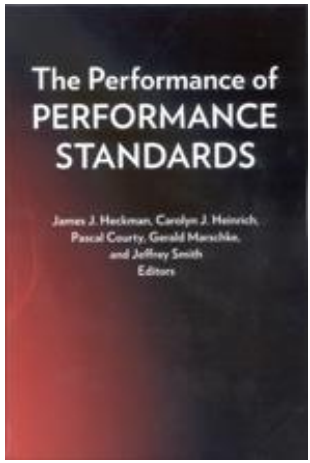
Local Responses to Performance Incentives and Implications for Program Outcomes



Carolyn J. Heinrich
University of Wisconsin

Chapter 8 (pp. 231-272) in:
The Performance of Performance Standards
James J. Heckman, Carolyn J. Heinrich, Pascal Courty, Gerald Marschke, and Jeffrey Smith, eds.
Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 2011
DOI: 10.17848/9780880993982.ch8

The Performance of Performance Standards

James J. Heckman
Carolyn J. Heinrich
Pascal Courty
Gerald Marschke
Jeffrey Smith
Editors

2011

W.E. Upjohn Institute for Employment Research
Kalamazoo, Michigan

Library of Congress Cataloging-in-Publication Data

The performance of performance standards / James J. Heckman . . . [et al.], editors.
p. cm.
Includes bibliographical references and index.
ISBN-13: 978-0-88099-292-3 (pbk. : alk. paper)
ISBN-10: 0-88099-292-1 (pbk. : alk. paper)
ISBN-13: 978-0-88099-294-7 (hardcover : alk. paper)
ISBN-10: 0-88099-294-8 (hardcover : alk. paper)
1. Government productivity. 2. Performance standards. 3. Civil service—Personnel management. I. Heckman, James J. (James Joseph)
JF1525.P67P476 2011
352.6'7—dc22

2011007877

W.E. Upjohn Institute for Employment Research
300 S. Westnedge Avenue
Kalamazoo, Michigan 49007-4686

Cover design by Alcorn Publication Design.
Index prepared by Diane Worden.
Printed in the United States of America.
Printed on recycled paper.

8
Local Responses to Performance Incentives and Implications for Program Outcomes

Carolyn J. Heinrich

In his classic piece on "street-level" bureaucracy, Lipsky (1980) describes the critical position occupied by public employees engaged in social service delivery. These employees, he argues, constitute the scope and function of government services, and the individual decisions of these workers become agency policy. Street-level bureaucrats shape citizens' expectations of government services, determine who qualifies for services, and implement service delivery.

This chapter presents research that explores how local (street-level) bureaucrats in the JTPA program shaped or moderated the role and effects of performance standards in program administration and service delivery. A case-study approach is used to investigate these effects in a county-level agency (located in the Chicago metropolitan area), using data on subunits (contractors) and their staff and individual participants. The local JTPA participant selection and service assignment processes are modeled using quantitative and qualitative data to facilitate a more precise understanding of how and the extent to which performance standards and related administrative policies influence participant access to training and the types of services provided to participants.

Although WIA superseded the JTPA program, the WIA program preserves major elements of the JTPA performance standards system and extends its role in managing local program processes and service delivery. WIA requires states to institute a performance-based certification system for training service providers that establishes a minimum performance level for all providers receiving individual training account (voucher) dollars. Local workforce investment boards and service providers continue to be responsible for guiding service and fund-

ing allocations, performance data collection, and the management and use of this information at the local level.

In this research, unique access to information from and about the job training agency's program administration, service providers, and the terms of their contracts with the agency facilitated the in-depth study of local JTPA program processes. Detailed information on individual participants from management information system (MIS) records (1984–1994) and detailed case management records maintained by staff also make possible the analysis of factors that are sometimes overlooked or obscured in aggregate (e.g., state-level) studies of program operations.

The findings of this research show that program administrators and service provider staff in this agency were highly conscious of the agency's performance goals. A contractual and administrative focus on specific levels of (or standards for) performance outcomes had direct and indirect effects on participant selection and training service assignment decisions of program staff. Both deliberate screening on applicant characteristics to advance performance goals and indirect cream skimming grounded in contractual arrangements and program administrative decisions appeared to occur in this agency, with possible negative implications for the participants and net value added of the program.

The remaining sections of this chapter are organized as follows. First, local-level administrative and service delivery processes and concerns about the role and influence of performance standards in these processes are described. The goals of the case study of participant selection and service assignments and hypotheses that were tested in a simulation of these processes are then explained. The next section presents the findings of the simulation and other multivariate analyses, as well as a discussion of these findings. The final section summarizes the findings and their implications for current employment and training programs and policies.

Role of Performance Standards in Local-Level Program Administration and Service Delivery

The substantial discretion accorded to local-level program administrators in deciding how performance standards are used and the extent to which they are used has confounded efforts to fully understand their influence and implications. The design and institution of performance

standards systems varies not only across states but also at the local level, where the main responsibility for making these systems function effectively lies. Along with their own target population and service goals, job training agencies transmit federal- and state-level goals and requirements to training professionals who serve clients and manage job training programs on a daily basis. As both Lipsky (1980) and Brodkin (1987) have pointed out, bureaucratic discretion of this type provides the means for administrative agencies and program managers to make policy by shaping it as they implement it.

The county job training agency in this study relied primarily on contracts with other public and private sector organizations to deliver program services.[1] Service providers acted, in effect, as agents of the administrative entity and entered into a competitive bidding process to obtain contracts with the agency for service provision. Through the contract awards and negotiation processes, job training agency officials attempted to exert control over who received services, the types of training services made available, and program outcomes.

Federal and state governments generally specified few guidelines or requirements for contracts between agencies and their service providers. Yet one would expect job training agencies to design contracts that facilitate satisfactory job training program outcomes as measured by state performance evaluation models. Contracts between this agency and its service providers contained detailed information about target population demographic characteristics; the types of training to be made available and anticipated wages-at-placement, estimated service costs, including tuition, wage subsidies, and supportive service costs; and performance-based payment benchmarks for reimbursement of program costs. Service providers were also required to establish detailed program budgets and service plans before contracts were finalized, and any subsequent modifications to the contracts had to be approved and documented by agency officials.

In the contract awards process, the largest weights were accorded to service providers' proposed placement rates, costs per placement, and average wage rates at placement. Secondary criteria used in this process included service provider experience with targeted population(s), labor market need for proposed services, private sector linkages and coordination with other agencies, and service provider in-kind contributions. Service providers' performance in the previous year also factored into

the decision process. Service providers who attained at least 90 percent of their planned goals for enrollment, job placements, and expenditures were eligible for exemplary service points that increased their competitive point totals.

If, in fact, service providers who satisfied or exceeded contract requirements—ostensibly furthering the performance and target population goals of the job training agency—were more likely to secure future contracts, the system would likely establish strong incentives for service providers to achieve high placement rates and wages at placement. Some research, discussed below, suggests that this type of performance evaluation system is also likely to contribute to unintended, negative program effects.

Arguments and Evidence on the Role and Influence of Performance Standards in JTPA Programs

Two fundamental issues underlie concerns about the influence of performance standards on employment and training programs: 1) who should have access to these services, and 2) what types of program services should be provided to achieve program goals. JTPA program eligibility guidelines required 90 percent of all enrollees to be disadvantaged; an equitable distribution of services among substantial segments of the eligible population; and minimum levels of service to youth, high school dropouts, and welfare recipients. WIA, however, has introduced a new universal access approach to service delivery in which all adults are eligible for core workforce development services, although local workforce investment boards are still encouraged to give priority for skills training services to public aid recipients and other low-income persons when program funds are sparse. A universal access approach to service does not eliminate the possibility that access to varying *levels* of service might still be constrained locally.

A primary concern expressed by JTPA program administrators was that performance standards might encourage cream skimming, or the selection of participants who are expected to have good postprogram outcomes, regardless of what the program contributes. In cases where participants would do nearly as well or equally well in the labor market without receiving program services, the program's measured performance would be high, but its net impact would be small or zero. (In

Chapter 6, Heckman and Smith define and discuss the cream skimming problem more extensively.)

