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# When financial work incentives pay for themselves: evidence from a randomized social experiment for welfare recipients

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## Abstract

This paper summarizes early findings from a social experiment that provided financial incentives for new welfare recipients to leave welfare and work full time. The financial incentive was essentially a negative income tax with a requirement that people work at least 30 h/week. Early results show that the financial incentive increased full-time employment, earnings, and income, and reduced poverty. Furthermore, at the end of the period discussed in this paper, the program was paying for itself through increased tax revenues.

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Policy-makers have struggled for decades to design an income support program that provides an adequate safety net while promoting economic self-sufficiency. Versions of the Negative Income Tax (NIT) that were tested in the 1970s, for example, guaranteed families income above the poverty threshold, but they discouraged work and marriage (Robins, 1985; Hum and Simpson, 1991; Groenevald et al., 1980). Enhanced earnings disregards that allow welfare recipients to keep more of their welfare benefits when they work have encouraged some people to work, but allowed others to cut back their work effort so that they have generated little or no effects on average hours of work and earnings

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(Moffitt, 1992; Michalopoulos and Berlin, 2001). Likewise, the Earned Income Tax Credit (EITC) is thought to have encouraged many low-income parents to work but high marginal tax rates and income effects have raised concerns that some parents will cut back their work effort (Meyer and Rosenbaum, 2001; Hotz and Scholz, 2001).

This paper describes the results of an approach that was tested as a pilot program in two Canadian provinces in the 1990s. The Self-Sufficiency Project (SSP) provided a generous, time-limited earnings supplement available to single parents who had been on welfare for at least a year, and who subsequently left welfare and found full-time work. By targeting supplements at this somewhat narrow group of welfare recipients who were relatively unlikely to work on their own and by rewarding only full-time work, the designers of SSP hoped to raise the incomes of low-wage workers with little or no increase in government costs, and with few negative side-effects in the form of work cutbacks.

The SSP “applicant study,” which is the focus of this paper, included about 3000 single parents from Vancouver and lower mainland British Columbia who started a new welfare spell between February 1994 and February 1995. This paper describes the effects of the supplement offer for these new welfare recipients through 30 months after they were offered the earnings supplement. One objective of the applicant study was to ask whether new welfare recipients would stay on welfare longer in order to qualify for the supplement. Card and Robins (forthcoming) found that there was a small “delayed exit effect” (Card et al., 1998). The Self-Sufficiency Project also includes a separate study of long-term welfare recipients who were immediately eligible for the supplement. Results from this “recipient study” have been published elsewhere (Card and Robins, 1998; Michalopoulos et al., 2000) and are summarized below.

The paper is organized as follows. Section 1 describes the applicant study, the earnings supplement, the data sources, and the sample used in the analysis. Section 2 outlines how the supplement offer was expected to affect behavior. Results from the study are summarized in Section 3, which focuses on how many people took up the supplement offer, and Section 4, which describes its effects on employment, earnings, income, and public expenditures. In Section 5, the generalizability of the results is examined by comparing the results from SSP applicant and the recipient studies. The paper concludes with a short summary.

## 1. Description of SSP and the applicant study

### 1.1. The SSP earnings supplement

SSP’s earnings supplement was broadly similar to the negative income tax (NIT) programs that were evaluated in the US and Canada in the 1970s (Robins, 1985; Hum and Simpson, 1991). It differed in several key ways from a conventional NIT, however. First, eligibility for the SSP supplement was limited to single parents who had been on welfare for at least a year. This restriction targeted SSP benefits to a disadvantaged group that normally experiences difficulty in the labor market. At the same time, the requirement of a full year on welfare substantially reduced the incentive for people to enter the welfare system in order to receive the supplement. A second feature of SSP is that benefits were available only to people who worked 30 hours or more per week (which is considered to

be “full time” in this paper) and who left welfare. This restriction was intended to limit the ability of parents to use income from the supplement to cut back their work effort, as occurred in the NIT experiments. In addition, unlike the conventional NIT, the SSP supplement varied with individual earnings rather than family income, and was therefore unaffected by family composition, other family members’ earnings, or unearned income. Finally, supplement payments were available for a maximum of 3 years beginning with the first month the supplement was received, but only to sample members who initiated SSP payments within 12 months of their initial eligibility.

SSP’s supplement offer was quite generous compared to the existing welfare system. It paid parents who worked 30 or more hours per week an amount equal to half the difference between their actual earnings and a target (or breakeven) level of earnings. At the beginning of the study, target earnings were set at \$37,000 in British Columbia, and they have been adjusted slightly over time to reflect changes in the cost of living and in the generosity of welfare benefits.<sup>1</sup> A participant in British Columbia who worked 35 hours/week at \$7 per hour earned \$12,740 per year and collected an earnings supplement of \$12,130 per year  $((\$37,000 - 12,740)/2)$ , for a total gross income of \$24,870. In comparison, if that participant had two children and decided to receive welfare without working, her annual income would be only \$17,111. If she worked 35 hours/week and continued to receive welfare, her income would be \$19,511. When tax obligations and tax credits are taken into account, most families had incomes \$3000–7000 per year higher with the earnings supplement than if they worked the same number of hours without the supplement.

### *1.2. The applicant study*

Recruitment into the SSP applicant study began in February 1994 and was completed in February 1995. Each month, Statistics Canada used administrative records to identify all welfare recipients in selected geographic areas in British Columbia who were single parents 19 years of age or older, and who had not received welfare in the previous 6 months. Statistics Canada then selected a “fielding sample” to contact, interview, and invite to be part of SSP’s applicant study.

A group of 3316 single parents were selected according to these criteria and subsequently completed a baseline interview and signed an informed consent form agreeing to be part of the study.<sup>2</sup> Immediately after the baseline interview, each of

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<sup>1</sup> All dollar amounts presented in this paper are in Canadian dollars.

<sup>2</sup> An additional 67 people completed the baseline interview and were randomly assigned, but were later removed from the study either because they had not been off welfare for enough months or were already off welfare before they completed the baseline interview (59 people) or because they asked to be removed from the study (8 people). In addition, 832 applicants were selected by Statistics Canada but did not become part of the study because they did not complete a baseline interview or did not sign an informed consent form agreeing to be part of the study. According to interviewers, many people did not complete the baseline interview because they had already left welfare. Among people who were still receiving welfare but refused to participate, many felt that they would be off welfare very quickly (some were receiving welfare because they were waiting to receive unemployment insurance benefits) and were reluctant to take part in an experiment designed for welfare participants. The exclusion of these people from the sample is likely to have resulted in overstated estimates of impacts, because these short-termers would have been unlikely to respond to the SSP offer.

these single parents was randomly assigned to either the program group, which was offered the opportunity to receive SSP supplement payments, or a control group, which was not (1677 were assigned to the program group and 1706 were assigned to the control group). Those assigned to the program group were informed that if they stayed on welfare for a full year, they would become eligible for the SSP earnings supplement.<sup>3</sup>

Program group members who became eligible for SSP by staying on welfare for 12 of the 13 months after their spell began were informed by mail of their status and invited to attend an orientation session describing the SSP program in more detail. Ninety-four percent of them attended such a session. These “eligible applicants” were given 1 year in which to find a full-time job, leave welfare, and initiate SSP payments. Those who initiated the supplement during this window could then receive supplement payments during the next 3 years—beginning with the month in which they first received supplement payments—provided that they continued to work 30 or more hours per week. Program group members who took up the supplement could return to welfare at any time if they met the normal eligibility requirements of welfare, but they could not receive welfare and supplement payments simultaneously. Operational details of the supplement program are described in [Card and Robins \(1998\)](#).

### *1.3. Data sources and sample characteristics*

Participants in the applicant study were followed for 6 years, with surveys at approximately 12, 30, 48, and 72 months after random assignment. This paper uses administrative data and information from the baseline, 12-month, and 30-month surveys of sample members to study the effects of SSP during the first two-and-a-half years of the study, or 18 months after most members of the program group could have begun receiving the supplement. Results from the 48- and 72-month surveys were not yet available when this paper was written. Whereas administrative records provided information on welfare benefits and SSP supplement payments, all other information came from the survey and was not available from administrative records. This included information on employment, hours of work, hourly wages, earnings, and other sources of income.<sup>4</sup> The analysis in this paper is limited to the 2852 participants who responded to the 30-month survey (1430 control group members and 1422 program group members).

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<sup>3</sup> Another group that could potentially become eligible for the SSP earnings supplement are people not on welfare, who could be induced by the supplement offer to begin receiving welfare to qualify for the supplement. This group was not enrolled in the SSP applicant study because it was assumed that their response would be small compared to the “delayed exit effect” of people already on welfare. However, in aggregate, this group could be large enough to significantly affect program costs. An estimate of its potential size is presented below.

<sup>4</sup> The surveys also include a great deal of other information, including information on education, household composition, expenditures on a few basic necessities, child care, and attitudes toward welfare and work. Results on these outcomes are not discussed in the paper because they were not the primary focus of the program. Those that are more directly related to employment or income, such as expenditures and child care, changed in expected ways. Others, such as household composition and education, were generally not significantly affected by the program.

Table 1

Characteristics of 30-month survey respondents in the SSP applicant study measured at the time of random assignment

Baseline characteristic	Program group	Control group	Difference	Standard error
<i>Welfare history</i>				
Average number of months of welfare in last 2 years	3.3	3.1	0.1	(0.1)
Average monthly welfare payments at random assignment (\$)	919	930	–11	(14)
<i>Work history</i>				
Ever worked for pay (%)	97.2	96.9	0.3	(0.6)
Worked in month before random assignment (%)	24.6	23.6	1.0	(1.6)
<i>Personal characteristics</i>				
Female (%)	90.2	92.6	–2.4**	(1.1)
Under age 25 (%)	15.2	14.6	0.6	(1.3)
Less than high school education (%)	35.2	36.8	–1.6	(1.9)
High school graduate, no post-secondary education (%)	42.8	40.3	2.5	(1.9)
Some post-secondary education (%)	22.0	22.9	–0.9	(1.6)
First Nation ancestry (%)	6.8	9.3	–2.5**	(1.0)
Immigrant (%)	30.4	30.0	0.4	(1.7)
Physical limitation (%)	19.9	19.7	0.2	(1.5)
Emotional limitation (%)	5.7	8.1	–2.4**	(1.0)
<i>Family structure</i>				
Average number of children (up to age 18)	1.5	1.6	0.0	(0.0)
Never married (%)	21.9	24.6	–2.7*	(1.6)
Sample size (total=2852)	1422	1430		

Sources: Calculations from baseline survey data and welfare administrative records.

Notes: Sample sizes vary for individual measures because of missing values. Two-tailed *t*-tests were applied to differences in characteristics between the program and control groups. Statistical significance levels are indicated as: \*=10%; \*\*=5%; \*\*\*=1%. Rounding may cause slight discrepancies in sums and differences.

Table 1 presents information about the survey respondents at the time of random assignment.<sup>5</sup> Reflecting the fact that the applicant sample was comprised of single parents on welfare, nearly all were female, most had one or two children, and a bit more than 20%

<sup>5</sup> Baseline characteristics for survey respondents were quite similar to characteristics of the full sample. Differences between respondents in the program and control groups that are statistically significant in Table 1 were also statistically significant for the entire applicant sample. In addition, the effects of the program on welfare and SSP supplement payments (which came from administrative records which were available for the full sample) were about the same whether they were calculated using survey respondents or the full applicant sample. See Appendix A of Michalopoulos et al., 1999, for details.

had never been married.<sup>6</sup> In addition, virtually all had some work experience but had not worked in the recent past. Reflecting the fact that sample members had recently applied for welfare, they had spent only 3 months on welfare on average in the 2 years prior to entering the study.

Consistent with random assignment, the baseline characteristics of the program and control groups were generally quite similar. In particular, the employment and welfare history of the two groups were virtually the same: both program group and control group members had received welfare for about 3 months on average in the 2 years prior to random assignment, nearly all sample members had worked for pay prior to random assignment, and about one-fourth of both groups were working at the time of random assignment. In each case where the differences between the two groups were statistically significant, those differences were fairly small and were for secondary characteristics that were not the target of the intervention and are not analyzed in this paper.

Although the two research groups were quite similar at random assignment, the small differences between the two groups indicate that the program group was slightly less disadvantaged than the control group. For example, 1% more of the program group was working at the time of random assignment than the control group, so that difference-in-difference estimates of the effects of SSP on employment would yield estimates that are one percentage point smaller than the raw differences between the two groups reported later in the paper. When differences between employment and earnings after random assignment were adjusted for baseline characteristics using least squares, the results changed by no more than about one-half a standard error compared with the results presented in this paper. Moreover, adjusting for pre-random assignment differences did not alter the conclusions of any of the statistical tests of the hypothesis that SSP had no effects.

## **2. Predicted effects of the supplement offer**

The design of the SSP supplement offer essentially divided people's decisions into two periods. In the year after random assignment, people could establish eligibility for the supplement by staying on welfare for 11 of the 12 months following their acceptance into the welfare system (or 12 of 13 months in total, including their first month on welfare). Those who established eligibility in this way could initiate supplement receipt by finding qualifying full-time work and leaving welfare in the next year. After that second year, the incentives under SSP remained constant. People who had initiated supplement payments could continue to receive them, but those who never established eligibility or never initiated supplement payments had no ongoing extra financial incentive to work.

