percent higher than our estimate of per student costs derived from the budgets that colleges projected in their proposals. (In the previous section of this chapter, we estimated costs to be around $970.) The variation across cohorts is not particularly large nor is there a trend. The average goes from $950 to $1,200 in the first two cohorts. But then it drops to about $1,000 for the third cohort and increases to about $1,200 again for the last complete cohort. The reason

Table 5-2

JSRP Costs, by Cohort
(standard deviation in parentheses)

Variables	Cohorts				Total
	1	2	3	4	
COST1 (Direct JSRP services)	956.20 (678.05)	1208.44 (867.43)	1009.93 (602.58)	1197.37 (632.55)	1120.48 (703.11)
COST2 (Tuition and fee subsidies)	1122.47 (1139.39)	1548.55 (1296.33)	1406.09 (1129.75)	1401.39 (973.01)	1417.91 (1132.35)
COST3 (OIG Grants)	192.48 (302.08)	270.05 (355.12)	226.08 (295.58)	234.88 (278.62)	237.66 (308.00)
TOTCOST	2271.16 (1779.77)	3027.04 (1952.00)	2642.10 (1584.98)	2833.65 (1422.45)	2776.06 (1667.21)

that the average actual cost is higher than the budgeted costs in the college proposals is probably because the actual number of participants is less than what the colleges projected.

The way that Ohio received the federal JOBS money to fund JSRP was by demonstrating that the state had matching expenditures. The next two items of cost represent those state expenditures. COST2 measures the state's subsidy to the colleges, i.e., the cost of offering the courses minus tuition and fees. These are estimated by the Ohio Board of Regents on a college-by-college basis and by type of course (baccalaureate, general studies, or technical). On average, the state is subsidizing the education of the JSRP participants (during their quarters of participation in JSRP only) about $1,400. This subsidy average rose from the first cohort, when it was about $1,120 to over $1,500 for the second cohort. It then settled back to about $1,400 for both of the last two (completed) cohorts.

The average OIG grant value per JSRP participant is around $240. The OIG grants are state-funded grants-in-aid that are based on need. About half of the JSRP participants received an OIG grant during their participation in the program, implying that the average grant per recipient was about $500.

The total cost per student of the JSRP program has risen from $2,271.16 in the first cohort to $2,833.65. This increase is far greater than inflation, but it emanates from the fact that the number of quarters of participation was significantly lower for the first cohort than for later cohorts as described in the previous chapter.

Tables 5-3 and 5-4 present the average direct JSRP costs (COST1) and the total costs (TOTCOST) per participant by college and by cohort. The variation across colleges is quite large. The average direct JSRP cost across all colleges and all cohorts is about $1120. The minimum average direct costs are at Belmont Technical College ($540) and Jefferson Technical ($650). The maximums are at Ohio University-Southern Campus (almost $2,000) and the two University of Cincinnati programs (both over $1,700). In general, it appears as if the programs affiliated with four-year institutions are the most expensive to fund. The University of Toledo-ComTech program and the Central Ohio Technical College-OSU programs are exceptions to this rule.

The total costs (which include JSRP costs plus state tuition subsidies and OIG grants) vary less dramatically than do the direct costs. That is, the tuition and fee subsidies and OIG grants seem to be slightly larger at institutions where direct JSRP costs are smaller. Notice that for Belmont Technical College and Jefferson Technical College, the average total costs exceed the overall average for all colleges. Yet these two colleges had the lowest direct costs. The average

Table 5-3

JSRP Program Costs by College and by Cohort
(Number of observations in parentheses)