Research on JTPA operations has generated mixed findings on the influence of performance standards, depending on the types of performance standards used and the local-level practices adopted. In a review of this research, Heinrich (1999) notes the general finding that state and local agencies with policies that emphasized exceeding performance standards while minimizing training costs tended to discourage services to hard-to-serve eligible applicants and reduced the intensity and average length of services for adults. Changes in the legislated performance standards requirements in 1988 were designed to deemphasize the role of performance standards in federal and state JTPA program evaluations and to encourage agencies to focus more on providing higher-quality training as measured by earnings and employment *retention* rather than job placement rates.[2]

From the program administrator's point of view, there was little effect of these legislated changes on service provider performance incentives. The system still focused on employment and earnings *levels* rather than *gains* or net value added of training programs. In the case-study agency, cost-per-placement standards were still included in contracts and were one of the primary criteria for evaluating service provider performance in contract award decisions. The 1988 legislative amendments that changed the evaluation of placement and earnings outcomes to three months after termination did not affect retention measures in this agency's contracts until the 1992 program year. Even then, the changes affected less than one-fourth of the contracts. This suggests that it is important to know what incentives went into contracts between job training agencies and their services providers and were used to guide competition among service providers. The findings also suggest that despite legislative changes, incentives to "cream-skim" may still have been present at the local level.

Because one does not observe participant outcomes in the counterfactual state (in the absence of program services), it is difficult to determine if intake staff participant selection decisions are unduly influenced by applicants' probable labor market success. Most research focuses on direct cream skimming by intake staff, or cream skimming based on their observations of applicant characteristics during the participant selection process. For example, one intake worker observed in this study

described an applicant who was laid off from a high-wage, high-skilled job and was hoping to be called back to this position. Anticipating an easy job placement, the worker enrolled the applicant and assigned him to job search assistance activities. When the participant was called back to his previous job, the service provider received credit for this placement. This is a relatively obvious case of cream skimming.

Cream skimming may also operate indirectly, however, through practices that may be more difficult to identify. Program managers may influence participant mix indirectly by offering certain types of training services that may or may not appeal to specific applicant groups. They may also establish intake and assessment procedures that favor one type of applicant over another. JTPA's restrictions on stipends and supportive services and the capabilities or willingness of service providers to make supportive services available, for example, may have influenced who applied and the level of motivation they needed to secure an opportunity to participate. In addition, the location of service offices and focus of outreach activities may also affect program awareness and the resulting applicant pool.

In this research, I distinguish between indirect cream skimming, which typically influences who is likely to apply for services and who is likely to follow through the application process (i.e., decisions made by the eligible persons), and direct cream skimming, which, alternatively, results from decisions made by intake staff based on their observations of and interactions with applicants during the selection process. I hypothesize that incentives created by JTPA performance standards (and continuing under WIA) likely encouraged a combination of direct cream skimming on participant characteristics and indirect cream skimming that was grounded in program administrative decisions and contractual arrangements at the local level.

CASE STUDY AND SIMULATION OF JTPA PARTICIPANT SELECTION AND SERVICE ASSIGNMENT PROCESSES

While JTPA legislation, state- and local-level program priorities, and terms of contracts between job training agencies and service providers all provided guidelines for participant selection and service

assignment, these decisions were typically made by the agency's job training professionals or service provider staff under contract with the agency. A goal of this case study was to uncover the underlying structure of these judgments, model the participant selection and service assignment processes, and evaluate their implications for employment and training outcomes.

A number of different factors might influence the judgments of agency and service provider staff in participant selection and service assignment decisions, including external influences such as agency or contract target population goals, training service and expenditures plans, eligibility requirements, and application procedures. Judgments of intake staff would also be based on their own knowledge, experience, and preferences, and the observed or measured characteristics of the applicants. Controls for these factors are necessary to evaluate their relative influences in participant selection and service assignment processes.

This study makes use of detailed information from applicants to a job training program at all stages of the participant selection process. Participant selection and service assignment decision-making processes were observed, intake staff were interviewed about these decision processes, and final outcomes (i.e., intake staff judgments) were recorded. These observations aided the formulation of hypotheses about these processes. Next, an empirical strategy was developed to assess how different factors interact to produce the final decision outcomes.

Case-Study and Simulation Goals, Methodology, and Hypotheses

In studying the structural components of human judgments, Rossi and Nock (1982) note that there are a relatively small number of characteristics to which decision makers pay attention when making judgments about persons. In other words, only a small number of characteristics of the seemingly infinite number of ways in which job training program applicants may differ are actually important to the judgments at hand. Second, they argue that, for the most part, judgments are "socially structured," i.e., there is general agreement among persons on how much weight should be given to relevant characteristics and on how these characteristics should be combined to arrive at judgments. A third structural component of human judgments is that each decision

maker tends toward consistency in his or her own judgments, departing in a regular way from the socially defined consensus on how such judgments should be made. If these structural components exist for a specific set of judgments, then the judgments can be modeled to determine what variables or characteristics are most relevant to the judgment, as well as the nature of their influence.

Using detailed data on intake staff decisions, I formulate an approach to evaluate the influences of external factors and applicant characteristics that used both "constructed" and actual program data. First, based on observations of participant selection and service assignment decisions and discussions with intake staff, I generate a list of factors examined by intake staff in these decision-making processes. Using actual data collected by program staff on these factors, I construct a simulation exercise of these processes. The exercise consisted of four main parts: 1) the selection of job training program participants from a pool of applicants constructed using actual program data; 2) the assignment of the selected "participants" to training activities; 3) the consideration of alternative scenarios of constraints on participant selection decisions, including different levels of performance standards and cost constraints; and 4) a review and open group discussion of the caseworkers' selection decisions, which included case comparisons chosen to probe the influences of external factors and applicant characteristics on their decisions. (See Heinrich [1995] for a detailed description of the simulation exercise design as well as a transcription of the postsimulation discussion.)

I subsequently analyze a number of hypotheses using these data. First, are there a relatively small number of observed applicant characteristics which emerge as important in intake staff selection decisions? What are these characteristics? The relative importance of characteristics associated with applicants' employability or their probability of placement was of particular interest, as they relate to analyses of cream skimming. Using information known about the actual placement outcomes of program applicants, I also evaluate the influence of applicants' probability of placement on intake staff selection decisions.

A second set of hypotheses posed the following questions: Do intake staff use the same decision function in selecting participants (as other staff members), and do they make the same participant selections? Another hypothesis pertains to the third structural component of human

judgments: Are intake staff selection decisions consistent, i.e., do they depart in a regular way from the socially defined consensus? The intake staff's actual selections of participants for the job training program were compared to their simulation selections to evaluate consistency.

The simulation was designed to hold constant or eliminate constraints on decision making that may influence intake staff's actual selection decisions. For example, in the simulation, intake staff were given explicit verbal and written instructions that they should assume no restrictions on the availability of training service activities. After making participant selections, intake staff assigned the selected cases to training service activities based on applicant characteristics. I subsequently analyzed the relationship of observed applicant characteristics to their assignment to different training service activities.

Intake staff were also provided with a target job placement rate and approximate cost per participant that reflected job training center contract averages of these performance standards for optional use in the simulation. I use responses of intake staff to a questionnaire administered during the exercise and postsimulation discussion to uncover information about the influence of these performance standards during the simulation and in practice and their interaction with training services constraints in actual job training programs.

Two professional job training program caseworkers who were employees of a job training service provider under contract with the agency participated in the simulation.[3] These caseworkers were exclusively responsible for selecting program participants and assigning them to program activities for the job training program studied. Agency officials and program caseworkers provided copies of all records of applicants to the program, including caseworkers' comments written during case reviews and following meetings with program applicants. Caseworkers' participant selection and service assignment procedures were also observed. While it might have been useful to conduct the simulation with many intake staff across the job training center, complete access to other applicant records and observations of intake staff were not possible, so that similar hypothesis testing and data analyses would not have been feasible.

Description of JTPA Participant Selection and Service Assignment Processes

Similar to many job training agencies under JTPA, the number of applicants eligible for program services in this service delivery area tended to substantially exceed the number of program openings. There were 221 applicants to the specific job training program studied, and 50 of these persons were eventually selected to participate. In screening applicants for the program, intake staff met with them an average of four times before they made a decision to either enroll them or to refer them to another organization for services.

All intake staff in Illinois were required to screen applicants for employment barriers, including basic skills deficiencies, limited work histories, single head of household with dependent children, displaced homemaker, child care needs, limited English proficiency, handicapped, veteran, ex-offender, and substance abuse. Caseworkers conveyed the importance of identifying applicants' employment barriers and determining whether they could be overcome with the commitment of the applicant and the resources of the program.