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<sup>6</sup> The sample was much less diverse than the welfare population as a whole in British Columbia, where single individuals and two-parent families can also receive welfare under the same system as single-parent families. In 1995, for example, about 56,000 of the approximately 220,000 or so welfare cases were single-parent families. (Ministry of Social Development and Economic Security, 2001).

The expected effects of the supplement offer are different during these two periods. During the first year, when people were establishing eligibility for the supplement, those who thought they might someday use the supplement had an incentive to stay on welfare. Thus, the main effect of SSP during the first year should have been an increase in welfare receipt. If maintaining welfare receipt discouraged people from working, there might have been an accompanying decrease in employment. If, in contrast, the supplement offer encouraged people to work while in preparation for finding full-time employment later, the program could have increased employment during this first year.

During the second year, when people could initiate supplement receipt by leaving welfare and working full time, the program increased the incentive to work 30 hours or more at some point to begin receiving the supplement. To the extent that people who responded to the supplement offer by working 30 or more hours per week would not have worked, the program would have increased the number of people who worked at some point in the second year.

Although the expected effects on employment are clear in the second year, both income and substitution effects make the expected effects on hours of work and earnings ambiguous. In particular, people who would have worked more than 30 h/week may have been encouraged by high tax rates and the extra income stemming from the supplement to cut back their work effort.<sup>7</sup> They may also have used the extra income they received from the supplement during one period of full-time work to stop working or to cut back to part-time work during another period. Moreover, income from the supplement may have allowed them to accept lower-wage jobs than they otherwise would have, either to speed their entry into work to take advantage of the supplement or as a pure income effect that allowed them to take jobs that had other advantages, such as being closer to home or involving less stressful or less dangerous work. For this group, therefore, SSP may have reduced work effort and reduced earnings.

In contrast, people who would not have worked in the absence of the supplement could only have increased (or kept the same) their hours of work and earnings in response to the supplement. The overall effect of SSP on hours of work, hourly wages, and earnings depends to some extent on the size of these two groups, and on the extent to which demand-side and institutional constraints allow individuals to cut back their hours of work. Because most welfare recipients were not working at the time of random assignment, however, the effects on hours of work and earnings are likely to be positive.

### 3. Supplement receipt

#### 3.1. Establishing eligibility

Using administrative records, Fig. 1 shows the proportions of program and control group members on welfare by month, starting 1 year before random assignment and

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<sup>7</sup> People receiving the SSP supplement lost 50 cents from the supplement with each additional dollar of earnings up to the target level of earnings, and they faced a positive marginal tax rate from payroll and income taxes.

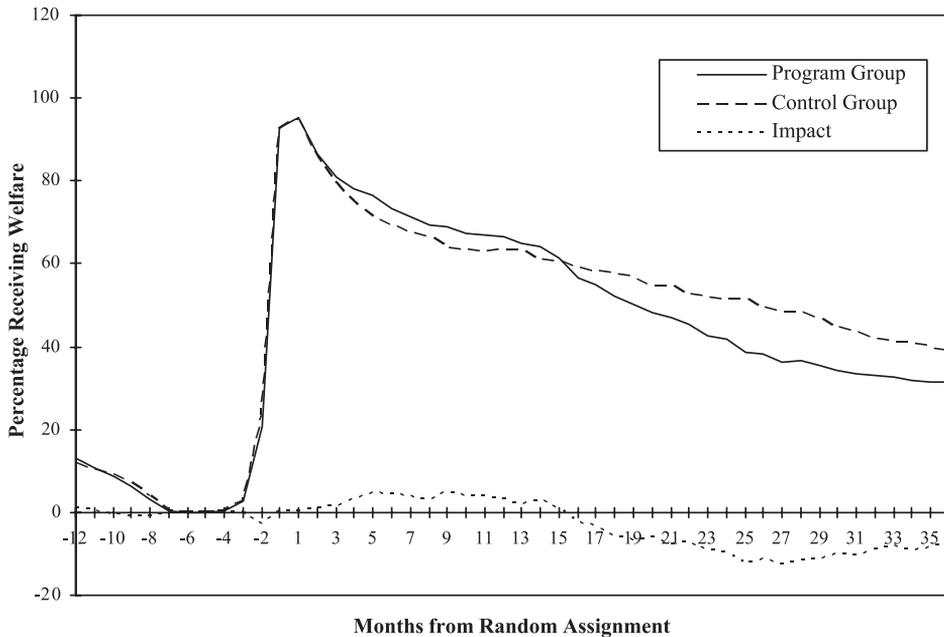


Fig. 1. Monthly rates of receiving welfare, SSP applicant study. Source: Calculations from welfare administrative records. Note: There is no month 0. Month 1 is the month of random assignment. Month -1 is the month prior to random assignment.

continuing to 36 months after, or about 6 months past the 30-month interview. Also shown in the graph is the program impact, defined as the difference between the program and control groups in the proportion on welfare. The figure clearly shows the distinct periods of the SSP applicant study, and confirms that the program group acted according to its economic incentives.

Prior to random assignment (months -12 to -1), the two groups received welfare at nearly identical rates, as is to be expected because the groups were randomly assigned, and because individuals were chosen for the study because they had not been on welfare recently.<sup>8</sup>

In the year after random assignment, the program group was more likely to receive welfare, reflecting the notion that program group members delayed leaving welfare in order to establish eligibility for the supplement.<sup>9</sup> The difference in welfare receipt reached

<sup>8</sup> Welfare receipt rates are not 0 in the months immediately before random assignment because finding people and enrolling them in the program took some time. Most program group members (72.4% of the sample) began their new welfare spell in the month before they were randomly assigned, but about 18% had received welfare for two months prior to random assignment, about 2% had been on welfare for three months prior to random assignment, and a handful of people were on welfare for more than three months prior to random assignment.

<sup>9</sup> Although SSP was designed to estimate this delayed exit effect, it was not designed to estimate an entry effect resulting from people coming onto welfare in order to receive the supplement offer. For a discussion of entry effects in welfare programs, see Moffitt (1992, 1996). Meyer (1995, 1996) also discusses entry effects in the context of a reemployment bonus program under unemployment insurance.

a peak in month 9 when about 69% of the program group and 64% of the control group received welfare. Looked at another way (not shown on the figure), about 60% of the program group and 56% of the control group remained on welfare long enough to satisfy the eligibility rule for SSP.

In the second year after random assignment, program group members who had established eligibility for the supplement had to leave welfare to receive the earnings supplement. As a result, they were less likely to receive welfare starting in about month 14 and continuing for the remainder of the follow-up period. By month 25, which corresponds to the end of the 12-month window for taking up the supplement, the welfare receipt rate of the program group was about 12.5 percentage points below the welfare receipt rate of the control group.

### 3.2. Supplement take-up by eligible applicants

Fig. 2 shows the proportion of program group members who ever initiated supplement payments and the proportion who were receiving supplement payments in a given month, starting in the 12th month of the follow-up period. These supplement take-up rates are shown both as a proportion of the eligible program group (those who were on welfare for 12 of the 13 months following the beginning of their spell) and as a proportion of the overall program group. Over the year following notification of supplement eligibility, the proportion of applicants who ever received the supplement gradually increased, reaching a

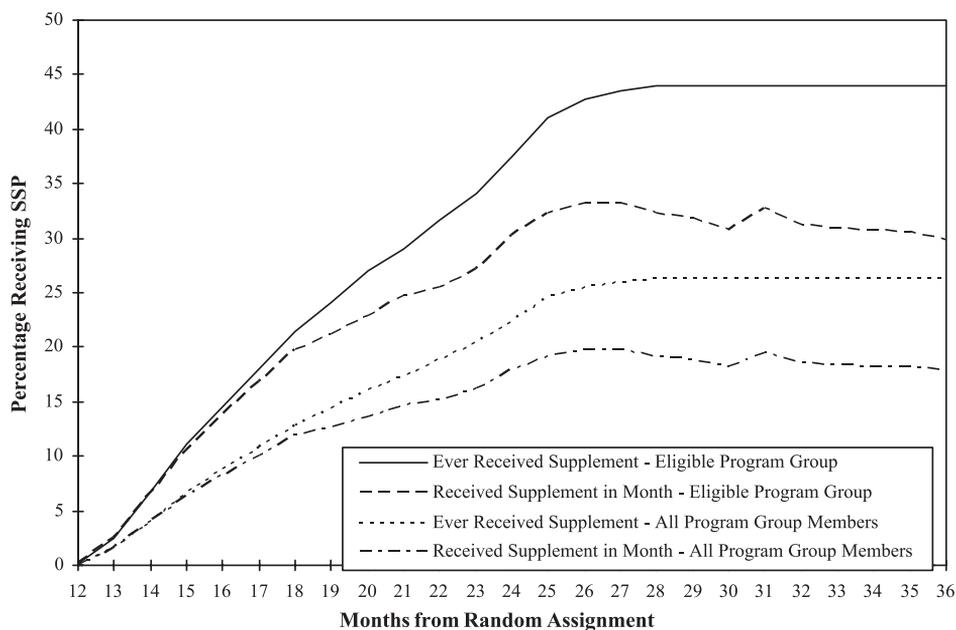


Fig. 2. Percentage of program group members receiving SSP supplement. Source: Calculations from payment records from SSP's Program Management Information System.

plateau of about 26% of the overall program group (or 44% of the eligible program group) in month 27.<sup>10</sup> The proportion of the program group receiving SSP each month also rose through the second year, reaching a peak in month 26. At the peak, substantially fewer eligible program group members were receiving SSP than had ever received SSP. The gap between the proportion who ever received SSP and those who received payments at the end of the follow-up period represents the proportion of people who started and then left full-time jobs. These participants could receive SSP supplement payments in later months, if they returned to full-time employment.

#### 4. Impacts of SSP on employment, income, and net public expenditures

Although a sizable proportion of the program group received SSP payments, a key issue is whether supplement takers would have worked full time in the absence of the program. If so, the supplement was essentially a “windfall” income gain that rewarded people who did not change their behavior. In this case, there would be no differences in full-time employment between program and control group members. The alternative is that some, or even most, supplement takers would not have left welfare and worked full time without the availability of the supplement, in which case full-time employment would be different between program and control group members.

##### 4.1. Impacts on employment and earnings

Table 2 shows the effects of SSP on employment, hours, and earnings using data collected in the 12- and 30-month follow-up surveys. As can be seen in the table, SSP increased full-time employment by roughly 12 percentage points in quarter 9. With a standard error of 1.8, the 95 percent confidence interval for this around this impact ranges roughly from 8.5 to 13.7 percentage points, implying that the program’s effect on full-time employment was very unlikely to have occurred by chance.

In each quarter shown in Table 4.1, the increase in full-time employment was about equal to the increase in total employment, implying that the supplement offer had little effect on part-time employment. This may imply that the program increased full-time employment primarily by persuading people who would not otherwise to work full time, although the result is also consistent with a movement of some people from part-time to full-time work and an equally large movement of non-workers to part-time work.

In quarter 9, SSP also increased hours worked by 20 per month. If the increase in hours of work were due only to people who otherwise would not have worked, then new workers averaged about 165 hours of work/month ( $20/0.121$ ), which is consistent with the expectation that people who began to work because of SSP worked full time.

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<sup>10</sup> Although program group members had only 12 months to initiate an SSP payment after being informed of their eligibility status, and most members of the program group were informed of their eligibility status in month 12 or 13, the fraction who ever received SSP continued to rise until month 27. This discrepancy reflects delays in verifying jobs and processing SSP checks, as well as the fact that few individuals accepted full-time jobs in the last few weeks of their SSP eligibility window.

Perhaps the most striking result shown in Table 2 is the relatively large estimated program effect on earnings. The impact on earnings rose throughout the follow-up period, reaching a peak of \$242 per month in quarter 9, or about \$2000 dollar per month for every person who went to work because of the supplement offer ( $\$242/0.121$ ). This implies that new workers earned an average hourly wage of about \$12 ( $\$242/20$  h), considerably above the British Columbia statutory minimum wage of \$7. Because wages have a floor but no ceiling, however, most of the extra work resulting from SSP paid less than \$12 per hour, as is described later in the paper.

#### 4.2. Estimated windfall

As indicated above, SSP provided a “windfall” to people who would have worked full time without the supplement offer but who are nevertheless receiving supplement payments. An estimate of this windfall is the difference between the percentage receiving supplement payments and the impact on full-time employment. In quarter 9, 18.3% of the applicant sample received supplement payments, while SSP increased full-time employment by 12.5 percentage points. These figures suggest that 5.8% of the applicant sample, or about 30% of all supplement takers, were windfall cases who would have worked full time without the supplement offer near the end of the first year.

This estimated windfall is lower than for some other programs that have supplemented earnings to encourage work. For example, an enhanced earnings disregard in a random assignment study in Minnesota did not affect employment among welfare applicants, but increased the number of people who combined work and welfare and thereby received the program’s earnings supplement (Miller et al., 1997, Table 4.11).<sup>11</sup> Likewise, a random assignment study of a time-limited welfare program in Connecticut that allowed welfare recipients to keep their entire welfare check when they went to work did not increase employment among welfare applicants, but did increase the number of applicants who received welfare (Bloom et al., 2000, Table 4.9). In contrast, both programs increased employment of long-term welfare recipients. One interpretation of these findings is that welfare applicants in Minnesota and Connecticut who received the earnings supplements would have worked without the supplements, and therefore were all windfall recipients.