College	Cohort				Total
	1	2	3	4	
Belmont Technical College	252.51 (54)	488.88 (127)	495.74 (158)	699.16 (183)	540.22 (522)
Central Ohio Technical College	--	1236.18 (55)	925.70 (119)	975.93 (170)	1000.16 (344)
Central Ohio Technical-OSU/Newark	--	1503.98 (6)	691.54 (15)	988.29 (19)	954.36 (40)
Cincinnati State Technical and CC	400.10 (46)	646.95 (150)	1083.56 (107)	1466.31 (105)	944.49 (408)
Clark State CC	788.93 (126)	887.06 (164)	959.04 (174)	1162.12 (178)	963.57 (642)
Columbus State CC	943.29 (7)	1119.62 (99)	672.93 (318)	742.99 (416)	762.53 (840)
ComTech-Univ. of Toledo	638.79 (13)	848.87 (180)	705.01 (358)	961.96 (350)	832.61 (901)
Cuyahoga CC	1509.55 (131)	1472.52 (439)	945.41 (401)	1129.32 (405)	1224.62 (1376)
Edison State CC	2200.96 (4)	1680.12 (44)	890.51 (86)	1073.81 (78)	1146.56 (212)
Firelands College-BGSU	1500.00 (2)	931.02 (71)	1181.41 (107)	1724.23 (82)	1285.88 (262)
Hocking College	1162.21 (325)	1733.16 (228)	1475.38 (244)	1310.13 (259)	1394.12 (1056)
Jefferson Technical College	494.34 (16)	612.34 (100)	622.17 (143)	716.49 (145)	648.53 (404)
Kent State Univ.-Salem	--	--	736.19 (33)	1113.17 (36)	932.88 (69)
Kent State Univ.-Trumbull	--	--	--	1130.12 (7)	1130.12 (7)
Lorain County CC	--	738.61 (129)	833.61 (336)	1036.29 (379)	910.10 (844)
Marion Technical College	1526.59 (23)	1307.88 (101)	1349.39 (88)	2161.40 (60)	1528.08 (272)

Table 5-3
(Continued)

College	Cohort 1	Cohort 2	Cohort 3	Cohort 4	Total
Muskingum Area Technical College	861.90 (172)	1088.86 (295)	1017.88 (207)	1178.09 (285)	1059.35 (959)
North Central Technical College	621.14 (38)	923.31 (165)	1082.75 (121)	1446.43 (133)	1092.64 (457)
Northwest Technical College	1263.43 (14)	1344.10 (75)	1068.77 (103)	1326.78 (88)	1233.34 (280)
Ohio University-Chillicothe	--	--	--	1484.52 (27)	1484.52 (27)
Ohio University-Southern	587.82 (69)	2347.47 (152)	1800.92 (119)	1979.76 (107)	1988.13 (415)
Owens CC	--	1124.77 (88)	626.32 (159)	623.04 (206)	703.97 (522)
Rio Grande CC	1334.76 (1)	2073.33 (91)	1157.73 (119)	1328.27 (128)	1468.42 (339)
Shawnee State University	--	1396.02 (422)	1304.92 (407)	1839.70 (362)	1499.74 (1191)
Sinclair CC	646.70 (157)	624.45 (313)	695.50 (312)	978.27 (299)	746.06 (1081)
Southern State CC	1315.16 (23)	1233.04 (158)	1102.44 (168)	1431.68 (204)	1270.06 (553)
Stark Technical College	--	765.22 (79)	957.48 (175)	1117.55 (200)	994.54 (454)
Terra Technical College	1698.28 (3)	1277.05 (136)	1191.57 (148)	1652.43 (93)	1338.99 (380)
Univ. of Cincinnati-Clermont	1596.59 (13)	2098.31 (95)	1661.16 (144)	1566.67 (190)	1712.60 (442)
Univ. of Cincinnati-University	1401.36 (14)	1781.01 (71)	1835.19 (110)	2005.36 (103)	1860.72 (298)
TOTAL	956.20 (1288)	1208.44 (4033)	1009.93 (4979)	1197.37 (5297)	1120.48 (15597)

Table 5-4

JSRP Sum of All Costs by College and by Cohort
(Number of observations in parentheses)