Caseworkers indicated that they viewed the presence of employment barriers as an opportunity to serve persons who have a greater need for program services. Employment barriers that emerged as positive selection criteria included basic skills deficiencies, minimal work histories, single head of household, and the presence of children in a household. Persons with employment barriers that could not be addressed with program resources, such as serious medical or mental health conditions, were referred to other agencies for assistance. In addition, caseworkers did not view the receipt of public assistance as an employment barrier, noting that since the stipend provided under CETA was eliminated in JTPA, the receipt of public aid may have provided an essential source of income for some participants during their enrollment.

Caseworkers also evaluated applicants' levels of motivation and commitment to making the program work. While the average number of times applicants met with caseworkers was four, case records of program applicants showed a range of as few as one meeting to as many as eight scheduled appointments over four to six weeks. Applicants were typically required to come back for at least one additional meeting; those who did not return again were assumed to be less serious about

participating. If the applicants kept their appointments, were punctual, and came prepared, caseworkers interpreted these as signs that they were capable and willing to make a serious program commitment. In effect, caseworkers attempted to distinguish between those people who were only interested in a "quick fix" (i.e., looking for the shortest way to get money in their hands) and those who had a serious interest in increasing their skills and finding employment.

The types of information caseworkers sought from applicants also aided their efforts to assess the applicants' ability or willingness to commit to the program. In evaluating employment histories, caseworkers not only sought basic information about employment status, job positions, and recent wages, but they also wanted to know how long applicants stayed with their jobs, the reasons they were no longer at the jobs, and whether absenteeism was ever a problem. They wanted to know the types of occupational or job training activities received in order to avoid duplication or to build upon previously acquired skills. They asked whether the training was completed, if the applicant obtained a job after training, and how long the individual then stayed with the job. If there were gaps in an applicant's employment history, the caseworkers wanted to find out if there were reasonable explanations for them, such as pregnancy, health problems, or family responsibilities. As with employment barriers, their concern was not necessarily how many problems there were, but rather how much effort the applicant was willing to put forth to overcome these difficulties.

Caseworkers claimed that they were less likely to select individuals with post–high school educations, since they believed they could do more to serve persons with relatively less education. Their ability to effectively serve the less educated, however, was also contingent on contract specifications for training service availability. Caseworkers indicated in the simulation questionnaire that the types of training services and available training "slots" were determined long before their initial screening sessions with applicants. In fact, the types of training services and corresponding number of training opportunities were typically set before the final approval of program funding in the JTPA program. The program director then told the caseworkers how many vocational training, on-the-job training (OJT), and other positions could be made available to participants. "[The program director] will tell us something like 'we have five slots for OJT, and we want to fill them

with $8.00 per hour positions," explained one caseworker. Caseworkers could make a request to modify the original training service plan, but this was usually not done. The service assignment process actually began, therefore, when the caseworkers commenced the applicant screening process.

Caseworkers also frequently arranged specific training opportunities (e.g., a particular apprenticeship position in a manufacturing plant), and then looked for applicants who met the position requirements. In effect, they would first "fill the training slots" with appropriate positions to satisfy the service provider contract and then screen for applicants who were suitable to these positions. The responses of 110 JTPA applicants to follow-up survey questions about their screening sessions with intake staff also provided evidence of this practice. About 20 percent of the applicants discussed *specific* training opportunities and jobs with intake staff. Several were even set up for interviews and offered jobs before they began intake procedures or before they were notified of the staff's decision to either accept them into the program or refer them elsewhere. One respondent indicated that she was offered a job during the application process and was worried that if that particular job closed, she might not be accepted into the program.

Performance standards in service providers' contracts with the agency may also have influenced the training opportunities made available and final participant selections. In the simulation, caseworkers were given a target job placement rate and an approximate cost per placement to guide their decisions if they chose to use this information. The caseworkers indicated in the postsimulation questionnaire, however, that this information did not have any influence on their participant selection and service assignment decisions. They pointed out that their objective was to "place" the participants, not to worry about costs. "I work with the person, not the money," wrote one caseworker.

During a meeting with agency officials prior to the start of the program, one of the caseworkers had made the comment that it was difficult to get "numbers" out of his mind, that he was thinking "numbers, numbers, numbers." When asked about his comment in the open discussion, this caseworker indicated that it was the job placement rate number that concerned him. He clarified that the placement rate affects whether or not his organization will get comparable funding in the next program year. The director who supervises the caseworkers' work also

indicated that the job placement rate achieved by the program would be a key factor in agency's evaluation of the service provider's performance. On the other hand, caseworkers also emphasized the separation of day-to-day operations "in the field" and issues of the budget that are the director's concern: " . . . we're not dealing directly with the budget. We are the implementers of the program."

The findings of an interview conducted with the agency's intake supervisor supported the caseworkers' assertion about the role and influence of performance standards (see Heinrich [1995] for the interview transcription). The intake supervisor indicated that participants were selected on the basis of the professional judgment of intake staff, and that the performance standards played no direct role in their decisions. Yet the intake supervisor also indicated that intake staff had little discretion in deciding what types of training services they could make available to clients. She said they were given strict, detailed guidelines to which they were expected to closely adhere in assigning participants to activities. This finding is consistent with the caseworkers' responses indicating they did not have a role in determining the *availability and number* of training service openings. These decisions were made by the program director in consideration of contract requirements and budget specifications negotiated with agency officials. Together, these findings suggest that the influence of performance standards in the participant selection and service assignment processes may have been more likely to operate indirectly, at the administrative or executive level, through decisions made about service availability by program directors and agency executives. The reported separation of performance standards considerations from intake staff duties appears to refute contentions that performance standards lead to direct cream skimming based on applicant characteristics at the caseworker level.

SIMULATION FINDINGS: JTPA PARTICIPANT SELECTION AND SERVICE ASSIGNMENTS

Figure 8.1 shows how simulated data were analyzed to evaluate the influence of various factors on participant selection and service assignment decisions. The columns show the decision of caseworker

Figure 8.1 Analysis of Counselors' Simulated Selection Decisions

		Counselor 1 selections	
		Choose applicant	Do not choose
Counselor 2 selections	Choose applicant	Both select applicant	Only counselor 2 chooses
	Do not choose	Only counselor 1 chooses	Neither select applicant

1 (e.g., choose or do not choose applicant), and the rows reflect the same decision of caseworker 2. Also shown are the four possible outcomes of caseworkers' decisions for a given applicant: both select the applicant, neither selects the applicant, caseworker 1 selects the applicant but caseworker 2 does not, and caseworker 2 chooses the applicant but caseworker 1 does not. The simulation data for all applicants were aggregated to form the following variables for analyses: 1) applicants selected by caseworker 1 (column 1 in the box); 2) applicants selected by caseworker 2 (row 1 in the box); 3) applicants selected by either caseworker 1 or caseworker 2 (upper right-hand cell, upper left-hand cell and lower left-hand cell); and 4) the selection decisions of caseworker 1 plus those of caseworker 2 (all four cells in the box), which factors in their decisions not to choose applicants as well. The fourth decision variable is used only in logit analyses of the simulation data.

Comparison of Simulation Selections and Actual Program Selections

Simple comparisons of the caseworkers' simulation and actual program selections (e.g., chi-square tests) suggested that the two caseworkers selected similar groups of participants and that they were generally consistent in their decision-making procedures. Twelve of the 25 cases selected by the caseworkers in the simulation (48 percent) were the same. However, these comparisons do not provide information about which applicant characteristics they emphasized in their selection decisions, how much weight was given to these characteristics, or how different characteristics might have interacted to influence their selection decisions. To learn more about caseworkers' decision functions and

how they arrived at final selections, maximum likelihood logit models of their participant selections were estimated.

Logit models were used to estimate factors influencing participant selections.[4] Four of the dependent variables employed in the logit analyses were described in Figure 8.1: 1) the simulated participant selections of caseworker 1; 2) the simulated participant selections of caseworker 2; 3) the simulated selections of either caseworker 1 or caseworker 2; and 4) selections of caseworker 1 plus caseworker 2, where cases selected by neither caseworker have zero "weight." Cases selected by one but not the other are "weighted" by one, and cases selected by both are "weighted" by two. Errors in these simulated selection models may represent individual errors (e.g., deviations from the caseworkers' usual judgment processes), intrinsic uncertainty (e.g., reflecting that the caseworkers' judgments may naturally vary or not always be 100 percent consistent), and other possible decision errors.