Programs like the EITC also appear to have many windfall recipients. Estimates from Meyer and Rosenbaum (2001) imply that expansions of the EITC since the early 1980s encouraged about 800,000 single parents to work; other research indicates little or no increase in work by married parents (Eissa and Hoynes, 1998). According to Hotz and Scholz (2001), the number of families claiming the EITC increased by about 13 million between 1984 and 1996, and nearly 20 million families received the EITC in 1996. Since about 3 million workers without children currently receive the EITC, this suggests that the

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<sup>11</sup> The Minnesota study included tests of two related programs. One program, which is referred to as “incentives only” in Miller et al. (1997), contained the enhanced earnings disregard. A second program contained the enhanced disregard, but also required people to look for work or enroll in education or training to receive their full welfare benefits. Windfall results presented here are for the incentives only program since it was a test of an earnings supplement by itself.

Table 2  
Impacts of SSP on labor market outcomes in the applicant study

Outcome (monthly average)	Program group	Control group	Difference (impact)	Standard error
<i>Overall employment rate (%)</i>				
Quarter 1	29.0	28.3	0.7	(1.6)
Quarter 2	33.2	31.4	1.8	(1.7)
Quarter 3	35.3	33.8	1.5	(1.7)
Quarter 4	38.5	36.9	1.6	(1.7)
Quarter 5	42.2	38.1	4.1**	(1.8)
Quarter 6	45.8	38.5	7.3***	(1.8)
Quarter 7	49.0	39.5	9.6***	(1.8)
Quarter 8	52.4	40.7	11.6***	(1.8)
Quarter 9	54.9	42.8	12.1***	(1.8)
<i>Full-time employment rate (%)<sup>a</sup></i>				
Quarter 1	15.3	16.3	-1.0	(1.2)
Quarter 2	19.1	18.8	0.2	(1.4)
Quarter 3	21.3	20.5	0.7	(1.5)
Quarter 4	24.6	23.1	1.4	(1.5)
Quarter 5	29.5	25.4	4.1**	(1.6)
Quarter 6	32.6	25.6	7.0***	(1.7)
Quarter 7	35.5	26.3	9.2***	(1.7)
Quarter 8	38.7	27.7	10.9***	(1.7)
Quarter 9	41.2	28.7	12.5***	(1.7)
<i>Average hours worked (h/month)</i>				
Quarter 1	29	31	-2	(2)
Quarter 2	38	38	1	(2)
Quarter 3	41	42	0	(2)
Quarter 4	47	45	2	(3)
Quarter 5	57	50	7**	(3)
Quarter 6	62	51	11***	(3)
Quarter 7	67	52	14***	(3)
Quarter 8	71	54	17***	(3)
Quarter 9	76	56	20***	(3)
<i>Average earnings (\$/month)</i>				
Quarter 1	291	306	-15	(25)
Quarter 2	404	412	-7	(33)
Quarter 3	443	451	-8	(34)
Quarter 4	485	476	9	(34)
Quarter 5	630	552	78**	(38)
Quarter 6	684	557	126***	(38)
Quarter 7	741	572	168***	(39)
Quarter 8	788	596	192***	(40)
Quarter 9	853	610	242***	(40)
Sample size (total=2852)	1422	1430		

Table 3  
The distribution of hourly wages and weekly hours worked, month 25 in the SSP applicant study

Outcome	Program group	Control group	Difference (impact)	Standard error
<i>Hourly wage rate (% in each category)</i>				
Not working	45.7	58.3	−12.5***	(1.9)
Wage unreported <sup>a</sup>	5.0	5.9	−0.9	(0.8)
Less than \$6.00	2.9	2.5	0.4	(0.6)
\$6.00–6.99	1.3	0.8	0.4	(0.4)
\$7.00–7.99	10.1	5.2	4.8***	(1.0)
\$8.00–8.99	5.3	3.5	1.8**	(0.8)
\$9.00–9.99	4.3	3.0	1.3*	(0.7)
\$10.00–14.99	14.1	12.3	1.8	(1.3)
\$15.00 or higher	11.5	8.5	2.9***	(1.1)
<i>Hours worked per week (% in each category)</i>				
Not working	45.7	58.3	−12.5***	(1.9)
Hours per week unreported <sup>a</sup>	1.7	1.9	−0.2	(0.5)
Fewer than 30	12.5	11.5	1.0	(1.2)
30	6.0	3.5	2.5***	(0.8)
31–34	2.5	0.8	1.6***	(0.5)
35	6.1	3.9	2.2***	(0.8)
36–39	5.4	4.4	1.0	(0.8)
40	13.5	10.6	2.9**	(1.2)
More than 40	6.8	5.2	1.5*	(0.9)
Sample size (total=2582)	1422	1430		

Source: Calculations from 30-month applicant follow-up survey data.

Notes: Two-tailed *t*-tests were applied to differences in outcomes between the program and control groups. Statistical significance levels are indicated as: \*=10%; \*\*=5%; \*\*\*=1%. Rounding may cause slight discrepancies in sums and differences.

<sup>a</sup> Sample members in this category were employed during the month but did not report enough information about hours worked and/or earnings for the outcome in question to be calculated.

expansion increased the number of families receiving it by 10 million, many times more than the number who began working in response to the expansion.

Differences in the policies may explain the apparently smaller amount of windfall in SSP. SSP required people to be on welfare for a year before receiving its earnings supplements, but neither the welfare earnings disregards nor the EITC had such a requirement. As a result, people who left welfare quickly were ineligible for SSP's supplement, but would have been eligible for the welfare earnings disregard, and all working poor families are eligible for the EITC. SSP also required people to find full time work within a year of establishing eligibility, but someone in Minnesota or

Notes to Table 2:

Source: Calculations from 12- and 30-month applicant follow-up survey data.

Notes: The estimates for each quarter are calculated by averaging the monthly estimates for the three months within the quarter. Sample sizes vary for individual measures because of missing values. Two-tailed *t*-tests were applied to differences in outcomes between the program and control groups. Statistical significance levels are indicated as: \*=10%; \*\*=5%; \*\*\*=1%. Rounding may cause slight discrepancies in sums and differences. "Full-time employment" is defined as working 30 or more hours in at least 1 week during the month.

Connecticut could have received the enhanced disregard whenever they found employment, as long as they stayed on welfare and had low enough earnings to qualify for welfare. As a result, some people who could not find work within a year did not receive the earnings supplement in SSP but might have been windfall recipients in the US welfare studies. SSP required people to work 30 hours or more per week, but the EITC and welfare programs in Minnesota and Canada rewarded both part-time and full-time work. Thus, some people who would have worked part time without the supplement and who did not change their work behavior were windfall recipients in the US welfare studies but not in SSP. Other policies may also help explain why SSP apparently generated less windfall than earnings supplements in the US. For example, the EITC may have encouraged control group members in the US studies to work—thus increasing the number of windfall recipients in those studies—but the EITC does not exist in Canada.

#### *4.3. Impacts on hourly wage rates and weekly hours worked*

As mentioned above, SSP's effects on earnings and hours of work are consistent with the notion that people who went to work because of the program earned \$12 per hour on average and worked full time. Table 3 explicitly explores the question of how SSP affected hourly wages and hours worked by showing the distributions of wages and hours in the 25th month of the follow-up period, which was the latest month for which information was available for all 30-month respondents.<sup>12</sup>

In the 25th month, 12.5% more of the program group than control group worked were working. SSP's impact on jobs that paid wages between \$7 and \$8 per hour was nearly 40% of the impact on employment ( $4.8/12.5=38\%$ ). An equally large proportion of the impact on wages occurred at wages of \$10 or more per hour ( $4.7/12.5=37\%$ ), or \$3 or more above the minimum wage. Thus, SSP resulted in increases in both low-wage jobs and relatively high-wage jobs.

The second panel of Table 3 shows that the impact on the number of people working the minimum level of 30 hours/week was about 20% of the total employment impact ( $2.5/12.5$ ). Similar calculations reveal that the impact on working 31–39 hours is between 35% and 40% of the total employment impact ( $4.8/12.5$ ), as is the impact on working 40 or more hours per week ( $4.4/12.5$ ). The last finding is worth noting: even though SSP provided little incentive to work more than 30 h/week, it increased the number of people who worked at least 40 hours/week. This may imply that demand-side and institutional constraints prevented those who took up the supplement from working the minimum of 30 hours/week.

Program group members who would have worked without the supplement offer may have taken advantage of the income provided by the supplement to accept lower wage jobs than they otherwise would have. These jobs might have provided other advantages, such

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<sup>12</sup> Measures of wages and hours worked were derived from survey responses. The surveys asked each individual to indicate the number of hours they worked and how much they were paid for each spell of each job they held. Individuals were allowed to indicate an hourly wage or a weekly, monthly, semi-monthly, or annual salary. They were also allowed to specify the hours they worked per day, week, or month. For individuals who indicated a pay period other than hourly, the hourly wage was calculated as earnings divided by hours worked.

as being close to home or involving less stressful work. Likewise, income and substitution effects may have encouraged those who would have worked more than 30 hours/week in the absence of the supplement to cut back their hours of work in response to the supplement offer. While it is not possible to use differences between the program and control groups to learn how any one individual changed her behavior in response to the supplement offer (Manski, 1996), the distribution of wages and hours worked can provide some relevant information. Specifically, if fewer people earned high wages in the program group than in the control group, this implies that some people took lower wage jobs than they would have. Likewise, if fewer people worked many hours in the program group than in the control group, this implies that the supplement offer encouraged people to work fewer hours.

Table 3 provides no evidence that either effect occurred. More people in the program group than in the control group were earning at least \$15 per hour, which is the highest wage category shown in the table, and SSP increased employment at all levels of work effort that would qualify a program group member for supplement payments.

Of course, this is not definitive evidence that SSP did not encourage work cutbacks or lower-wage employment. It is possible, for example, that some people accepted lower wage jobs than they otherwise would have, but that other people went to work at relatively high wages because of the supplement. Likewise, it is possible that some people who went to work because of the supplement worked more than 40 hours/week while others who would have worked more than 40 hours/week cut back their work effort. Table 3 shows only that the number of people who cut back their work effort or took lower-wage jobs is smaller than the number who took relatively high-wage jobs or worked relatively long hours because of the supplement offer.

#### 4.4. Impacts on income, poverty, and net public expenditures

Programs that supplement earnings typically increase the amount of cash transfers that are paid out. This was true of the NIT (Robins, 1985), and it appears to be true of welfare earnings disregards (Moffitt, 1992; Michalopoulos and Berlin, 2001). Table 4 shows evidence on this issue for SSP by summarizing the effect of the program on cash payments, income, and projected taxes. All income amounts shown in Table 4 are monthly averages over the 6-month period prior to the 30-month survey. Taxes and tax credits were imputed for each participant on the basis of income data for this 6-month period.

On average over this period, SSP increased earnings by \$223 per month and increased cash transfer payments by \$57 per month (\$154 more in supplement payments, offset by \$97 less in welfare payments). However, SSP supplement takers paid payroll taxes on their earnings and income taxes on their earnings and supplement payments. In fact, program group members paid \$78 more in taxes on average than did control group members. On balance, then, SSP generated a small but statistically insignificant savings in net transfer payments. Even though increases in taxes and reductions in welfare payments more than offset SSP supplement payments, participants gained \$174 per month in after-tax income. As a consequence, SSP reduced the

Table 4  
Monthly income and net transfer payments in the SSP applicant study

Outcome	Program group	Control group	Difference (impact)	Standard error
<i>Sources of individual income (\$)</i>				
Earnings	836	613	223***	(39)
SSP supplement payments	154	0	154***	(8)
Welfare payments	352	449	-97***	(17)
Other transfer payments <sup>a</sup>	240	245	-5	(8)
Other unearned income <sup>b</sup>	129	146	-17	(11)
<i>Projected taxes and net transfer payments</i>				
Projected income taxes <sup>c</sup>	193	115	78***	(11)
Net transfer payments (i.e., public expenditures on SSP, welfare payments, and other transfers, net of income tax revenue)	571	600	-29	(26)
<i>Total individual and family income</i>				
Total individual income (\$)	1722	1470	252***	(36)
Total individual income net of taxes (\$)	1529	1355	174***	(28)
Total family income (\$) <sup>d</sup>	1972	1686	286***	(47)
Percentage with income below the low income cutoff <sup>e</sup>	57.2	68.5	-11.3***	(2.0)
Sample size (total=2852)	1422	1430		

Sources: Calculations from 30-month applicant follow-up survey data, welfare administrative records, and payments from SSP's Program Management Information System.

Notes: Sample sizes vary for individual measures because of missing values. This may cause slight discrepancies in sums and differences. Two-tailed *t*-tests were applied to differences in outcomes between the program and control groups. Statistical significance levels are indicated as: \*=10%; \*\*=5%; \*\*\*=1%. Rounding may cause slight discrepancies in sums and differences.

<sup>a</sup> Includes the Child Tax Benefit, the Goods and Services Tax Credit, Unemployment Insurance, and provincial tax credits.

<sup>b</sup> Includes alimony, child support, income from roomers boarders, and other reported income.