College	Cohort				Total
	1	2	3	4	
Belmont Technical College	1674.84 (54)	2972.56 (127)	3087.77 (158)	3104.35 (183)	2919.39 (522)
Central Ohio Technical College	--	3318,62 (55)	2609.47 (119)	2701.36 (170)	2768.26 (344)
Central Ohio Technical-OSU/Newark	--	6300.35 (6)	3023.23 (15)	4327.27 (19)	4134.22 (40)
Cincinnati State Technical and CC	1144.75 (46)	2672.81 (150)	2737.11 (107)	3111.73 (105)	2630.35 (408)
Clark State CC	2141.54 (126)	2569.66 (164)	2339.12 (174)	2671.80 (178)	2451.47 (642)
Columbus State CC	1738.63 (7)	2045.63 (99)	1928.19 (318)	2095.81 (416)	2023.46 (840)
ComTech-Univ. of Toledo	1118.98 (13)	1918.97 (180)	1676.92 (358)	1984.79 (350)	1836.82 (901)
Cuyahoga CC	4129.70 (131)	4038.32 (439)	2701.01 (401)	3100.30 (405)	3381.21 (1376)
Edison State CC	2446.14 (4)	3255.33 (44)	2793.23 (86)	3207.52 (78)	3035.02 (212)
Firelands College-BGSU	1500.00 (2)	1457.89 (71)	1965.89 (107)	2930.09 (82)	2126.44 (262)
Hocking College	2372.97 (325)	3900.62 (228)	3610.87 (244)	3466.80 (259)	3257.12 (1056)
Jefferson Technical College	2604.97 (16)	3403.67 (100)	3419.09 (143)	3594.05 (145)	3445.83 (404)
Kent State Univ.-Salem	--	--	1280.13 (33)	2212.03 (36)	1766.34 (69)
Kent State Univ.-Trumbull	--	--	--	1475,03 (7)	1475.03 (7)
Lorain County CC	--	1611.45 (129)	2298.47 (336)	2407.13 (379)	2242.26 (844)
Marion Technical College	2589.41 (23)	2968.92 (101)	2819.69 (88)	3828.54 (60)	3078.17 (272)

Table 5-4
(Continued)

College	Cohort 1	Cohort 2	Cohort 3	Cohort 4	Total
Muskingum Area Technical College	1861.01 (172)	3117.55 (295)	2695.56 (207)	2744.07 (285)	2690.11 (959)
North Central Technical College	933.53 (38)	2505.71 (165)	2948.66 (121)	3065.79 (133)	2655.26 (457)
Northwest Technical College	2500.19 (14)	3287.74 (75)	2628.59 (103)	2636.89 (88)	2801.34 (280)
Ohio University-Chillicothe	--	--	--	3284.22 (27)	3284.22 (27)
Ohio University-Southern	1803.61 (69)	4180.48 (152)	2944.01 (119)	3181.16 (107)	3356.35 (415)
Owens CC	1984.02 (69)	3967.21 (88)	3176.56 (159)	2944.27 (206)	3060.55 (522)
Rio Grande CC	1334.76 (1)	3864.57 (91)	2664.11 (119)	3189.26 (128)	3180.72 (339)
Shawnee State University	--	2618.77 (422)	2970.78 (407)	3298.30 (362)	2945.60 (1191)
Sinclair CC	2220.71 (157)	2919.39 (313)	2656.49 (312)	2770.28 (299)	2700.79 (1081)
Southern State CC	2016.20 (23)	2612.97 (158)	2597.42 (168)	3041.75 (204)	2741.60 (553)
Stark Technical College	--	2109.21 (79)	2174.39 (175)	2533.24 (200)	2321.13 (454)
Terra Technical College	1698.28 (3)	3073.21 (136)	3129.19 (148)	3276.49 (93)	3133.91 (380)
Univ. of Cincinnati-Clermont	1985.99 (13)	3003.74 (95)	2397.99 9144)	2348.04 (190)	2494.60 (442)
Univ. of Cincinnati-University	2707.25 (14)	3736.96 (71)	3730.56 (110)	3576.63 (103)	3630.81 (298)
TOTAL	2271.16 (1288)	3027.04 (4033)	2642.10 (4979)	2833.65 (5297)	2776.06 (15597)

total costs range from $1,840 at ComTech to $3,630 at the University College Campus of the University of Cincinnati. The overall average was $2,780. Again, the most costly programs tend to be those affiliated with four-year institutions (again with notable exceptions, such as ComTech).

The cost differences are explained by several factors. First, students may participate in a different number of quarters, on average, across institutions. Second, tuition and fees differ by institution. Third, the services that JSRP programs provide for participants differ among the colleges. Finally, it should be recognized that programs have certain fixed costs that may be apportioned across all of the participants at a college. Colleges that have larger JSRP enrollments will have smaller average fixed costs.