The fifth dependent variable indicates which of the 50 applicant cases included in the simulation were actual program participants and was used to model the influence of applicant characteristics on caseworkers' actual participant selections. The error term in this model may reflect the influence of omitted variables (e.g., factors which caseworkers considered but were not incorporated in the simulation), such as the reasons applicants left their previous jobs. This type of information was not available for all applicants and therefore was not provided to caseworkers in the simulation.

A large number of possible explanatory variables was reduced through the modeling process to a core set of independent variables, including age, sex (male), single head of household, highest grade completed, previous training services, never married, welfare recipient, number of children, basic skills deficiency, limited work history, unemployed all of preprogram year, and most recent wage. All of the dependent and independent variables employed in the logit analyses are described in Appendix 8A.

The logistic regression model results for the five dependent variables are summarized in Table 8.1. The findings suggest that caseworkers emphasize different factors in their selection decisions, and the coefficient sizes and signs on many variables suggest that they weighed these factors differently as well. Four of the explanatory variables in the model of caseworker 2's selections attained statistical significance,

Table 8.1 Findings from Simulation and Actual Participant Selection Logit Models

	Dependent variables				
Independent variables	Caseworker 1 selections (N=46)	Caseworker 2 selections (N=46)	Selections of caseworker 1 or 2 (N=46)	Selections of caseworker 1 + caseworker 2 (N=96)	Actual participant selections (N=46)
Constant	45.473***	−13.098**	12.439	10.537**	−2.639
	(16.854)	(6.596)	(13.355)	(4.841)	(5.203)
Age	−0.088	0.260***	0.472	−0.021	0.044
	(0.086)	(0.099)	(0.291)	(0.038)	(0.069)
Sex (male)	1.332	−0.796	0.152	−0.012	0.979
	(1.512)	(1.161)	(0.865)	(0.698)	(1.103)
Single head of household	−0.220	−1.297	−6.275	−0.213	3.403***
	(1.496)	(1.472)	(4.392)	(0.744)	(1.383)
Highest grade completed	−3.503***	0.100	−2.887*	−0.910***	−0.111
	(1.341)	(0.469)	(1.551)	(0.374)	(0.370)
Previous training services	−0.156	−0.129	6.190	−0.100	0.501
	(1.016)	(1.034)	(4.256)	(0.603)	(0.855)
Never married	0.918	4.303***	10.909	2.013	−1.272
	(1.129)	(1.631)	(6.784)	(1.461)	(0.949)
Welfare recipient	2.200	1.559	1.978	0.456	−1.472
	(1.493)	(1.156)	(1.325)	(0.633)	(0.996)
Children	−0.412	0.635**	2.347*	−0.157	−0.027
	(0.274)	(0.324)	(1.349)	(0.167)	(0.210)

Basic skills deficiency	2.840**	8.054*	−0.586	−1.591	0.246
	(1.337)	(4.835)	(0.654)	(1.202)	(0.938)
Limited work history	−1.102	1.198	0.567	1.814	0.901
	(1.245)	(2.173)	(0.679)	(1.454)	(0.973)
Unemployed all of preprogram year	−0.661	−4.269	2.603***	−1.320	1.528*
	(0.995)	(3.111)	(0.682)	(1.326)	(0.919)
Most recent hourly wage	0.014	0.026	0.023	−0.163	0.098
	(0.246)	(0.115)	(0.142)	(0.308)	(0.191)
Log likelihood	−18.493	−8.464	−46.783	−16.963	−25.079
Pseudo R^2 (%)	37.2	15.6	84.5	36.9	48.2

NOTE: * significant at α = 0.100; ** significant at α = 0.050; *** significant at α = 0.010. Standard errors are shown in parentheses below the coefficient values.

compared to only one independent variable in the model of caseworker 1's selections. Caseworker 2 was the older and more experienced intake staff member. It is possible that as intake staff gain more experience in this profession, they become more certain about which applicant characteristics are important and/or more consistent in their decision-making procedures.

A formal test of the hypothesis that the caseworkers employed the same decision function, a test for equality of the coefficients in the selection models, was performed.[5] The results of the likelihood ratio test rejected the null hypothesis (at $\alpha < 0.005$) that the caseworkers' decision functions were the same.[6] This finding suggests that there may not be a strong "social structure" or consensus as to how applicant characteristics should be evaluated in participant selection processes, at least for the characteristics measured and included in these models. I also calculated pseudo-R^2 values for the models (see Amemiya 1981) and found that when modeled separately, there is considerably more unexplained variance in the caseworkers' simulated selections. This seems to suggest that when combining the decisions made by both caseworkers and giving more weight to cases in which both agreed to either admit or reject applicants, we gain a better understanding of their decision-making processes.

The most consistent finding across the models in Table 8.1 was the negative coefficient on the highest grade completed variable, statistically significant in three of the five models. This finding implies that applicants with more education were less likely to be selected into the program and is consistent with caseworkers' indications that they favored applicants with lower education levels.

The two employment barriers mentioned most frequently in case reviews and in the postsimulation discussion were basic skills deficiencies and limited work histories. Being the most closely related (of the observed characteristics) to applicants' employability, one would expect that if intake staff were cream skimming based on these characteristics, they would be negatively related to the probability of selection. The coefficient for basic skills deficiency is positive in three models and is large and statistically significant in two of these. The limited work history variable also has a positive coefficient in four models but is not statistically significant in any model. These findings provide tentative evidence against the theory that intake staff cream-skim on observed

characteristics related to employability. Long-term unemployment was also a statistically significant, *positive* selection factor in two models.

The variable coefficients in the model of the caseworkers' actual program participant selections, however, differed from those in the caseworkers' simulation models. These differences might be attributed to a number of factors, including unobserved and unmeasured factors (such as applicant motivation or constraints on training service assignments) and decision errors (including random deviations from their usual judgment processes or inconsistencies in their judgments).

With information about the caseworkers' actual program participant selections and the employment outcomes of program applicants, I further analyze the influence of applicants' probability of placement on participant selection decisions using a two-stage model. In the first-stage regression (shown in Table 8.2), a variable indicating whether or not employment was obtained following program application was regressed against applicants' demographic and employment and training history characteristics to obtain predicted probabilities of placement for the applicants. These predicted placement probabilities formed a new variable (the probability of placement) that was used as an explanatory variable in a second-stage regression with caseworkers' actual participant selections as the dependent variable (also shown in Table 8.2).

A striking finding of this second-stage regression is the relatively large, positive, and statistically significant coefficient on the probability of placement variable, more precisely estimated than any other explanatory variable in the regression. This finding suggests that in the actual participant selection process, caseworkers were likely influenced by factors related to applicants' probability of placement (or employment). It also indicates that direct cream skimming on applicant characteristics might have been occurring.

To further evaluate this argument, I also added the probability of placement variable to the caseworkers' simulated selection models and reestimated these logistic regressions (see Table 8.3). In estimating these models, I sought to test whether the probability of placement was some function of the observed applicant characteristics provided to caseworkers in the simulation, or a function of additional information the caseworkers acquire during the selection process, i.e., information not captured in the variables made available in the simulation.

Table 8.2 Two-Stage Logistic Regression Estimation of the Influence of Applicants' Probability of Placement on Participant Selection Decisions

	First-stage logistic regression	Second-stage logistic regression
Independent variables	Dependent variable: Placed in employment (or employed) following program participation (or application)	Dependent variable: Actual participant selections
Constant	−34.547*	1.482
	(19.327)	(6.884)
Age	0.360**	−0.087
	(0.161)	(0.106)
Sex (male)	5.715	0.638
	(3.650)	(1.397)
Single head of household	2.835	3.960**
	(3.026)	(1.750)
Highest grade completed	1.171	−0.232
	(0.942)	(0.487)
Previous training services	0.576	0.615
	(0.898)	(1.092)
Never married	4.046*	−2.896**
	(2.398)	(1.375)
Welfare recipient	3.500	−2.358*
	(2.365)	(1.352)
Children	0.206	−0.148
	(0.669)	(0.284)
Basic skills deficiency	4.597	−0.297
	(3.027)	(1.316)
Limited work history	7.146*	0.070
	(3.983)	(1.217)
Unemployed all of preprogram year	−4.095*	2.365**
	(2.227)	(1.191)
Most recent hourly wage	−0.472	−0.126
	(0.354)	(0.260)
Probability of placement	n/a	6.392***
		(2.114)
Model log likelihood	−9.150	−18.360
Pseudo R^2 (%)	17.1	37.1

NOTE: * significant at $\alpha = 0.100$; ** significant at $\alpha = 0.050$; *** significant at $\alpha = 0.010$. Standard errors are shown in parentheses below the coefficient values.