<sup>c</sup> Includes projected Employment Insurance premiums and Canada Pension Plan premium, deducted at payroll and projected income taxes. Payroll deductions and income taxes were projected from federal and provincial tax schedules and data on earned and unearned income and SSP supplement payments; the actual taxes paid by sample members may differ from these projections.

<sup>d</sup> Family income is measured by the sum of the sample member's income plus the earnings of any other members in that person's family.

<sup>e</sup> Calculated by comparing annualized family income with the low income cut-off defined by Statistics Canada for the sample member's location and family size.

proportion of families in poverty (income below Statistics Canada's low income cutoff) by more than 11 percentage points.

Of course, the cost calculations shown in Table 4 apply only to the 6-month period preceding the interview and the program may cost more in later periods if control group members' employment and earnings catch up to those of program group members. The calculations understate the cost of the program because they ignore other elements of government expenditures, such as administrative costs and the costs of child-care

subsidies. They also understate the cost of an ongoing program if knowledge of the program increased over time, causing more people to take advantage of the program or making them more able to take advantage of the program by finding full-time work. Finally, it is worth noting that the point estimate implies that SSP did not increase cash transfer payments among applicants, but the estimate is consistent with a modest increase in cash transfer costs, with the 95% confidence interval around the estimated effect on net transfer payments ranging as high as \$23 per month.

Table 4 also understates the cost of the program because it ignores the possibility that people might begin receiving welfare in the hope of eventually receiving the supplement. Blank (2001) estimated that the welfare caseload in the US has increased by 0.569% with each percent increase in the generosity of welfare benefits. In the period covered in this paper, the program increased cash transfers from SSP and welfare by 5.5% (from about \$16,500 on average for control group members to about \$17,400 on average for program group members, according to Michalopoulos et al., 1999). If people outside the welfare system perceive that SSP increased the generosity of welfare benefits by 5.5%, and if Blank's estimated elasticity applies to Canadian welfare caseloads, this implies that welfare caseloads would increase by about 3.1% in response to SSP ( $5.5 \times 0.569$ ).<sup>13</sup> This would have added about 44 people to the SSP applicant study sample of 1422 ( $1422 \times 0.031$ ).<sup>14</sup> If each of the additional 44 people were to work 35 h/week for \$8 per hour—typical numbers as shown in Table 3—each would receive supplement payments of about \$1000 per month, which would have added about \$31 to the monthly cost of the program per program group member during the 6 months prior to the end of the follow-up period. They would also have increased welfare expenditures by \$31 per program group member during the year in which they would have established eligibility for the supplement.<sup>15</sup>

## 5. Can the results be generalized?

Results from the SSP applicant study were remarkable in some respects. In particular, many people who responded to the supplement offer earned relatively high wages

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<sup>13</sup> This estimate is also consistent with the estimated delayed exit effect of 4% discussed earlier. It is reasonable to assume that the incentive of a non-recipient to apply for welfare and stay on welfare for a year to establish eligibility for the SSP earnings supplement is less than the incentive of a new welfare recipient to stay on welfare for a year.

<sup>14</sup> This calculation assumes that an ongoing program would require people to be on welfare for a year as a single parent to qualify for the earnings supplement. If single individuals could receive welfare for a year, then have a child, and immediately become eligible for the supplement, the entry effects would be larger. Likewise, if two-parent families could receive welfare for a year, divorce, and immediately become eligible for the supplement, the entry effects would be larger.

<sup>15</sup> For British Columbia as a whole, a 3.1% increase in single-parent welfare cases in 1997 would have added about 1450 additional cases to the 46,895 single parents on welfare at the time (Ministry of Human Resources, 1997). Since welfare benefits in British Columbia are about \$1000 per month for a family of three, this would have increased cash assistance payments by nearly \$1.5 million per month during the year in which parents would establish eligibility for the SSP supplement.

considering that they had been on welfare, and the program did not appear to increase after-tax cash transfer payments. An important policy question is whether the results can be generalized to other samples. This section addresses this issue by comparing results from the applicant study to a second SSP study that was targeted at long-term welfare recipients.

In the SSP recipient study, a group of about 6000 single parents in British Columbia and New Brunswick who had been on welfare for at least a year were selected at random from the welfare rolls between November 1992 and March 1995. One-half of these people were randomly assigned to a program group, which was offered the SSP supplement, while the remainder formed a control group. The primary difference between the applicant and recipient studies was that program group members in the applicant study had to stay on welfare a year to become eligible for the supplement offer after they entered the study, but program group members in the recipient study were eligible for the supplement when they entered the study. Another difference between the two studies is that in the applicant study all sample members were from British Columbia, whereas in the recipient study some sample members were from New Brunswick as well as British Columbia. The supplement payment formula was the same in the applicant and recipient studies.

There is no reason to expect results from the two studies to be similar because the applicant and recipients samples were quite different. For one thing, only about 60% of applicant program group members remained on welfare an entire year whereas all members of the recipient study were on welfare at least a year (and many were on welfare for much more than a year when they entered the study).<sup>16</sup>

To account for the fact that many members of the applicant sample left welfare quickly, we construct impacts per eligible program group member for the applicant study by dividing the program's impacts by the proportion of the program group eligible for SSP (59.4%).<sup>17</sup> This method provides an estimate of the effect of the program among those who established eligibility for the supplement under the assumption that the supplement offer had no effect on the behavior of the 40% of applicants who left welfare quickly and were therefore never eligible to receive it. Although this assumption seems plausible, it may have been violated if program group members who left welfare in the first year changed their decisions during that first year. For example, someone may have turned down a job offer in the month after random assignment in anticipation

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<sup>16</sup> The two samples also differed considerably in their baseline characteristics. Members of the applicant sample were more likely to have a high school diploma than members of the recipient sample, were more likely to have worked in the month prior to random assignment, and were less likely to have reported physical or emotional problems that limited their work readiness. The applicant sample's higher level of educational attainment, greater recent work experience, and lower levels of physical and emotional problems all suggest that they would have an easier time finding work than members of the recipient sample and an easier time finding high-wage jobs.

<sup>17</sup> Calculating impacts per eligible applicant program group member is borrowed from the evaluation of the *Job Training and Partnership Act (JTPA)*, which reported "impacts per enrollee" (Bloom, 1984).

of establishing eligibility for the supplement, but later in the year received and accepted a better offer.<sup>18</sup>

To make the recipient sample comparable to eligible applicants, it was limited to people in British Columbia who had been on welfare for only about a year at the time of random assignment. To be precise, the recipient sample was limited to people in British Columbia who had not received welfare in the 14th through 17th months prior to random assignment, in the 15th through 18th months prior to random assignment, or in the 16th through 19th months prior to random assignment. A total of 352 “short-term” recipients were identified using this criterion.<sup>19</sup>

To see whether these adjustments helped create more comparable groups, Fig. 3 shows welfare receipt rates for control group members of the full recipient sample, the short-term recipient sample, the full applicant sample, and the eligible applicant sample. For applicants, the time interval covered in the figure begins 12 months prior to random assignment and runs to 36 months after random assignment. A comparable time interval for the recipient sample begins 23 months prior to random assignment and runs to 25 months after.

Fig. 3 verifies that the overall recipient control group was much more likely than the overall applicant control group to have received welfare in the recent past. For example, some 70% of the overall recipient control group was receiving welfare 23 months prior to random assignment (month –12 in Fig. 3), while virtually no member of the applicant sample was receiving benefits at a comparable time. Fig. 3 also indicates that the attempt to choose a recipient group comparable with the eligible applicant control group was fairly successful. The proportion receiving welfare is strikingly similar through month –5. Subsequently, there is a steep rise in the proportion receiving welfare in both groups, culminating in a period between months 1 and 12 in which virtually 100% of both groups were on welfare. After month 12 (the month of random assignment for recipients), the two groups show similar declines in welfare receipt. Employment and earnings levels for eligible applicant control group members and short-term recipient control group members were also similar (not shown in the figure; see Michalopoulos et al., 1999).

Table 5 shows the effects of SSP per eligible applicant and among short-term recipients, as well as the differences between the two. Overall, the impacts per eligible applicant tended to be larger in magnitude than impacts for short-term recipients, and

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<sup>18</sup> An alternative to calculating impacts per eligible applicant is to compare outcomes for program and control group members who remained on welfare for a year or more. This method rests on the assumption that individuals who delayed leaving welfare to become eligible for the supplement were not fundamentally different from other eligible applicant control group members. Analyses in Michalopoulos et al. (1999) show that eligible program group members and control group members were different from one another prior to random assignment in ways that could affect their later employment and other economic outcomes. For example, eligible applicant program group members were significantly more likely to be working at the time of random assignment, and they were more likely to have graduated from high school than were eligible applicant control group members. However, as noted in Footnote 20 below, the two methods provide similar results.

<sup>19</sup> Recent research on sample selectivity models has underscored the importance of making comparisons based on the probability of satisfying the appropriate selection criteria (see, for example, Heckman et al., 1998; Rosenbaum and Rubin, 1983). Although the rule used to select the comparison sample of short-term recipients was not exactly the same as the rule used to select the applicant sample, the differences are relatively minor.

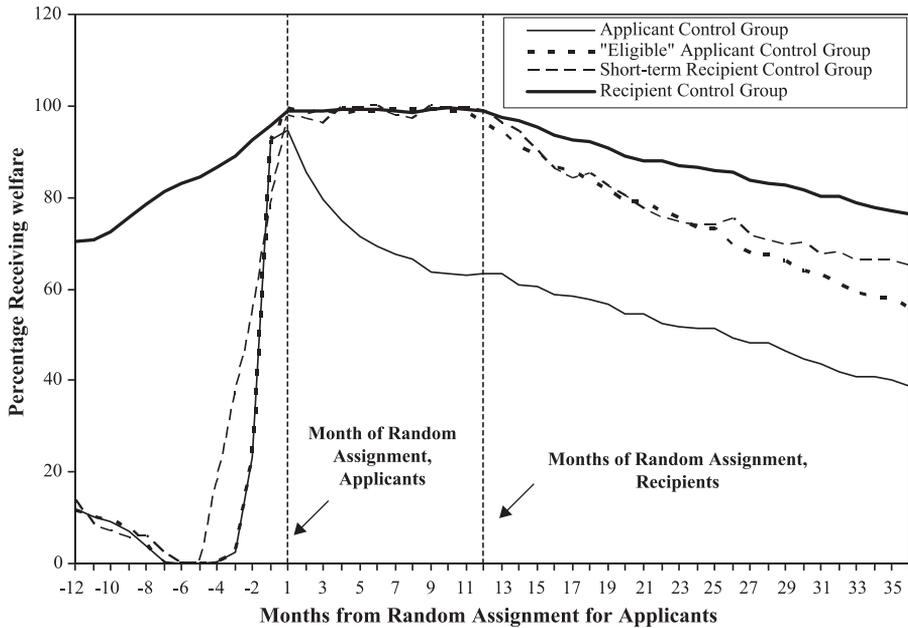


Fig. 3. Monthly rates of receiving welfare, British Columbia applicant and recipient samples. Sources: Calculations from 30-month follow-up survey data and 18-month follow-up survey data.

half of the differences in impacts are statistically significant. Perhaps the most important differences are in earnings and net transfer payments. SSP's impact on monthly earnings per eligible applicant program group member is more than three times as high as the impact on monthly earnings for short-term recipients (\$376 versus \$118). Moreover, the impact per eligible applicant program group member on monthly payments from either welfare or SSP supplements is \$108 less than the comparable impact among short-term recipients. The combination of modest impact on total welfare and SSP supplement payments and large impact on earnings in the applicant study resulted in lower net public expenditures per eligible applicant program group member. Among short-term recipients, in contrast, estimated tax collections fall well short of the increased transfer costs, leading to a \$126 per month increase in average net transfers.<sup>20</sup>

<sup>20</sup> It should be noted that impacts per eligible applicant were about the same as the difference in outcomes between eligible program group members and eligible control group members. In the 6 months prior to the 30-month interview, the difference in employment rates between eligible sample members in the two groups was 19.9 percentage points (compared to 20.5 percentage points per eligible applicant shown in Table 5), the difference in average monthly earnings is \$325 (compared to \$376 per eligible applicant), and the difference in average net transfers is -\$48 (the same as the impact per eligible applicant). By contrast, when ineligible applicant program group members were compared with ineligible applicant control group members, the differences were almost all close to zero, and only one of the outcomes shown in Table 5 was significantly different between the two groups (at the 10% significance level). Thus, the two methods, while resting on somewhat different assumptions, lead to the same general conclusions.

Table 5  
Comparisons of effects of SSP per eligible applicant and among short-term recipients

Outcome	Impact per eligible applicant <sup>a</sup>	Impact per short-term recipient	Difference	Standard error of difference
Employed (%)	20.5***	15.7***	4.8	(5.6)
Employed full-time (%) <sup>b</sup>	20.4***	13.3***	7.1	(5.1)
Average monthly hours	32***	19***	12	(9)
Average monthly earnings (\$)	376***	118	258**	(101)
Receiving welfare (%)	-18.3***	-8.1*	-10.2*	(5.4)
Receiving welfare or SSP (%)	11.0***	16.5***	-5.5	(4.8)
Average welfare payments (\$)	-163***	-60	-104*	(60)
Average welfare+SSP payments (\$)	96***	204***	-108**	(54)
Average income tax (\$) <sup>c</sup>	131***	61***	70***	(26)
Average net transfer (Welfare+SSP+Other transfers-Taxes) (\$) <sup>d</sup>	-48	126**	-174**	(73)
Average net individual income (\$) <sup>e</sup>	293***	250***	43	(78)
Income below the low income cutoff (%) <sup>f</sup>	-19.0***	-10.7**	-8.3	(5.9)
Sample size	2852	344		

Sources: Calculations from 30-month applicant follow-up survey data, 18-month recipient follow-up survey data, welfare administrative records, and payment records from SSP's Program Management Information System.