In summary, examination of cost information across colleges and over time reveals considerable variation. Some colleges have very high costs per students; others have relatively low costs. It is difficult to analyze the differences systematically, because many factors contribute to the differences, but it appears as if urban programs, programs with relatively small enrollments, and community college or four-year college programs tend to be the most expensive.

6. SUMMARY OF FINDINGS

This report documents the methodology and results from a thorough evaluation of the JSRP program. The evaluation was comprised of four separate studies--a process study, a follow-up study, an impact analysis, and a cost effectiveness study. This chapter summarizes the findings from each of these studies. In some cases, the findings highlight aspects of the program that are operating well, and in other cases, the findings highlight program challenges.

At the state level, the JSRP is administered by a collaboration of three agencies: the Ohio Department of Human Services (ODHS), the Ohio Board of Regents (OBOR), and Columbus State Community College (CSCC). This collaboration appears to be operating smoothly, with each agency serving a different administrative function. The OBOR appears to act as the executive of the tripartite team as its staff sets the overall direction and parameters for the colleges. The ODHS acts as the fiscal arm of the administrative team. CSCC, under contract to OBOR, operates the program and is responsible for its day-to-day functioning. The philosophy of the state is to set the direction, but to allow local colleges considerable autonomy and flexibility in the services that they can offer to participants.

The biggest challenge facing the state is the uncertainty about the future of the program if federal welfare reform were to result in a block-grant approach. The state administrators are trying to tailor program operations in anticipation of block grants and in anticipation of statewide emphasis on employment outcomes of clients. A major thrust in the current year (1995-96) is focusing college programs on employment and skill outcomes.

The process study suggested that local programs were providing services that were impacting the lives of JOBS clients in a positive way. The sites were operating autonomously,

but many program aspects were similar across sites. Staff were structured similarly: a director, one or more student advisors, and a secretary. Some sites supplemented the program with peer tutors or work study student counselors. Almost all programs had an organized, modular set of workshops for initial services. All sites offered tutoring and counseling as part of their ongoing services, although the programs varied substantially in terms of how aggressive they were in monitoring students. Most sites had a program newsletter, and some sites had an active advisory committee.

Students were quite satisfied with the JSRP programs and activities in which they had participated. They particularly praised the helpfulness of the staff. The programs were providing a considerable amount of information to students that was helping them with their educational and career planning. The programs were also providing clients with valuable counseling advice and help in traversing college programs of study. The programs seemed to be having success with retention, but graduation rates seem modest.

The colleges reported healthy relationships with the CDHSs that are referring clients to them. Collaboration was reported to be smooth, and problems were easily resolved at the local level. In fact, the JSRP programs facilitated significantly the case management of clients for CDHSs in addition to providing educational services to clients. The student advisors, in many instances, were much closer to clients than were the JOBS caseworkers (because of smaller caseloads and more exposure). The JSRP counselors were able to track personal situations that may be affecting the clients' lives. In several of the sites, we witnessed a recognition of this by both the JSRP student advisors and the JOBS caseworkers and exploitation of this win-win situation. The JSRP student advisors were able to help clients address problems and therefore

increase their likelihood of success in the college setting. The JOBS case managers were able to devote more time and resources to other cases trusting that the JSRP program was monitoring their client and would communicate any problems that arose.

The vision and leadership skills of the director of the program at the college seemed to be key factors in successful programs. Also, aggressive monitoring of student grades and progress was undertaken at more successful programs, and well-organized initial services seminars seemed to set programs apart in terms of their effectiveness.

The major challenges that local programs face are low basic skills of participants and the many barriers that JOBS clients have in undertaking college programs of study. If students need to enroll in developmental course work, then they require more time to complete their programs. But since JSRP is time-limited, and Pell grants have financial limitations, students in developmental courses run considerable risk that they will not have the resources to complete their programs. It is almost certainly the case that JSRP participants are more likely than the average student to have child care needs and transportation constraints. Furthermore, many of the participants reported that they lacked family support for their college endeavors.

Another challenge that local programs were facing was a declining number of referrals from County Departments of Human Services. Declining AFDC rolls and a tight labor market may explain the downward trend. However, it seemed to us that the state and local AFDC caseworkers could promote the program more aggressively to face this challenge.