The results presented in Table 8.3 indicate that the probability of placement was not a significant factor in the caseworkers' simulation selection decisions. There are several possible interpretations of these findings. One is that the caseworkers did evaluate and weigh applicants' observed characteristics to estimate their probability of placement, but that in the simulation (free of performance pressures and constraints), they did not use this information. A more plausible explanation, however, is that the probability of placement was judged mainly using information not made available in the simulation. For example, some of these unmeasured variables might include information that provides clues about the applicants' motivation (from details of employment history to physical appearance). Although this type of information is not systematically collected by employment and training program staff, in their actual participant selection decisions, caseworkers seemed to predict placement probabilities very well and to use this information to guide their decisions.

In his classic study on bureaucracy, Blau (1955) finds similar participant screening philosophies and practices among state employment agency staff. Like the JTPA intake workers, employment agency staff who exercised discretion in client selection indicated they derived satisfaction from helping those most in need and "welcomed the opportunity to assist them." However, in actual client selections, Blau finds the majority of agency staff favored "strivers," or persons who were most likely to be successful in society. He concluded that personal preferences for helping the most disadvantaged were set aside as a result of the orientation toward maximizing placements and in the interest of efficient performance. Forty years later, Blau's conclusions seem to garner support from this case study as well.

Multinomial Logit Analyses of Factors Influencing Participant Assignment to Training Activities

During the simulation, the caseworkers assigned each person they selected to a training service activity. They were given no guidelines as to the number of "participants" they could assign to each of four available program activities (vocational training, on-the-job training, remedial education, and job search assistance). In making these assignments, caseworkers were asked to consider only applicant characteristics.

Table 8.3 Logistic Regressions of Simulated Participant Selections from Caseworker 1 and Caseworker 2, Including Probability of Placement Variable

	Dependent variables	
Independent variables	Caseworker 1's simulated participant selections	Caseworker 2's simulated participant selections
Constant	45.367***	−18.037**
	(16.987)	(8.503)
Age	−0.105	0.362***
	(0.096)	(0.140)
Sex (male)	1.180	−0.860
	(1.545)	(1.220)
Single head of household	−0.432	−1.643
	(1.591)	(1.518)
Highest grade completed	−3.458***	0.239
	(1.347)	(0.500)
Previous training services	−0.136	−0.220
	(1.014)	(1.089)
Never married	0.753	5.884***
	(1.172)	(2.192)
Welfare recipient	2.125	1.806
	(1.484)	(1.191)
Number of children	−0.422	0.824**
	(0.274)	(0.375)
Basic skills deficiency	−1.610	4.045**
	(1.207)	(1.748)
Limited work history	1.557	−0.920
	(1.557)	(1.256)
Unemployed all of preprogram year	−1.223	−1.081
	(1.334)	(1.075)
Most recent hourly wage	−0.191	0.064
	(0.321)	(0.259)
Probability of placement	0.806	−2.816
	(1.886)	(2.224)
Model log likelihood	−16.726	−18.493
Pseudo R^2 (%)	36.8	37.2

NOTE: ** significant at $\alpha = 0.050$; *** significant at $\alpha = 0.010$. Standard errors are shown in parentheses below the coefficient values.

The multinomial logit analyses examine the factors that influenced intake staff service assignment decisions. The dependent variables are categorical variables for four main types of program activities made available in JTPA programs: vocational training, on-the-job training, basic or remedial education, and job search assistance. The independent variables in these models were the characteristics of the selected participants, i.e., the same core set of variables employed in the models of participant selection. Table 8.4 shows the multinomial logit estimation of participant service assignments using the simulation data. Despite the small sample of 38 simulation assignees (only those cases selected were assigned to services), there are a number of statistically significant findings among these results.

A multinomial logit regression of service assignment was also estimated for adult JTPA Title IIA program participants in the job training agency. The management information system (MIS) data provided by the agency for all JTPA program years was used, yielding a total of 18,120 observations. The dependent variable employed in the job training center multinomial logit model included assignment to the same four categories of training as the simulation model. The independent variables were also the same as those available for the simulation models, with a few exceptions.[7] The job training center multinomial logit model is shown in Table 8.5.

One of the more important findings of the multinomial logit models suggests that access to training opportunities for persons with basic skills deficiencies and low education levels may have been relatively limited. High school dropouts and persons with basic skills deficiencies were significantly more likely to be assigned to receive remedial education, while persons with more education were significantly less likely to receive these services. Persons with basic skills deficiencies were significantly less likely to be assigned to vocational training, on-the-job training, or job search assistance, while persons with post–high school educations were significantly more likely to receive job search assistance. These findings support the theory that individuals assigned to on-the-job training and job search assistance require basic education and skill levels that make them more "job-ready." Discussions with the program caseworkers and findings of the National JTPA Study also revealed that vocational training providers often have enrollment requirements that preclude the entry of persons with basic skills defi-

Table 8.4 Multinomial Logit Model of Training Activity Assignments Using Simulation Data

Independent variables	Categorical dependent variable			
	Vocational training	On-the-job training	Basic or remedial education	Job search assistance
Constant	−9.800	110.385	8.676	−4.052
	(13.93)	(258.1)	(5.799)	(15.53)
Age	0.121	−0.307*	−0.006	−0.579
	(0.114)	(0.179)	(0.060)	(0.460)
Sex (male)	0.427	0.324	0.301	−1.605
	(1.867)	(2.920)	(0.852)	(4.188)
Single head of household	3.618*	−3.555	0.725	−34.639
	(2.222)	(2.639)	(0.900)	(46.71)
Highest grade completed	−0.584	−8.869	−1.094**	0.724
	(0.887)	(20.93)	(0.483)	(1.991)
Welfare recipient	0.305	−1.049	0.562	7.679*
	(1.527)	(1.767)	(0.721)	(4.465)
Number of children	0.344	−0.571	−0.008	−1.801*
	(0.352)	(0.660)	(0.206)	(0.919)
Basic skills deficiency	1.169	−42.929**	1.828**	−1.203
	(1.664)	(20.15)	(0.926)	(3.050)
Limited work history	3.601**	0.571	0.539	−39.705**
	(1.782)	(3.122)	(1.045)	(16.40)
Unemployed all of preprogram year	0.500	10.278**	2.183***	20.488
	(1.288)	(4.167)	(0.761)	(14.47)

Never married	0.624	4.391	−0.514	0.117
	(1.386)	(2.768)	(0.753)	(0.116)
Most recent hourly wage	0.850**	0.546	0.114	0.010
	(0.431)	(0.322)	(0.182)	(0.008)
Model log likelihood	−61.396			

NOTE: * significant at α = 0.100; ** significant at α = 0.050; *** significant at α = 0.010. Standard errors are shown in parentheses below the coefficient values.