Notes: For applicants, impacts pertain to the 6-month period before the 30-month follow-up interview. For recipients, impacts pertain to the 6-month period before the 18-month follow-up interview. "Short-term recipients" are defined as British Columbia sample members from the recipient study who did not receive welfare payments in months 14–17, 15–18, or 16–19 before random assignment. Two-tailed *t*-tests were applied to impact estimates and to differences in impact estimates. Statistical significance levels are indicated as: \*=10%; \*\*=5%; \*\*\*=1%. Rounding may cause slight discrepancies in sums and differences.

<sup>a</sup> "Impact per eligible applicant" is the impact for applicants divided by the SSP eligibility rate among program group members (0.594).

<sup>b</sup> "Full-time employment" is defined as working 30 h or more in at least 1 week during the month.

<sup>c</sup> Includes projected Employment Insurance premiums and Canada Pension Plan premiums deducted at payroll and projected income taxes. Payroll deductions and income taxes were projected from federal and provincial tax schedules and data on earned and unearned income and SSP supplement payments; the actual taxes paid by sample members may differ from these projections.

<sup>d</sup> Average monthly public expenditures on SSP, welfare payments, and other transfers (Child Tax Benefit, Goods and Services Tax Credit, UI (EI) benefit, and provincial tax credits), net of projected tax revenue.

<sup>e</sup> Net individual income includes earnings, welfare, and SSP payments, as well as all other sources of individual cash income (tax credits, alimony and child support, etc.), net of projected tax revenue.

<sup>f</sup> Calculated by comparing annualized family income (individual pre-tax income plus earnings of other family members) with the low income cutoff defined by Statistics Canada for the sample member's location and family size.

These results imply that the applicant sample may be unusual, and that the results may not be generalized to other samples. The differences between results per eligible applicant and results for short-term recipients could be attributed to the higher wages among eligible applicants compared to short-term recipients. As a consequence, the program's impact on earnings per eligible applicant was greater than among short-term recipients, the impact on cash transfers was smaller per eligible applicant than among short-term recipients, and the supplement offer increased tax payments more per eligible applicant than among short-term recipients. There are a number of possible explanations for the higher wage rates in

the applicant study, including the structure of the program for the two groups and policy changes that occurred in British Columbia during this period.

As discussed earlier, the short-term recipient group entered the SSP study eligible to receive the supplement and had to find full-time work within a year. By contrast, applicants had essentially 2 years to find full-time work—1 year in which they had to remain on welfare and 1 in which they had to begin working full time. The extra year may have allowed applicants to conduct a more effective job search, or may have allowed them to prepare in other ways for work, such as by getting additional education or training.

The small delayed exit effect in the applicant study meant that the applicant study had a group of eligible sample members with no counterpart in the short-term recipient study. Since these people were on the margin between leaving welfare within a year and staying on for an entire year, they were likely to have some advantages over the short-term recipient group, such as having more education or more work experience. This may also partly explain the impacts on relatively high wages in the applicant study.

Policy changes in British Columbia may also have affected the comparison between eligible applicants and short-term recipients because of the timing of the two studies. Applicants were randomly assigned between February 1994 and February 1995. They could therefore initiate supplement receipt between February 1996 and February 1997, and potentially receive the supplement as late as February 2000. The recipient sample, in contrast, was randomly assigned between November 1992 and March 1995, which means they had to initiate supplement receipt before March 1996. Although some could have received the supplement as late as February 1999, people who were randomly assigned at the beginning of the study would have stopped receiving supplements by the end of 1996.

Economic conditions and minimum wage policy in British Columbia changed during this period. The Vancouver area labor market did not undergo huge changes in the mid-1990s, but its economy gradually improved, with unemployment falling from 9.3% in 1993 to 8.1% in 1996. During this same period the minimum wage in British Columbia increased from \$5.50 per hour in January 1993 to \$6.00 in April 1993, \$6.50 in March 1995, and \$7.00 in October 1995. The rise in the minimum wage and the strengthening economy may have been the reason that the extra work generated by SSP in the applicant study tended to be at higher wage rates than the extra work generated among short-term recipients. These higher wages may also explain why the program's impacts on earnings were much greater per eligible applicant than among short-term recipients, and why the program's cost was much less per eligible applicant than among short-term recipients. Although a higher minimum wage may have diminished the impacts of the applicant study by making it harder for people to find work, recent research on the minimum wage in the US and UK has found that the employment effects of relatively modest minimum wage increases are quite small (see, for example, [Card and Krueger, 1995](#)).

Provincial welfare policy also changed during this period. In January 1996, sanctions were introduced that prohibited anyone who quit a job without just cause from receiving welfare for 6 months. Thus, program group members who found full-time jobs and

initiated supplement payments might not be allowed to return to welfare if they voluntarily left those jobs (contrary to the original design of SSP). Later in 1996, the process of applying for welfare was made considerably harder. For example, applicants were required to make advance appointments and to bring various documents to their appointments, and the issuance of on-the-spot checks was eliminated. These changes would be expected to reinforce the effects of sanctions, potentially decreasing receipt of welfare by supplement takers who quit (or lost) full-time jobs, and providing further encouragement for them to keep their full-time work or find new full-time employment. Since individuals in the applicant study would have qualified for and received the supplement in a later period than individuals in the recipient study, these changes may have had a greater effect for applicants than for recipients.

## **6. Conclusion**

The applicant study of the Self-Sufficiency Project (SSP) tested a generous financial incentive for new welfare recipients in British Columbia. According to the analysis in this paper, SSP had substantial early effects. Despite a small increase in the number of people who extended their length of stay on welfare to become eligible for the program's earnings supplement, the financial incentive provided by the SSP supplement reduced welfare benefits and increased tax payments by enough to keep total public expenditures at about the same level. Furthermore, the increased earnings resulting from increased full-time employment generated a large increase in total family income and a large reduction in poverty levels.

The results are important for several reasons. First, they provide evidence that welfare recipients do respond to financial incentives to work and that some of them might begin to work full time if the incentives are great enough. Nevertheless, most people in the applicant study did not work full time despite the availability of a generous earnings supplement and despite the fact that the economy in British Columbia was relatively strong when the study was conducted. Thus, this level of financial incentives alone is not enough to encourage all welfare recipients to work.

The results are also important because the SSP applicant study appears to have increased household income without costing the government much in extra cash transfer payments. This result may be due in part to the features of the financial incentive offer: people had to stay on welfare a year to become eligible, had to work 30 or more hours per week to receive the earnings supplement, and had to find full-time work within a year. However, the result may also be due to the group of people who were studied. A similar study of longer-term welfare recipients in British Columbia, while also generating sizable increases in full-time employment and earnings, did not pay for itself.

All the results presented in this paper apply to the first two-and-a-half years of the applicant study, when participants were still eligible for supplement payments. After the fifth year of the study, the supplement was no longer available. Although the consequences of this change on individual behavior are yet unknown, it is possible that the impacts will persist as the work experience gained by program group members helps them to continue

to maintain their economic self-sufficiency. In contrast, the sudden loss in income due to the expiration of the supplement might force many people back on welfare. The impacts on long-run individual behavior and the long-run cost effectiveness of SSP will be the subject of future studies.

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# ARE TWO CARROTS BETTER THAN ONE? THE EFFECTS OF ADDING EMPLOYMENT SERVICES TO FINANCIAL INCENTIVE PROGRAMS FOR WELFARE RECIPIENTS

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The Self-Sufficiency Project (SSP) was a social experiment conducted in two Canadian provinces during the 1990s that tested a generous financial incentive program for welfare recipients. A little-known subsidiary experiment, called SSP Plus, had a three-way design that tested the incremental effect of adding employment services to the generous financial incentive program. Employment services are viewed by many welfare analysts as an important component of an overall strategy for helping welfare recipients escape poverty and achieve stable employment. This paper presents the results of the SSP Plus experiment. Adding employment services encouraged more people to take up the earnings supplement, and it appeared to have long-term effects on full-time employment and welfare receipt. This might be because the services improved the jobs people obtained. Compared to program participants who lacked the added services, SSP Plus members had higher earnings and wage rates, and also appear to have held more sustainable jobs.

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In recent years, policy-makers have been using financial incentives to encourage low-income individuals to work and become economically self-sufficient. In the United States, the largest financial incentive program is the Earned Income Tax Credit, which provided an earnings subsidy of up to about \$4,000 per year to nearly 20 million low-income individuals who worked in 2000 (Hotz and Scholz 2003). Other countries also use financial incentives to encourage low-income

individuals to work (for a discussion of European programs, see Ochel 2001).

Programs targeted to low-income families on welfare also provide financial incentives in addition to other provisions aimed at encouraging work, generally in the form of “earnings disregards” that allow recipients to keep part of their welfare check when they work (Robins and Michalopoulos 2001). The distinguishing feature of financial incentive programs is that they represent the “carrot”

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The Self-Sufficiency Project was a social experiment funded by the Canadian federal government. The authors are bound by contract not to distribute the SSP data to other individuals. The data are currently the property of Statistics Canada, which is in the process of determining policies regarding availability of these data to other researchers. The authors will make available the programs used to generate final results. For further elaboration on SSP data issues, contact Douglas Tattrie at the Social Research and Demonstration Corporation (SRDC) at dtattrie@srdc.org.

approach to encouraging work (sometimes termed “making work pay”), in contrast to the “stick” approach, which conditions benefit receipt on fulfilling work obligations.

Perhaps the most dramatic test of financial incentives for low-income families in the past two decades is the Self-Sufficiency Project, or SSP. SSP offered a generous monthly earnings supplement for up to three years to single-parent families in British Columbia and New Brunswick, Canada, who had been on Income Assistance (IA, or welfare) for at least a year. The supplement was equal to one-half of the difference between a “target” earnings level (initially \$37,000 in British Columbia and \$30,000 in New Brunswick, in Canadian dollars) and an individual’s earnings. To qualify for the earnings supplement, single parents had to leave IA, work full time (defined as working an average of at least 30 hours a week in a month), and take up the supplement within a year of when it was first offered. Because the income individuals could receive if they worked full time was much larger under SSP than under IA, the program provided a strong financial incentive to leave welfare and work full time.

SSP was studied by randomly assigning IA recipients either to a group receiving the incentive offer or to a control group. Results from the experiment indicate that SSP’s financial incentive offer more than doubled full-time employment during its peak years. Results from this experiment have been reported in Card and Robins (1998), Michalopoulos, Robins, and Card (2005), Card and Robins (2005), and Card and Hyslop (2005). The final reports covering the entire follow-up period of SSP are Michalopoulos et al. (2002) and Ford et al. (2003).

While SSP had large effects on full-time employment during its peak years, these effects gradually disappeared toward the end of the program period. The absence of long-term effects has been attributed to two factors. First, in order to qualify for the supplement, program group members tended to take low-wage jobs that were inherently unstable. Second, the jobs exhibited no wage growth (see Michalopoulos et al. 2002), so that when the supplement period ended, program group members were no different

from members of the control group in their earnings potential and hence exhibited similar employment behavior. Apparently, the added work experience obtained during the program period did not translate into higher wages and greater long-term employment for program group members.

The designers of SSP recognized that welfare recipients with prolonged spells of dependence on IA might face formidable barriers to finding and sustaining full-time employment. While a generous income supplement might help overcome many of these barriers, additional resources might be necessary to successfully encourage and sustain work effort. This notion was confirmed during the early stage of the SSP evaluation, when 43% of those who did not initiate supplement payments cited the inability to find a full-time job as their primary reason for not taking up the supplement offer (Lin et al. 1998). Therefore, the designers of SSP decided to test a variant of SSP called SSP Plus in which job-search and other related employment services were made available to a smaller number of program group members in New Brunswick. These employment services were in addition to any that were generally available to the control group through the community or other public agencies.

To study whether SSP Plus services would enhance the effects of the financial incentive, from November 1994 through March 1995, 892 single parents who were receiving IA and who had received IA for at least 11 of the prior 12 months in New Brunswick were randomly assigned in approximately equal numbers to three groups: (1) an SSP Regular group that was offered the SSP earnings supplement (296 families), (2) an SSP Plus group that was offered the earnings supplement plus voluntary employment services (293 families), and (3) a control group that was offered neither (303 families). The comparison of outcomes between the SSP Plus and SSP Regular groups provides an estimate of the incremental effect of the employment services. Although the design did not enable the identification of the effect of employment services without financial incentives, a great deal is known about the effects of employment services alone from dozens of

random assignment studies conducted over the past two decades. For example, Bloom and Michalopoulos (2001) discussed more than a dozen random assignment studies of mandatory welfare-to-work programs, and Bloom et al. (2005) discussed attempts to use services to encourage employment retention and advancement.