The follow-up study confirms the positive results from the process study in many ways. The sample of former JSRP participants gave very high marks to the *process*. They found the activities that they participated in to be very useful, particularly the orientation to college and

assistance with registration, financial aid, and other forms. They were highly satisfied with the counselors and counseling that they received. Over 90 percent of the former clients indicated that they would recommend the JSRP program to a friend or acquaintance, and half indicated that they had recommended it within the last six months. The only negatives about the programmatic processes were that about 7-10 percent of the sample felt that they had encountered poor counseling or misinformation, and a large share of the sample felt that the time limitations on services to a client should be relaxed.

What did the follow-up study say about the outcomes of the program? Here the results were less sanguine. In terms of retention, about two-thirds of the respondents felt that they would not have achieved as much education without the JSRP program. However, less than 15 percent of the sample had received a degree or certificate by the time of the follow-up survey; and 40 percent indicated that they were still enrolled in college at the time of the survey. This means that almost half of the sample had discontinued their college programs prior to receiving a degree or certificate. Clients *intended* to do better in the future. About three-quarters planned to continue their education at some point in the future, but it was hard to assess the likelihood of this occurring and give it much credibility.

Also about three-fourths of the respondents indicated that they felt that their postsecondary experiences improved their chances of getting and keeping a good job. However, during the two-year period from January 1993 to December 1994, only 40 percent of the respondents were employed for pay in any capacity—part time or full time. Furthermore, only 30 percent of the jobs held were reported to be related to the training that the clients were engaged in.

Other important outcomes for the JSRP program include welfare status and educational skill levels. On these fronts, the follow-up study showed that over 40 percent of the JOBS clients had currently closed cases, and the reading levels on JOBS assessments rose by over 50 percent.

The impact analysis examined the JSRP program using administrative data from the JSRP itself, CRIS-E, and the OBES wage-record file. The average number of credits earned per student was 33.04, and the average grade point average earned was 2.62, with 60 percent of students having earned grades in the A or B range. Defining program completion as having received services for three or more quarters, the data showed that 60 percent of participants in the most recent cohorts completed their JSRP participation.

Approximately 70 percent of program participants had some post-JSRP employment, and about 50 percent were employed in the most recent quarter of available data. For individuals who participated in the first two cohorts of JSRP, average quarterly earnings were substantial: $3,240 and $3,001 respectively. For individuals for whom we had earnings data both before and after JSRP participation, quarterly earnings growth ranged from $1,000 for the first cohort to $688 in the fourth cohort. Multivariate analyses helped to explain the factors that were correlated with post-JSRP employment and earnings for JSRP participants. Factors associated with higher earnings included having more education, being older, male, or white.

A net impact analysis contrasted JSRP participants with a comparison group. Individuals in the comparison group were more likely to be employed in 1995 quarter 2 (48 percent versus 46 percent), but JSRP participants received higher quarterly earnings. An earnings regression showed that JSRP participation boosts quarterly earnings by 8.45 percent. Participating in JSRP

for three or more quarters resulted in a 12.9 percent boost to quarterly earnings, once other factors are controlled. These are very strong positive results for the program.

The cost effectiveness study showed that the average direct cost per participant was approximately $1,120, and the total cost, defined as the direct JSRP cost plus state subsidies, averaged about $2,770 per student. There was substantial variation across colleges in these costs which could be explained by types of services provided, types of courses that JSRP students pursued, institutional costs, and average number of quarters of participation. Systematically higher costs appeared for programs at four-year institutions.

The future of the JSRP program is not clear. Substantial changes may be expected at the federal and state levels. Nevertheless, this evaluation shows that the programs that operated between 1990 and 1995 had substantial positive effects on participants. Despite their substantial barriers to success, the JOBS clients in JSRP programs were able to make the transition into college programs and to earn good grades. Most important, the net impact analyses showed that JSRP participants earned more than individuals in a comparison group. Many caveats need to be considered in interpreting the findings of this evaluation, but all in all, the evaluation suggests that the JSRP program is achieving success. It has many challenges to face, and we hope that the recommendations made herein and the findings that we have highlighted will be of use to the program as it moves forward.

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