Table 8.5 Multinomial Logit Model of Training Activity Assignments Using Service Records of 18,120 Adult JTPA Title IIA Participants, Program Years 1984–1993

	Categorical dependent variable			
Independent variables	Vocational training	On-the-job training	Basic or remedial education	Job search assistance
Constant	−0.297*	−0.303**	−4.899***	−2.951***
	(0.153)	(0.138)	(0.357)	(0.142)
Age	−0.016***	−0.029***	−0.033***	0.026***
	(0.003)	(0.003)	(0.006)	(0.002)
Sex (male)	−0.107*	0.571***	0.202	−0.007
	(0.064)	(0.058)	(0.130)	(0.054)
Single head of household	0.171**	0.155**	−0.120	0.188***
	(0.075)	(0.065)	(0.148)	(0.064)
High school dropout	0.098	−0.039	1.233***	0.169
	(0.076)	(0.068)	(0.129)	(0.704)
Post–high school education	0.016	−0.197***	−0.519***	0.152***
	(0.063)	(0.058)	(0.168)	(0.055)
Welfare recipient	0.147**	−0.573***	−0.466***	−0.023
	(0.069)	(0.067)	(0.123)	(0.061)
Household size	−0.013	0.029***	0.033*	−0.011
	(0.015)	(0.010)	(0.019)	(0.036)
Basic skills deficiency	−0.148***	−0.097*	0.593***	−0.087*
	(0.058)	(0.051)	(0.110)	(0.051)
Limited work history	0.067	−0.282***	0.346***	0.029
	(0.059)	(0.054)	(0.113)	(0.053)

Unemployed at application	−0.321	−0.135**	−0.029	0.027
	(0.338)	(0.060)	(0.138)	(0.063)
Unemployed all of preprogram year	−0.060	−0.293***	0.688***	0.234
	(0.076)	(0.069)	(0.151)	(0.157)
Employed–unemployed	−0.088	0.044	−0.160	0.031
	(0.074)	(0.060)	(0.148)	(0.065)
Unemployed–employed	−0.047	−0.092	0.145	0.249***
	(0.700)	(0.058)	(0.144)	(0.061)
African American	0.064	−0.340***	0.963***	−0.176***
	(0.061)	(0.052)	(0.145)	(0.054)
Program year 1989	0.806***	0.970***	2.177***	1.072***
	(0.096)	(0.078)	(0.205)	(0.090)
Program year 1990	0.993***	0.670***	2.496***	0.830***
	(0.082)	(0.077)	(0.184)	(0.089)
Program year 1991	0.930***	0.698***	2.030***	0.613***
	(0.093)	(0.079)	(0.093)	(0.099)
Program year 1992	−0.228**	−0.244***	0.308	0.354***
	(0.097)	(0.079)	(0.252)	(0.060)
Model log likelihood	−20,586.83			

NOTE: * significant at $\alpha = 0.100$; ** significant at $\alpha = 0.050$; *** significant at $\alpha = 0.010$. Standard errors are shown in parentheses below the coefficient values.

ciencies, e.g., requirements such as a high school diploma or minimum scores on tests of adult basic education.

Another noteworthy finding was that males were more likely to be assigned to on-the-job training, which has consistently been shown to be the most effective employment and training service (Barnow and Gubits 2002). During case reviews and the postsimulation discussion, the caseworkers pointed out that men tended to be more eager to get into training activities that generated a faster monetary payoff. Since on-the-job training participants received wages during the training period, males found these training opportunities more lucrative. In addition, male applicants were more likely to have had previous job experience that was expected to aid a successful outcome in on-the-job training activities. In general, women and welfare recipients were more likely to be assigned to vocational training activities, and welfare recipients were also significantly less likely to be assigned to on-the-job training activities. Also consistent with the above findings, persons with limited work histories (i.e., minimal job experience) were significantly less likely to be assigned to on-the-job training and job search assistance; they were significantly more likely to receive remedial education or vocational training services.

The coefficients for the program year indicators (Table 8.5) show a pattern of declining assignment probabilities in the 1990s, most likely reflecting the decline in JTPA program funding and reduced number of training opportunities during these years. Studies suggest that with fewer resources, job training agencies are more likely to allocate funds to less expensive, shorter-term training activities and to avoid serving those who require more intensive services to become job-ready (Dickinson and West 1988; Zornitsky et al. 1988; Orfield and Slessarev 1986). Table 8.6 shows that corresponding to funding declines in the 1990s, there was a noticeable shift in this agency toward less expensive services (e.g., job search assistance and job club activities). There was also a less definitive trend away from the provision of more expensive training such as remedial education services, on-the-job training and vocational training (with costs per placement ranging from $2,917.90 to $2,834.10). Job search assistance and job club activities (a less intensive form of job search) were much less expensive services (approximately $1700). (See Table 8.7 for job placement rates, wages at place-

Table 8.6 Number of Training Services Received by JTPA Title 2A Adult Participants, Program Years 1986–1993

JTPA training service activity[a]		PY 1986 N=2,732	PY 1987 N=2,302	PY 1988 N=1,811	PY 1989 N=1,633	PY 1990 N=1,314	PY 1991 N=1,010	PY 1992 N=1,101	PY 1993 N=1,065
Vocational training	n	1,145	947	730	733	654	527	544	409
	%	(41.9)	(41.1)	(40.3)	(44.9)	(49.8)	(52.2)	(49.4)	(38.4)
On-the-job training	n	815	609	530	473	340	288	325	281
	%	(29.8)	(26.5)	(29.3)	(29.0)	(25.9)	(28.5)	(29.5)	(26.4)
Remedial education	n	n/a[b]	n/a	n/a	186	96	51	38	50
	%				(11.4)	(7.3)	(5.0)	(3.5)	(4.7)
Job search assistance	n	n/a	n/a	216	204	157	84	197	184
	%			(9.1)	(12.5)	(11.9)	(8.3)	(17.9)	(17.3)
Job club	n	n/a	n/a	135	189	127	51	170	151
	%			(7.5)	(11.6)	(9.7)	(5.0)	(15.4)	(14.2)
Counseling and assessment	n	1,149	1,040	653	419	300	195	0	9
	%	(42.1)	(45.2)	(36.1)	(25.7)	(22.8)	(19.3)	(0.0)	(0.8)
Case management	n	n/a	n/a	n/a	n/a	n/a	n/a	950	1,036
	%							(86.3)	(97.3)

[a] Supportive services were not shown in this table since the identifier codes were used inconsistently in the JTPA MIS system.

[b] For some of the early program years, these data were either not available or were coded inconsistently.

ment, and estimated service costs for adult JTPA Title IIA participants by program activity.)

In addition, Table 8.6 shows that counseling and assessment activities were replaced by case management services beginning in program year 1992. To generate an official record of the provision of case management services, program staff had to make contact with a participant at least once per month. This minimal case-management requirement made these services very inexpensive to provide. In program year 1993, 23.8 percent of JTPA Title IIA program participants received *only* case management services while enrolled. It is possible that as program resources continued to decline, job training agencies found that providing only case-management services was an inexpensive way to maintain participant numbers despite squeezed budgets.

It is also possible that agency officials were struggling to manage trade-offs among the costs of services, the benefits to participants as measured by performance standards, and the number of training opportunities they could make available. The job placement rate was accorded the highest weight in this agency's performance evaluation process. The provision of on-the-job training services, which were more costly to provide but generated higher average job placement rates (by a margin of 21–38 percent) than other training activities, was not declining over time. Vocational training, however, had a substantially lower average

Table 8.7 Job Placement Rates, Wages at Placement, and Estimated Costs of Service for Adult JTPA Title IIA Participants by Program Activity

Program activity	Mean job placement rate (%)	Mean wage at placement ($)	Estimated cost per placement ($)
Vocational training	58.3	5.87	2,834.10
On-the-job training	81.2	6.72	2,844.13
Remedial education services	43.0	5.73	2,917.90
Job search assistance	47.7	6.82	1,789.06
Job club	51.2	6.90	1,642.90
Counseling and assessment	59.9	6.17	2,541.46
Case management	58.4	7.03	n/a[a]

[a] For most service provider contracts and participant records, the costs of case management activities are not specified separately from other service costs.

job placement rate (58.3 percent) that is about the same as the placement rate for counseling/case management activities, but is considerably more expensive to provide than counseling and case management. In a 1992 review of job training program evaluations, LaLonde finds that less expensive services provided to a larger segment of the eligible population yielded higher returns for each training dollar invested. It is also important to remember that costs per placement continued to be a primary factor in this agency's performance reviews and contract award decisions long after the federal government eliminated cost-per-placement standards.

Synthesis of Findings on Participant Selection, Service Assignment, and Program Management

The analyses of participant selection and service assignment decisions, in conjunction with the implications of declining program resources in this job training agency, suggest that declining program funds may have compelled the provision of cheaper training services. This, in turn, may have required the recruitment of more job-ready persons to attain successful outcomes (i.e., job placements). For example, given budgetary pressures due to declining federal program resources, service providers may have been led in competitive bidding and contract negotiations to increase the number of job search assistance (i.e., less expensive) positions budgeted for their programs. As intake staff typically worked with fixed numbers of available training positions when they began the applicant screening process, they may have been required to recruit more individuals suitable to job search assistance activities.

One of the most consistent findings in the simulated and actual participant selection models was the negative relationship of years of schooling completed to the probability of selection. On the other hand, Tables 8.4 and 8.5 showed that the number of years of schooling completed was positively related to assignment to job search assistance activities. Therefore, given a specific and growing number of job search assistance positions they were required to fill, intake staff may have been induced to select more applicants with higher education levels.