Previous academic publications on SSP have focused on results of the main SSP experiment rather than SSP Plus (although Zabel, Schwartz, and Donald [2006] presented results from SSP Plus that do not rely on the randomized design). In this paper, we present the results of the SSP Plus experiment. We report participation findings and examine the effects of SSP Plus on several outcomes, including full-time employment, earnings, and welfare receipt. We discuss the timing, as well as the level of the effects. We also examine the effects on family income and poverty. Our focus is on the incremental effects of SSP Plus (relative to the effects of the SSP Regular program).

### Data

Data for the SSP evaluation were obtained from a baseline survey, three follow-up surveys conducted approximately 18, 36, and 54 months after the baseline survey, and administrative welfare and SSP program data. This paper analyzes data covering the full 54-month follow-up period of the SSP Plus experiment and uses the sample that completed the 54-month survey. Because of modest sample attrition in survey responses, the data do not include all families for the full 54 months. About 86% of the baseline sample, or 765 members, completed the 54-month interview. Of those, 256 were in the SSP Plus group, 258 were in the SSP Regular group, and 251 were in the control group.<sup>1</sup>

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<sup>1</sup>Appendix A of Michalopoulos et al. (2003) compared effects on IA receipt and SSP supplement receipt taken from administrative records for the full sample and survey respondents for the full SSP program group and the control group. Differences in effects between survey respondents and non-respondents were not statistically significant. Likewise, differences in baseline characteristics between the two groups were generally small. A similar analysis of the potential bias from

The surveys collected detailed information on a wide variety of economic and demographic characteristics of the families. Employment and earnings histories are available for the entire 54-month period. Income Assistance histories are available for an additional year.

To help gauge the effects of SSP Plus, detailed information was collected on participation in employment services for both program groups (SSP Plus and SSP Regular) and for the control group. SSP Plus provided a specific set of services that was intended to surpass those available in the community. These included an employment plan, a résumé service, a job club, job coaching, job leads, a self-esteem workshop, and other workshops covering specific employment-related issues such as job loss or job upgrading (for further details, see Quets et al. 1999). It is important to note that SSP Plus program group members were not required to use these services. Rather, they were encouraged by program staff to use them as a benefit in addition to the financial supplement. Unlike the supplement, which could only be received if program group members worked full time within one year of random assignment, SSP Plus program group members were eligible for the services immediately following random assignment. If SSP Plus group members did not take up the supplement, they could continue to receive services for up to one year.

The added services component in SSP Plus was designed to stimulate greater program take-up and full-time employment than would occur with just the financial supplement alone. It was also hoped that the added services would lead to more sustainable jobs and would help people find new jobs if they became unemployed.

### Service and Supplement Receipt

SSP program staff actively encouraged the use of the services provided by SSP Plus. Despite the voluntary nature of the services option, virtually all SSP Plus program group

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survey non-response was not conducted for the SSP Plus sample.

Table 1. Service and Supplement Receipt and the Incremental Effect of SSP Plus.

Outcome	Outcome Levels			SSP Plus vs. Regular SSP	
	SSP Plus Program Group	SSP Regular Program Group	Control Group	Incremental Effect of SSP Plus	Standard Error
<b>Ever Since Random Assignment (%)</b>					
<b>Received Services</b>					
Took Part in Job-Search Program Such as Job Club or Job-Search Workshop	50.9	37.8	35.0	13.1***	(4.3)
Took Part in Life-Skills Program Such as Money Management or Parenting	12.4	12.0	11.7	0.3	(2.9)
Received Counseling for Personal Problems	37.0	39.4	36.5	-2.4	(4.4)
Participated in Work-Related Training or Education	23.5	25.6	25.0	-2.1	(3.7)
Participated in NB Works	9.6	10.7	9.9	-1.1	(2.7)
Took Courses toward Completion of High School Diploma, College Diploma, or University Degree	22.7	20.9	23.4	1.8	(3.6)
<b>Received Supplement</b>					
Received at Least One Supplement Payment	53.1	36.8	0.0	16.3***	(3.6)

Note: Two-tailed t-tests were applied to differences between the outcomes for the program and control groups.

\*Statistically significant at the .10 level; \*\*at the .05 level; \*\*\*at the .01 level.

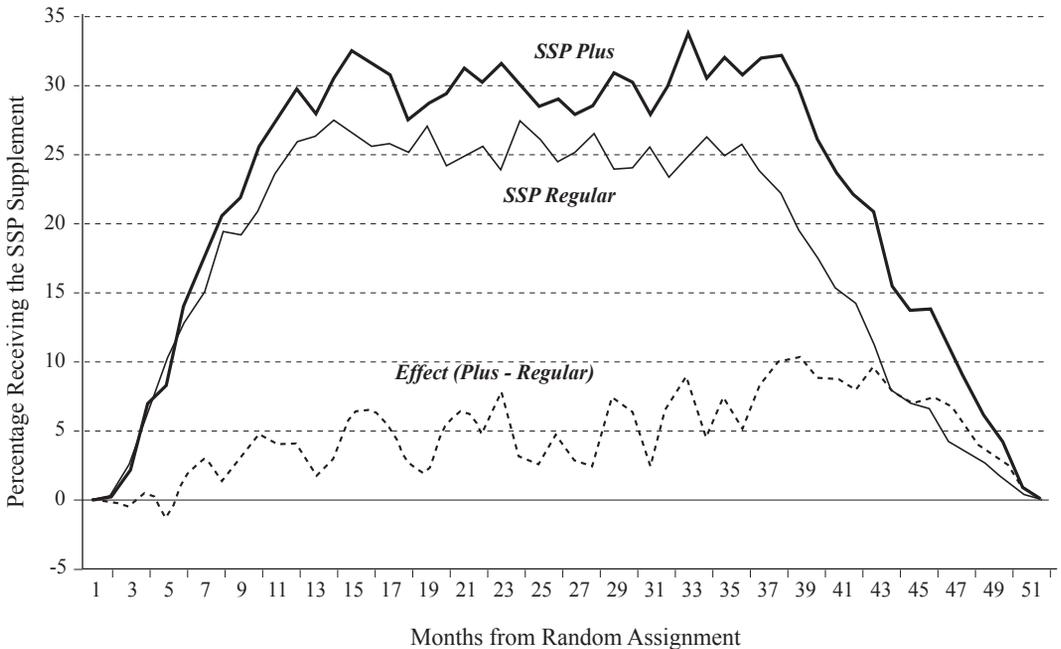
members completed an employment plan and more than half used the résumé service, received job coaching, and received job leads. About a quarter of the SSP Plus program group attended a job club (Quets et al. 1999; Lei and Michalopoulos 2001). Services were available both before and after full-time jobs and supplement take-up were obtained. For example, employment plans, résumé services, and job clubs were used more frequently before supplement take-up, while job coaching and job leads were used more frequently after supplement take-up.

An important consideration in assessing the added effects of the services in SSP Plus is whether SSP Plus program group members actually received greater services than SSP Regular program group members (and control group members). As shown in Table 1, over half of SSP Plus program group members received some type of job-search service (job clubs or job-search workshops), which is 13.1 percentage points higher than the rate of use of these services by SSP Regular program group members and is statistically

significant.<sup>2</sup> There were no statistically significant differences between the two groups in the use of other services, such as life skills management, counseling for personal problems, work-related training or education, the New Brunswick Works program, or general education. Thus, it appears that the bulk of the additional service participation by SSP

<sup>2</sup>All effects reported in this paper are regression-adjusted for 16 baseline characteristics. That is, estimates of SSP Regular and SSP Plus are the estimated coefficients that include indicators of membership in one of the two program groups and a series of baseline characteristics. Estimates of the added effects of SSP Plus services are the difference in the coefficients on the program group indicators. Baseline characteristics included in the regressions are monthly earnings and IA payments in the year before random assignment, age and age squared, and dummy variables for being female, having less than a high school education, working at baseline, responding affirmatively to a survey question about liking to go to work, expecting to be married in a year, and expecting to be working in a year. Dummy variables for missing covariates were also included in the regressions. Adjusting for the effects of covariates increases the precision of the estimated effects and controls for any differences in observable characteristics that may have occurred between groups prior to random assignment.

Figure 1. Receipt of Supplement by SSP Plus and Regular SSP Program Group Members and the Incremental Effect of SSP Plus.



Plus program group members was focused on finding jobs and not on enhancing human capital through increased education and training.

As Table 1 indicates, the higher level of job-search activities in the SSP Plus program group was accompanied by an increase in program take-up of similar magnitude. More than half of the SSP Plus program group received at least one supplement payment, compared to just over a third of SSP Regular program group members.

Figure 1 shows the percentage of SSP Plus and Regular program group members who received the supplement in each month after random assignment. The monthly supplement receipt rates are always lower than the take-up rates reported in Table 1 because there was movement into and out of jobs over time (during the months between jobs, takers did not receive a supplement). Initially, for both Plus and Regular program group members, supplement receipt rose as more and more individuals established eligibility. Supplement receipt peaked at the end of the

one-year take-up period and then remained fairly constant for both groups for about two years. After that, supplement receipt fell as the three-year period of eligibility ended for an increasing number of individuals. The point of main relevance to this paper is that in almost every month, supplement receipt was statistically significantly higher among SSP Plus program group members than among SSP Regular program group members. Over time, there was a slight upward drift in the effect on supplement receipt, averaging about 2 percentage points in the first year, 5 percentage points in the next two years, and 7 percentage points in the final year.

### Effects

#### Cumulative Effects

Although the analysis has established that program take-up was higher among SSP Plus program group members, it remains to be seen whether the higher take-up reduced welfare receipt and translated into greater

Table 2. Control Group Means, Cumulative Effects of SSP Regular, and Incremental Effects of SSP Plus on Employment, Earnings, and Income Assistance, Months 1 to 52.

<i>Independent Variable</i>	<i>Control Group Mean</i>	<i>Effect of SSP Regular</i>	<i>Standard Error</i>	<i>Incremental Effect of SSP Plus</i>	<i>Standard Error</i>
Number of Months of Full-Time Employment	10.1	6.1***	1.3	1.3	1.3
Earnings (Canadian \$)	14,821	3,628**	1,610	3,206**	1,615
Number of Months Receiving Income Assistance	38.0	-5.5***	1.4	-2.7*	1.4

Notes: Effects of SSP Regular are relative to the control group. Incremental effects of SSP Plus are relative to SSP Regular.

\*Statistically significant at the .10 level; \*\*at the .05 level; \*\*\*at the .01 level.

full-time employment. One way to assess the overall effect of SSP Plus is to examine cumulative effects on employment, earnings, and IA. These are shown in Table 2 for the entire period covered by the follow-up surveys (months 1 to 52).

The financial incentive (represented by the cumulative outcomes of the SSP Regular program when compared to the control group) clearly increased employment and earnings and reduced IA receipt. On average, the supplement alone induced program group members to work more than six additional months of full-time employment during this period, when compared to the control group (a 60% difference). Program group members also had \$3,628 higher earnings (a 24% difference) and 5+ months' less Income Assistance receipt (a 14% difference) than control group members. For program group members who were also offered additional services, full-time employment was not statistically significantly higher than for members of the SSP Regular program group, but earnings were \$3,206 (17%) higher, and IA receipt was almost three months (8%) lower.

### Effects over Time

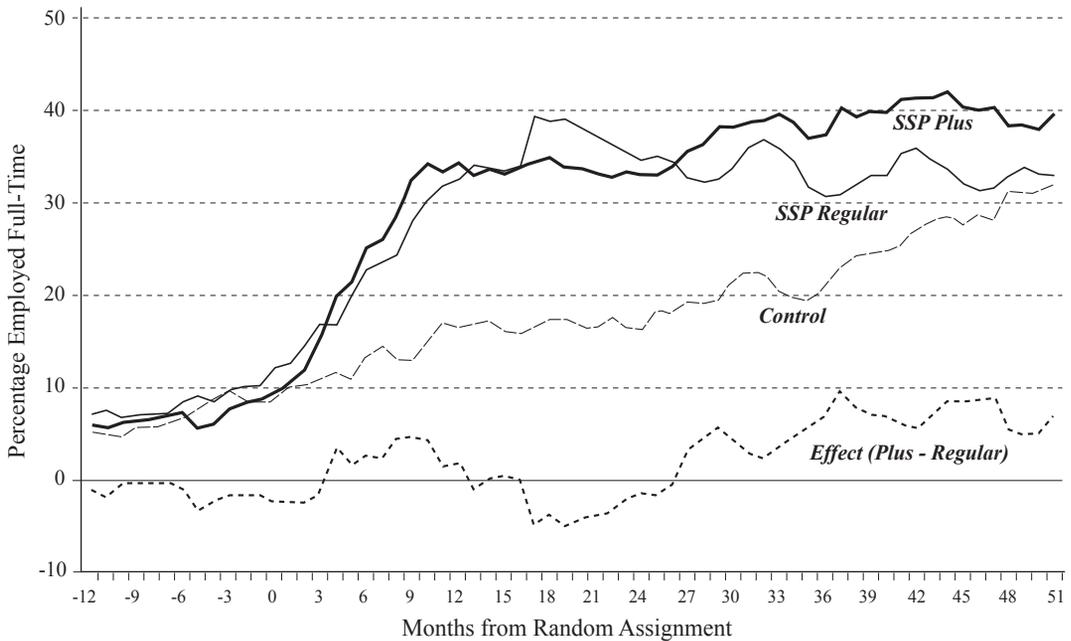
Although, as Table 2 demonstrated, the addition of SSP Plus services led to higher earnings and reduced IA receipt over the entire 54-month period following random assignment, such cumulative measures can mask substantial variation within the follow-up. The next question we address is whether and how these effects varied over

time. Naturally, effects are expected to be largest during the three years that individuals are eligible for SSP supplement payments. But if the earnings supplement offer or the additional services have potential for longer-term effects, the effects must persist past this three-year period.