The participant selection models also indicated that applicants with basic skills deficiencies were more likely to be selected, and the ser-

vice assignment models showed these persons were significantly more likely to receive remedial education services. However, remedial education was one of the more expensive training activities, and provision of these services declined over time under JTPA. Nonprofit agencies (independent of the JTPA program) were likewise under increasing performance accountability pressures and less likely to offer remedial education on their "menu" of services. As fewer remedial education opportunities were made available, it is possible that caseworkers were less likely to enroll persons with basic skill deficiencies. In addition, the findings also showed that participants with basic skills deficiencies were significantly less likely to be assigned to vocational training, on-the-job training, and job search assistance, suggesting that more disadvantaged participants might not have had access to the full range of training services if remedial education services were not made available to them.

Other case study findings generally supported these assertions about the effects of budgetary constraints on the availability of training opportunities and the selection of program participants. Service provider managers indicated that contract cost-per-placement standards discouraged the provision of multiple services (e.g., remedial education followed by vocational training), since these services raised average cost per placement figures and could negatively affect future contract awards. Even though intake staff asserted that they are not influenced by performance standards, the continued emphasis on placement rates and costs per placement in local-level service provider contracts seemed to be a pervasive force. A separate study (Heinrich 1999) of this agency's administrative and service provider contracting practices showed that service providers' performance relative to cost standards established in their contracts with the local JTPA agency was the most important factor influencing the agency's contract renewal and funding level decisions.

In conclusion, the strong emphasis on placement rates and costs per placement in the local-level performance evaluation system seemed to inevitably pervade intake staff participant selection and service assignment decisions, contributing to both direct and indirect creaming practices. Other factors affecting program administration and service delivery decisions exacerbated the pressures generated by performance standards. These factors included declining program resources (relative to a large job-training-eligible population), the absence of performance

standard adjustments in service provider contracts for services to more disadvantaged applicants, and minimum qualifications required for entry to more intensive skill-building program activities.

CONCLUSION

While the findings of this case study are not generalizable to all job training programs, some basic policy conclusions emerge that have implications for the administration of current job training programs under WIA and other programs (e.g., public welfare). This research produced evidence that "street-level bureaucrats" engaged in job training program service delivery were responsive to incentives generated by the performance standards system. The local job training agency designed its own performance-based contracting and provider performance evaluation system, and program administrators and service provider staff demonstrated that they were highly conscious of the agency's emphasis on placement rate and cost-per-placement outcomes.

The agency's contractual and administrative focus on placement rates and cost-per-placement appeared to have both direct and indirect effects on the participant selection and training service assignment decisions of program staff. Both direct cream skimming on applicant characteristics during the participant selection process and indirect cream skimming grounded in contractual arrangements and program administrative decisions were likely occurring in this service delivery area, with potentially negative implications for the achievement of basic program objectives.

The research findings also suggest that the main sources of indirect cream skimming were contractual and administrative constraints on the types of training services that could be made available to program participants. The study of the JTPA service assignment processes showed that participant selection decisions and service assignment decisions were most often made concurrently, and that the numbers and types of available training positions were typically fixed before the intake process began. Therefore, intake staff were required to find persons suitable to the available training positions, rather than selecting participants based primarily on their relative need for and interest in training

services and then assigning them to appropriate activities. This practice by itself does not constitute cream skimming. However, as job training program funds declined over time, the availability of remedial education services decreased substantially, and the provision of relatively less-expensive program services, such as job search assistance and job club activities, increased. As a result, access to training for persons with basic skills deficiencies and low education levels appears to be declining, while access for more able, job-ready applicants (better suited to job search activities) was likely increasing.

In the WIA program, concerns have again been raised about the influence of performance standards on individuals' access to program services. The WIA performance standards, like those in JTPA, still focus on shorter-term outcome levels, and budgetary constraints likewise limit the types of services that are made available to participants. In addition, WIA introduced a sequential process of service access, from core (basic and self-directed job search services) to intensive (job readiness and job search seminars) to substantive job skills training services. While local programs have adapted different approaches to sequencing, early studies show that few clients are receiving the more expensive intensive or training services (D'Amico et al. 2001). Barnow and Gubits (2002) note that in one site, the level of training provided under WIA was reduced by 75 percent.

As discussed in the introductory chapter, a 2002 GAO report suggests that history may be repeating itself. The GAO interviewed WIA program administrators in 50 states and visited five sites to assess the effectiveness of the WIA performance management system and reported that many states have indicated that the need to meet performance standards is a driving factor in who receives WIA-funded services at the local level. It also described how some local areas were limiting access to services for individuals who they perceive are less likely to get and retain a job. Observing the serious challenges that states and localities have faced in implementing the system, the GAO suggested that "even when fully implemented, WIA performance measures may still not provide a true picture of WIA-funded program performance" (GAO 2002, p. 3). In a summary report to the USDOL on the implementation of WIA, Barnow and Gubits (2002, Note 12) also find, based on meetings with officials from about 20 states, that "the greatest dissatisfaction

in every instance has been with the way the performance management system has been implemented."

This study presents evidence of strong links between the types of services made available in public training programs and who gets access to these services, and the role and effects of performance standards on key decisions made by program administrators and street-level bureaucrats in implementing the program. More generally, the collective empirical findings of this book demonstrate the responsiveness of public organizations and their employees to performance standards, and suggest that in designing or refining performance standards systems for public programs, careful consideration should be given to both direct and indirect potential consequences of these systems for those served or seeking services.

Notes

1. While this administrative structure was common to many JTPA service delivery areas, WIA now prohibits these local agencies from directly providing training services, and the only contract or agreement for service provision that may be established (with few exceptions) is between the workforce investment boards and One-Stop center operators. The local workforce investment boards are required to select One-Stop operators through a competitive process or designation of a consortium that includes at least three of the federal programs providing services at the One-Stop.
2. The principal 1988 changes included an end to mandatory use of cost-per-placement standards and a shift toward the evaluation of placement and earnings outcomes three months after participant termination rather than at the time of termination.
3. The job training program service provider I closely studied has been operating in this job training center since the CETA years (i.e., before JTPA). It is one of the primary vendors and has accounted for approximately 7 percent of all service provider contracts since the start of JTPA. One of the two program caseworkers had approximately 5 years of experience working in this profession, and the other was employed as a caseworker for 16 years. Both had worked for this particular service provider for about 5 years.
4. The logit model estimated was: $P_i = E(Y{=}1 \mid X_i) = 1 / 1 + e^{-(b1 + b2Xi1 + \ldots + b_k X_{ik})}$, where P_i is the probability an applicant is selected, Y is the program caseworker's decision, taking on the value "1" if a given applicant is selected, and the X_{ik} are characteristics of the program applicants. The betas (b_k) measure the influence of applicant characteristics on caseworkers' judgments.

5. First, an *unrestricted* model of the caseworkers' simulation selections was estimated. This model included two sets of explanatory variables (i.e., the demographic characteristics and employment and training history variables included in the logit models)—one set interacted with caseworker 1's simulation selections and the other interacted with caseworker 2's selections. This model allowed different estimates of the variable coefficients for each caseworker. The restricted model used the dependent variable "caseworker 1 *plus* caseworker 2 selections."
6. Likelihood ratio statistic = $-2 \ln \lambda$, where $\ln \lambda = \ln L(\Omega_r) - \ln L(\Omega) = -56.376 - -33.492 = -22.884$. The observed value of $-2 \ln \lambda$ is very large (45.768). With 11 degrees of freedom, it is much greater than $\chi^2_{0.005}$, which leads me to strongly reject H_o.
7. In the job training center multinomial logit model: 1) education is represented by indicator variables (high school dropout, post–high school education, and college graduate, where the omitted category is high school graduate); 2) household size is used as a proxy for the number of children; 3) employment status and history are represented by an indicator variable for employment status at application (unemployed at application) and variables indicating employment history in the year prior to application (no preprogram year earnings, employed–unemployed transition, unemployed–employed transition); 4) an indicator variable for race (African American) is included in the model; 5) there were no variable measures available in the MIS data for marital status or previous training activities, and 6) program year indicators are included to capture the influence of changes in the availability of different training activities across program years.

References

Amemiya, T. 1981. "Qualitative Response Models: A Survey." *Journal of Economic Literature* 19(4): 483–536.

Barnow, Burt S., and Daniel B. Gubits. 2002. "Review of Recent Pilot, Demonstration, Research, and Evaluation Initiatives to Assist in the Implementation of Programs under the Workforce Investment Act." ETA Occasional Paper No. 2003-10. Washington, DC: USDOL.

Blau, Peter M. 1955. *The Dynamics of Bureaucracy: A Study of Interpersonal Relations in Two Government Agencies*. Chicago: University of Chicago Press.

Brodkin, Evelyn Z. 1987. "Policy Politics: If We Can't Govern, Can We Manage?" *Political Science Quarterly* 102(4): 571–587.

D'Amico, Ron, Deborah Kogan, Suzanne Kreutzer, Andrew Wiegand, and Alberta Baker. 2001. *A Report on Early State and Local Progress Towards WIA Implementation*. Submitted to U.S. Department of Labor, Employment and Training Administration, USDOL Contract No. G-7681-9-00-87-30. Washington, DC: USDOL.

Dickinson, Katherine P., and Richard W. West. 1988. *Evaluation of the Effects of JTPA Performance Standards on Clients, Services, and Costs*. Report No. 88-17. Washington, DC: National Commission for Employment Policy Research.

General Accounting Office (GAO). 2002. *Improvements Needed in Performance Measures to Provide a More Accurate Picture of WIA's Effectiveness*. Report to Congressional Requesters. GAO-02-275. Washington, DC: GAO.

Heinrich, Carolyn J. 1995. "Public Policy and Methodological Issues in the Design and Evaluation of Employment and Training Programs at the Service Delivery Area Level." PhD diss. Harris School of Public Policy Studies, University of Chicago.

———. 1999. "Do Government Bureaucrats Make Effective Use of Performance Management Information?" *Journal of Public Administration Research and Theory* 9(3): 363–393.

LaLonde, Robert J. 1992. "The Earnings Impact of U.S. Employment and Training Programs." Unpublished manuscript. University of Chicago.

Lipsky, Michael. 1980. *Street-Level Bureaucracy*. New York: Russell Sage.

Orfield, Gary, and Helene Slessarev. 1986. *Job Training under the New Federalism*. Chicago: University of Chicago Press.

Rossi, Peter H., and Steven L. Nock. 1982. *Measuring Social Judgements*. Beverly Hills: Sage Publications.

Zornitsky, Jeffrey, and Mary Rubin. 1988. *Establishing a Performance Management System for Target Welfare Programs*. Report No. 88-14. Washington, DC: National Commission for Employment Policy Research.

Appendix 8A
Variable Descriptions

DEPENDENT VARIABLES

Actual participant selections = 1 if actual program participant, 0 if applicant, nonparticipant.
Counselor 1 selections = 1 if selected by counselor 1 during the simulation, 0 if not selected by counselor 1.
Counselor 2 selections = 1 if selected by counselor 2 during the simulation, 0 if not selected by counselor 2.
Counselor 1 or counselor 2 selections = 1 if selected by either counselor 1 or counselor 2 during the simulation, 0 if not selected by either counselor 1 or counselor 2.
Counselor 1 plus counselor 2 selections: based on 100 evaluated exercise cases (50 by counselor 1 and 50 by counselor 2) = 1 if selected by either counselor 1 or counselor 2 during the simulation, 0 if not selected by either counselor 1 or counselor 2.
Service category = 0 if not selected nor assigned to a training activity, 1 if selected case was assigned to vocational training, 2 if selected case was assigned to on-the-job training, 3 if selected case was assigned to remedial education, and 4 if selected case was assigned to job search assistance.
Wage at placement = JTPA program participants' wage at placement (i.e., at the time of their termination from the program, if placed in a job), in dollars.

INDEPENDENT VARIABLES

Sex = 1 if male, 0 if female.

Age Variables

Age: (continuous, range 19–51).
Age less than 30 years = 1 if under 30 years old, 0 otherwise.
Age 30 to 39 years = 1 if 30 to 39 years old, 0 otherwise.
Age over 39 years = 1 if over 39 years old, 0 otherwise.

Ethnicity

White = 1 if white (Caucasian), 0 otherwise.
African American = 1 if African American, 0 otherwise.
Hispanic = 1 if of Hispanic origin (including South or Central Americans, Mexicans, Puerto Ricans, and others), 0 otherwise.
Other race = 1 if American Indian, Asian, or any other race excluded in other categories, 0 otherwise.

Education Variables

Highest grade completed: (continuous, range 10–16).
Dropout = 1 if high school dropout, 0 otherwise.
Graduated high school = 1 if high school graduate with no post–high school education, 0 otherwise.
Post–high school education = 1 if has post–high school education, 0 otherwise.
Any training = 1 if previously received vocational, on-the-job, or other training services, 0 otherwise.
GED = 1 if has GED, 0 otherwise.

Labor Force Status and Employment History Variables

Employed at application = 1 if employed at application, 0 otherwise.
Unemployed at application = 1 if unemployed at application, 0 otherwise.
Not in labor force at application = 1 if not in labor force, 0 otherwise.
Employed–unemployed transition = 1 if employed in 7–12 months prior to application and unemployed in 6 months prior to application, 0 otherwise.
Employed–not in labor force transition = 1 if employed in 7–12 months prior to application and not in labor force in 6 months prior to application, 0 otherwise.
Employed all of preprogram year = 1 if employed in 7–12 months prior to application and employed in 6 months prior to application, 0 otherwise.
Unemployed–employed transition = 1 if unemployed in 7–12 months prior to application and employed in 6 months prior to application, 0 otherwise.
Unemployed–not in labor force transition = 1 if unemployed in 7–12 months prior to application and not in labor force in 6 months prior to application, 0 otherwise.
Unemployed all of preprogram year = 1 if unemployed in 7–12 months prior to application and unemployed in 6 months prior to application, 0 otherwise.
Not in labor force–employed transition = 1 if not in labor force in 7–12 months prior to application and employed in 6 months prior to application, 0 otherwise.

Not in labor force–unemployed transition = 1 if not in labor force in 7–12 months prior to application and unemployed in 6 months prior to application, 0 otherwise.
Not in labor force all of preprogram year = 1 if not in labor force in 7–12 months prior to application and not in labor force in 6 months prior to application, 0 otherwise.
Ever worked full time = 1 if ever worked full time, 0 otherwise.
Most recent wage: (continuous, range $4.25– $10.40).
Zero earnings in year prior to enrollment = 1 if no earnings in employment security records in the four quarters prior to the individual's enrollment in JTPA, 0 otherwise.

Employment Barriers

Single head of household = 1 if single head of household, 0 otherwise.
Displaced homemaker = 1 if displaced homemaker, 0 otherwise.
Veteran = 1 if veteran of any war, 0 otherwise.
Vietnam veteran = 1 if veteran of Vietnam War, 0 otherwise.
Limited work history = 1 if limited work history, 0 otherwise.
Transportation = 1 if transportation is a barrier, 0 otherwise.
Basic skills deficiency = 1 if basic skills deficiency, 0 otherwise.
Child care = 1 if child care is a barrier, 0 otherwise.
Medical problem = 1 if medical problem, 0 otherwise.
Welfare recipient = 1 if receiving any public assistance (AFDC, food stamps, or general assistance), 0 otherwise.
Handicapped = 1 if physically handicapped, 0 otherwise.
Limited English proficiency = 1 if tested and found to have limited ability to speak English, 0 otherwise.
Ex-offender = 1 if convicted of criminal offense prior to time of application, 0 otherwise.
Substance abuse problem = 1 if determined by intake staff or medical doctor to be chemically dependent (i.e., a substance abuser), 0 otherwise.

Marital Status Variables

Never married = 1 if never married, 0 otherwise.
Married = 1 if married, 0 otherwise.
Married, not living with spouse = 1 if married, not living with spouse, 0 otherwise.
Divorced = 1 if separated, divorced, or widowed, 0 otherwise.

Family Composition

Number of children: (continuous, range 0–7).
Household size: (continuous variable).

Training History Variable

Previous training services = 1 if any vocational, occupational, or on-the-job training services were received by program applicant prior to his/her application to JTPA, 0 otherwise.

Program Year Indicator Variables

Program year 1985 through Program year 1993: Each of these indicators takes on the value 1 if the JTPA participant was enrolled during that program year (beginning July 1, ending June 30), 0 otherwise.