Results presented earlier for SSP supplement receipt show that the effects of both the earnings supplement and the added services were greatest near the end of the first year of the program and diminished thereafter. One might expect the effect on full-time employment to follow a similar pattern. As Figure 2 shows, the full-time employment rate increased over time for all three groups, from below 10% to over 30%. In contrast to the statistically significant incremental effect of services on supplement receipt, SSP Plus had close to a zero incremental effect on the full-time employment rate throughout the first 36 months that was almost never statistically significant. But after month 36, the incremental effect of SSP Plus on full-time employment became statistically significant in most months, averaging close to 7 percentage points from months 36 to 52.

What can explain the lack of an incremental effect on full-time employment in the first three years when there was a statistically significant differential effect on supplement receipt? One possibility is that some members of the SSP Plus program group were induced by the availability of the services to take up the supplement offer but then quickly stopped working full time. Possibly they went to work to secure access to the supplement in later

Figure 2. Full-Time Employment Rates and the Incremental Effect of SSP Plus.



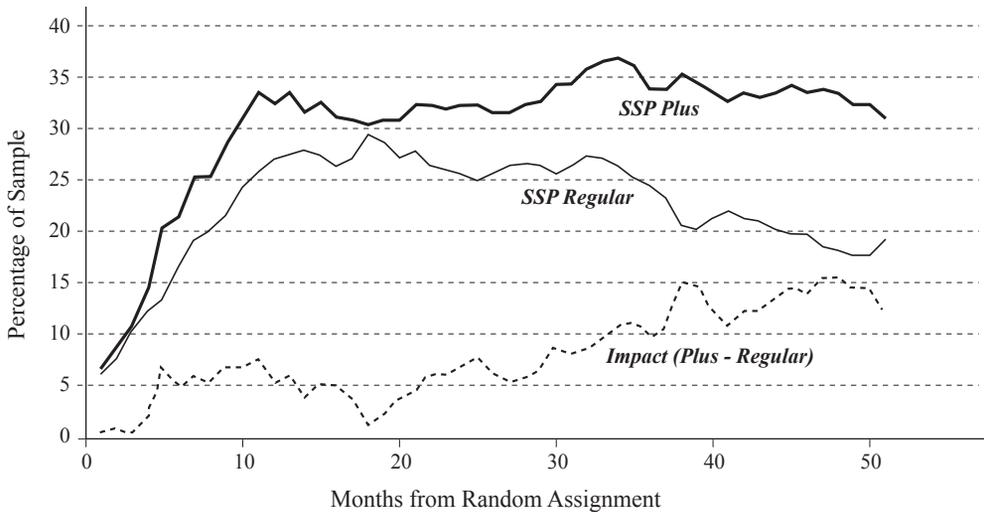
months and then either voluntarily left those jobs to pursue other opportunities or were laid off or fired from those jobs because they were not really job-ready when they initially took up the supplement. In either case, the SSP Plus services might have helped these individuals regain full-time employment later on.

To investigate the possibility that initial full-time employment was short-lived for some SSP Plus members, in Figure 3 we show the percentage of the SSP Plus and Regular SSP participants who ever took up the supplement and worked full time, by month. To maintain the advantages of random assignment, the proportions are expressed as a percentage of all sample members, not just of those who took up the supplement. For example, in month 20, just under 30% of the Regular SSP sample both took up the supplement and were working full time. For both the SSP Plus and Regular groups, the percentage increased during the first year as individuals began leaving IA for full-time work. The higher take-up rate among the SSP Plus group is shown by the higher proportion

of that group that took up the supplement and worked full time near the end of the first year and first part of the second year. In the middle of the second year, however, rates for the two groups converged. This is consistent with takers quitting or losing their full-time jobs. The idea that SSP Plus takers were more likely to leave employment quickly is supported by the fact that more than half of supplement takers in the SSP Plus group initially stayed employed full time for eight months or less, compared with only 35% for regular SSP supplement takers (results not shown in the figure or tables). After the middle of the second year, the two lines diverge again. In fact, the steady full-time employment rate among SSP Plus takers is quite remarkable and might be a testament to the effectiveness of the post-employment services in helping people keep their jobs or find new jobs. By contrast, takers in the Regular SSP group gradually stopped working full time, and this trend became particularly strong when individuals began losing eligibility for the supplement in month 36.

As noted above, one possible explanation

Figure 3. Percentage Who Took up the Supplement and Worked Full-Time.



for short-lived employment spells among SSP Plus supplement takers is that SSP Plus services encouraged some people to work who were not yet job-ready. While it is impossible to determine directly whether SSP Plus “dug deeper” in this way, as noted by Michalopoulos et al. (2000), it is possible to infer the characteristics of the people who took up the supplement offer because of SSP Plus services by making use of a feature of the random assignment experiment: the characteristics of members of the SSP Regular group who took up the supplement offer are the same, on average, as the characteristics of members of the SSP Plus group who would have taken up the supplement offer in the absence of SSP Plus services. Differences between supplement takers in the Regular SSP and SSP Plus groups must therefore be due to the characteristics of the people who were motivated by the services to go to work.

Under this assumption, the average characteristics of takers in the SSP Plus group, takers in the Regular SSP group, and those who took up the supplement because of SSP Plus services are given by

$$(1) \quad \bar{x}_{Pt} = p_{Rt} \bar{x}_{Rt} + (1 - p_{Rt}) \bar{x}_{Et},$$

where  $\bar{x}_{Et}$  represents the average characteristics of those who took up the supplement

because of SSP Plus services,  $\bar{x}_{Pt}$  is the average characteristics of those who took up the supplement in the SSP Plus group,  $\bar{x}_{Rt}$  is the average characteristics of those who took up the supplement in the Regular SSP group, and  $p_{Rt}$  is the ratio of the number of takers in the Regular SSP group to the number of takers in the SSP Plus group. Manipulating this equation provides an expression for the average characteristics of the extra supplement takers:

$$\frac{\bar{x}_{Pt} - p_{Rt} \bar{x}_{Rt}}{1 - p_{Rt}} = \bar{x}_{Et}$$

Table 3 shows the baseline characteristics of supplement takers in the SSP Plus group and in the Regular SSP group, and also shows the implied characteristics of those who took up the supplement offer because of SSP Plus services. The final column shows the p-value of the hypothesis that the extra supplement takers had the same characteristics as the takers in the Regular SSP group. For the most part, we found little difference between the inferred characteristics of the extra takers and of the regular SSP supplement takers, which is not surprising given the small number of supplement takers. Where there are statisti-

Table 3. Inferred Characteristics of Individuals Who Took up the Supplement Because of SSP Plus Services.

<i>Independent Variable</i>	<i>Supplement Takers</i>			<i>P-Value of Difference between Extra Takers and SSP Plus</i>
	<i>SSP Plus</i>	<i>Regular SSP</i>	<i>Extra Takers in SSP Plus Group (Inferred)</i>	
Group Months Employed in the Prior Year	2.8 (3.9)	3.5 (4.7)	1.1 (7.1)	0.043
Years Employed Prior to Random Assignment	7.1 (5.9)	8.8 (7.2)	3.2 (10.0)	0.001
Less Than High School Education	29.4 (45.7)	36.8 (48.5)	12.2 (101.9)	0.139
Physical Condition Limited Activity	16.9 (37.6)	23.2 (42.4)	2.4 (76.9)	0.105
Emotional Problem Limited Activity	4.4 (20.6)	5.3 (22.4)	2.4 (44.4)	0.699
Illness Limited Activity	4.4 (20.7)	6.3 (24.5)	0.0 (38.7)	0.340
Had the Blues	16.9 (37.6)	12.6 (33.4)	26.8 (97.9)	0.365
<i>Couldn't Take a Job in Prior Four Weeks Because of:</i>				
Family Problem	11.1 (31.5)	5.3 (22.4)	25.0 (92.1)	0.181
Attending School	10.4 (30.6)	3.2 (17.6)	27.5 (94.5)	0.106
Child Care Problems	8.1 (27.5)	4.2 (20.2)	17.5 (79.3)	0.296
Transportation Problems	5.9 (23.7)	2.1 (14.4)	15.0 (72.3)	0.263
Any of the Above	31.1 (46.5)	17.9 (38.5)	62.5 (127.4)	0.030
Has a Child under Age 6	59.6 (49.3)	49.5 (50.3)	82.9 (114.6)	0.073
Sample Size	136	95	41	

cally significant differences, however, they do indicate that the extra takers were less job-ready. In particular, compared to the regular SSP supplement takers, the extra takers worked fewer months in the year prior to random assignment, had fewer years of work experience prior to random assignment, were more likely to report a circumstance that had recently prevented them from taking a job, and were more likely to have a preschool-age child. Among the non-statistically significant results, two interesting ones are that fewer of the extra takers than of the regular SSP supplement takers had less than a high school educa-

tion and fewer had an emotional problem or illness that limited their activity. These results are consistent with the notion that the SSP Plus services helped otherwise able-bodied individuals overcome barriers to employment.

Because the interviewing process ended in month 54, employment data are not available after this period to determine whether the long-run effects of SSP Plus continued. However, data on IA receipt are available for one additional year for the analysis sample. While effects on IA receipt are not the same as effects on full-time employment, they are related, and effects on IA receipt are

one indication of the ability of the program group members to become economically self-sufficient.

Table 4 presents the yearly effects of SSP Regular and the incremental effects of SSP Plus on full-time employment and IA receipt. For the most part the effects are mirror images of each other, with positive effects on full-time employment translating into similar negative effects on IA receipt. As this table shows, the effect of SSP Regular on both full-time employment and IA receipt disappeared by the end of the supplement period. However, the incremental effect of SSP Plus seems to have persisted through the supplement receipt period. In the second quarter of the 6th year, about two and a half years after eligibility for the SSP supplement and services ended, the incremental effect of SSP Plus on IA receipt was close to 8 percentage points and was statistically significant at the 10% level. Moreover, the table generally indicates a rising trend in the incremental effects of SSP Plus on full-time employment and IA receipt, although the incremental effects seem to have declined a bit toward the end of the data period.

Another way to gauge whether the services provided by the SSP Plus program are having a lasting effect is to examine the effect of the program on wage rates. If SSP Plus group members find higher-wage jobs, there might be a greater inducement to keep these jobs; moreover, higher-wage jobs may be more inherently stable. Table 5 shows the effects of SSP Regular and the incremental effect of SSP Plus on the distribution of wages in month 52. As indicated in this table, it appears that SSP Plus program group members were more likely than SSP Regular program group members to take jobs paying wages that exceeded the minimum wage by \$2 or more. This is additional evidence, albeit rough, that the services provided in the SSP Plus program helped recipients find higher-paying jobs.

### **Effects on Household Income and Poverty**

One of the objectives of financial incentive programs for welfare recipients is to raise family income and reduce the long-run

incidence of poverty. Traditional welfare-to-work programs often increase employment but do not increase family income because earnings from work are exchanged for welfare benefits. Under a financial incentive program like SSP, it is possible for both employment and income to increase. Therefore, it is of great interest to determine whether the supplement and the employment services provided by SSP had any long-lasting effects on income and poverty.

Table 6 presents effects of SSP Regular and incremental effects of SSP Plus services on average monthly income and poverty in the six months immediately prior to the 54-month follow-up survey. As this table indicates, SSP Regular apparently had no long-run effects on individual earnings, but the addition of SSP Plus services did, resulting in average monthly earnings that were about \$104 higher than those for the SSP Regular program participants. This is consistent with the positive incremental effects of SSP Plus on full-time employment during the latter months of the program. Although offset somewhat by reduced IA payments, additional income was also received from other transfers, such as federal and provincial tax credits. Overall, individual income in SSP Plus was \$119 per month higher (about \$1,428 per year) than in SSP Regular. This represents an increase in individual income of about 10% over SSP Regular (monthly income for SSP Regular program group members averaged about \$1,173 [ $\$1,242 - \$69$ , or \$14,076 per year] in the six months prior to the 54-month follow-up survey).

In the six months prior to the 54-month follow-up survey, very few families were still receiving the supplement. In theory, families were only eligible to receive supplements through the end of the fourth year after random assignment, or 48 months. A few received supplements in the six months prior to the 54-month interview because a few families were interviewed earlier than 54 months after random assignment and a few families received their first supplement payment after the twelfth month due to delays in verifying employment and completing the paperwork required to initiate supplement payments.

Table 4. Effects of SSP Regular and Incremental Effects of SSP Plus on Full-Time Employment and Income Assistance Receipt.

Year	<i>Full-Time Employment</i>					<i>Income Assistance Receipt</i>				
	<i>Control Group Mean</i>	<i>Effect of SSP Regular</i>	<i>Standard Error</i>	<i>Incremental Effect of SSP Plus</i>	<i>Standard Error</i>	<i>Control Group Mean</i>	<i>Effect of SSP Regular</i>	<i>Standard Error</i>	<i>Incremental Effect of SSP Plus</i>	<i>Standard Error</i>
Year 1	0.121	0.090***	0.013	0.024	0.024	0.909	-0.084***	0.020	-0.006	0.020
Year 2	0.165	0.195***	-0.024	0.032	0.032	0.755	-0.162***	0.034	-0.023	0.035
Year 3	0.195	0.146***	0.025	0.032	0.032	0.692	-0.135***	0.036	-0.053	0.036
Year 4	0.257	0.070***	0.074**	0.035	0.035	0.615	-0.062*	0.037	-0.110***	0.037
Year 5	0.311	0.022	0.056	0.040	0.040	0.545	-0.028	0.038	-0.088**	0.038
Year 6	—	—	—	—	—	0.476	-0.005	0.041	-0.077*	0.041

Notes: Effects of SSP Regular are relative to the control group. Incremental effects of SSP Plus are relative to SSP Regular. In the latest year (Year 5 for full-time employment and Year 6 for Income Assistance) the figures are for the first two quarters.

\*Statistically significant at the .10 level; \*\*at the .05 level; \*\*\*at the .01 level.

Table 5. Control Group Means, Effects of SSP Regular, and Incremental Effects of SSP Plus on the Distribution of Wages, Month 52.

Wage Status	Hourly Wage Rate (% in Each Category)				
	Control Group Mean	Effect of SSP Regular	Standard Error of Effect	Incremental Effect of SSP Plus	Standard Error of Effect
Not Working	0.490	0.052	0.043	-0.072*	0.043
Wage Unreported in Survey	0.047	-0.023	0.015	-0.008	0.015
Less Than the Minimum Wage	0.071	-0.001	0.023	-0.003	0.023
Minimum Wage to \$1.99 above Minimum	0.207	-0.014	0.035	-0.011	0.035
\$2 or More above the Minimum Wage	0.186	-0.018	0.034	0.094***	0.035

Notes: Effects of SSP Regular are relative to the control group. Incremental effects of SSP Plus are relative to SSP Regular. In New Brunswick, the minimum wage was \$5.50 (Canadian \$) in month 52 for all sample members.

\*Statistically significant at the .10 level; \*\*at the .05 level; \*\*\*at the .01 level.

As indicated in the bottom panel of Table 6, the SSP program did not have an appreciable effect on the post-supplement period poverty rate for either program group (about 80% of SSP sample members had incomes below the poverty level at the end of the experiment). In fact, there appears to have been an unexpected increase in the poverty gap (the difference between the poverty level and actual income) for SSP Regular program group members. Among SSP Regular program group members, after the supplement eligibility period ended, there was about a 10 percentage point increase in the proportion of families with incomes below 75% of the poverty level and a corresponding reduction in the proportion of families with incomes between 75% and 100% of the poverty level. Whether or not this was a temporary difference in income cannot be determined, because data covering later periods are not available. It is important to note, however, that this effect on poverty may be an artifact of the small SSP Plus sample. A similar effect was not detected in the New Brunswick sample of the larger SSP study that included about 4,800 individuals randomly assigned to SSP or a control group.

The services provided by the SSP Plus program apparently offset the reduction in income experienced by SSP Regular program group members. At the end of the follow-up period, the SSP Plus program as a whole was neutral with respect to the incidence of poverty. Thus, the services provided by SSP Plus seem to have improved economic

conditions somewhat for families with the very lowest incomes.

### Conclusions

The central finding of this evaluation of Canada's innovative Self-Sufficiency Project of the 1990s is that adding employment services as part of a financial incentive program for welfare recipients appears to have had a number of positive effects. First, it encouraged more people to take up the offer of a financial incentive, which improved their families' financial status. Although the services had little immediate effect on full-time employment, they appear to have helped individuals maintain full-time employment, and they also seem to have led eventually to sizeable gains in full-time work. The longer-term effect on full-time work was accompanied by improved jobs for those who were offered employment services: compared to SSP participants who did not receive the services, those who did receive them enjoyed both higher earnings and higher wage rates, and the jobs they held appeared to be more sustainable. While the results of the SSP Plus experiment are intriguing, however, they rest on sample sizes too small to support definitive conclusions about the role of employment services in financial incentive programs for welfare recipients. More evidence is needed from additional tests of such an approach in different environments and, if possible, using larger sample sizes.

With this in mind, it should be noted

Table 6. Control Group Means, Effects of SSP Regular, and Incremental Effects of SSP Plus on Income and Poverty.

<i>Independent Variable</i>	<i>Control Group Mean</i>	<i>Effect of SSP Regular</i>	<i>Standard Error of Effect</i>	<i>Incremental Effect of SSP Plus</i>	<i>Standard Error of Effect</i>
<b>Components of Individual Income (\$)</b>					
Earnings	500	-19	58	104*	58
SSP Supplement Payments	—	8*	5	7	5
Income Assistance Payments	413	-37	30	-54*	30
Other Transfer Payments	271	-10	20	44**	20
Other Nonwage Income	54	-11	12	17	12
Total Individual Income	1,242	-69	52	119**	51
Total Individual Income (after Taxes)	1,184	-65	45	108**	44
<b>Total Family Income (after Taxes)</b>	<b>1,571</b>	<b>-94</b>	<b>93</b>	<b>137</b>	<b>93</b>
<b>Incidence of Poverty (%)</b>					
Income below Poverty Level	79.7	0.3	3.9	-0.8	3.9
Below 50% of Poverty Level	21.6	6.7	4.2	-7.6*	4.2
50 to 75% of Poverty Level	35.7	3.6	4.8	-1.1	4.8
75 to 100% of Poverty Level	22.4	-10.1***	3.8	7.9*	3.8

*Notes:* Effects on income are measured as average monthly effects in the six months prior to the 54 month follow-up survey. Effects of SSP Regular are relative to the control group. Incremental effects of SSP Plus are relative to SSP Regular. Other transfer payments include the Child Tax Benefit, the Goods and Services Tax Credit, Employment Insurance, and provincial tax credits. Other nonwage income includes alimony, child support, income from roomers and boarders, and other reported income. Family income is measured as the sum of the sample member's net income and the labor income of any other members of that person's family. Income below poverty level is calculated by comparing annualized family income with the annual low-income cut-off (LICO) defined by Statistics Canada for the sample member's location and family size.

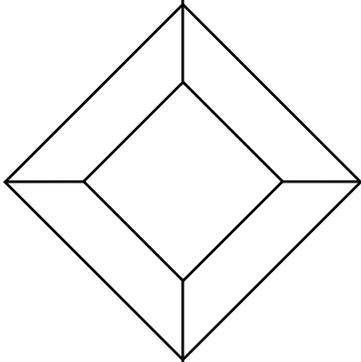
\*Statistically significant at the .10 level; \*\*at the .05 level; \*\*\*at the .01 level.

that since SSP Plus, several other programs providing employment services for welfare recipients have been launched in the United States and the United Kingdom. Some of these programs focus on job retention and career advancement rather than assistance in finding jobs. These programs are currently being tested in a series of random assignment experiments (see [www.mdrc.org](http://www.mdrc.org) for details). While several of these programs are providing financial incentives

in addition to employment services, none of the financial incentives are as generous as the ones provided in SSP Plus and none are able to identify the incremental effects of the employment services. Nonetheless, when the results from these more recent experiments become available, they should add significantly to our knowledge about the importance of employment services in financial incentive programs for welfare recipients.

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# **Making Work Pay**

## **Final Report on the Self-Sufficiency Project for Long-Term Welfare Recipients**

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## Executive Summary

This is the final report of the Self-Sufficiency Project (SSP), a study of long-term welfare recipients. SSP is a research and demonstration project designed to test a policy innovation that makes work pay better than welfare. Conceived and funded by Human Resources Development Canada (HRDC), managed by the Social Research and Demonstration Corporation (SRDC), and evaluated by the Manpower Demonstration Research Corporation (MDRC) and SRDC, SSP offered a temporary earnings supplement to selected long-term income assistance (IA) recipients in British Columbia and New Brunswick. The earnings supplement was a monthly cash payment available to single parents who had been on income assistance for at least one year and who left income assistance for full-time work. The supplement was paid on top of earnings from employment for up to three years, as long as the person continued to work full time and remained off income assistance. While collecting the supplement, the single parent received an immediate payoff from work; for a person working full time at the minimum wage, total income before taxes was about twice her earnings.<sup>1</sup> The accompanying text box briefly describes the key features of the supplement offer.

### Key Features of the SSP Earnings Supplement

- **Full-time work requirement.** Supplement payments were made only to eligible single parents who worked at least 30 hours per week and left income assistance.
- **Substantial financial incentive.** The supplement equalled half the difference between a participant's earnings and an "earnings benchmark." During the first year of operations, the benchmark was \$30,000 in New Brunswick and \$37,000 in British Columbia. Unearned income (such as child support), earnings of other family members, and number of children did not affect the amount of the supplement. The supplement roughly doubled the earnings of many low-wage workers (before taxes and work-related expenses).
- **One year to take advantage of the offer.** A person could sign up for the supplement if she found full-time work within the year after random assignment. If she did not sign up during that year, she could never receive the supplement.
- **Three years of supplement receipt.** A person could collect the supplement for three calendar years from the time she began receiving it, as long as she was working full time and not receiving income assistance.
- **Voluntary alternative to welfare.** No one was required to participate in the supplement program. After beginning supplement receipt, people could decide at any time to return to income assistance, as long as they gave up supplement receipt and met the IA eligibility requirements.

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<sup>1</sup>The feminine pronoun is used throughout this report because the vast majority of single parents receiving income assistance are women.

To measure the effects of its financial incentive, SSP was designed as a social experiment using a rigorous random assignment research design. In the SSP “recipient study,” the subject of this report, a group of about 6,000 single parents in British Columbia and New Brunswick who had been on income assistance for at least a year were selected at random from the IA rolls. Half of these people were randomly assigned to a program group and offered the SSP supplement, while the remainder formed a control group. This report describes the impacts of the supplement offer through four and a half years after random assignment, with information on welfare use through the beginning of the sixth year after random assignment. The key questions of this report are whether the SSP program increased parents’ earnings and income, whether it reduced reliance on welfare, whether it harmed or benefited children, how much it cost, and whether the supplement offer had ongoing effects in the period after parents were no longer eligible to receive it.

## THE FINDINGS IN BRIEF

Because the evaluation of SSP assigned people to the program and control groups at random, the *impact* or effect of the supplement offer is measured as the difference in employment, earnings, income, and other outcomes between the two groups. These comparisons indicate that SSP increased full-time employment, earnings, and income, and reduced poverty.

- **One third of the long-term welfare recipients who were offered the SSP earnings supplement worked full time and took up the supplement offer.** To receive the supplement, people in the program group had to work full time within a year of entering the study. Thirty-six per cent of them took up the supplement in this way and were then eligible to receive the supplement for the next three years. On average, these supplement takers received the supplement for 22 months over their three years of eligibility and received more than \$18,000 in supplement payments over that time.
- **SSP increased employment, earnings, and income, and reduced welfare use and poverty.** By the end of the first year after random assignment, program group members were twice as likely as control group members to be working full time, and the effect of SSP on employment continued to be strong through most of the follow-up period. As a result, SSP increased the average person’s earnings by nearly \$3,400, or more than 20 per cent over the earnings of the average control group member. The rules of SSP prohibited people from simultaneously receiving the earnings supplement and income assistance. As a result, the program reduced IA payments by about \$3,500 per family in the program group. When people left income assistance to receive the earnings supplement, they replaced their IA payments with SSP supplement payments. As a result, SSP increased income and substantially reduced poverty. Over the entire follow-up period, program group members had on average about \$6,300 more in combined income from earnings, IA payments, and earnings supplements than control group members. Three years after people had entered the evaluation, SSP had reduced the proportion with income below Statistics Canada’s low income cut-offs by nearly 10 percentage points. These impacts are probably concentrated among the people who took up the supplement offer, suggesting that SSP’s effects were nearly three times as large among supplement takers.

- **The effects of SSP on employment, welfare use, and income were small after parents were no longer eligible for the supplement.** Members of the program group could receive supplement payments for up to three years, and the program's effects were strong throughout the period when parents were eligible for the supplement. In the middle of the fifth year after random assignment, which was after supplement takers could no longer receive the SSP earnings supplement, the program and control groups were equally likely to work; for example, 42 per cent of both the program group and the control group were working, and the average earnings of both groups were nearly \$500 per month. The impact on welfare receipt persisted somewhat longer, but by the middle of the sixth year after random assignment both groups were about equally likely to be receiving income assistance. Although the program's effects were small at the end of the follow-up period, this finding does not change the fact that program group members gained considerable work experience because of SSP and their families benefited from the increased income they gained while the supplement was being paid.
- **Elementary-school-age children in the program group performed better in school than similar children in the control group.** Parents in the program group gave their elementary-school-age children higher marks on school performance than did parents in the control group. Results of vocabulary and math tests confirmed that in this age group children in the program group were performing better than their control group counterparts. The program achieved some of these positive effects after parents had stopped receiving the earnings supplement (and after the program had stopped having effects on family income), suggesting that a temporary income gain may have long-term effects on children. For children in other age groups, however, there were few differences in outcomes between the program and control groups.
- **Government agencies spent money to achieve SSP's positive results, but society as a whole benefited from the program.** Government agencies spent about \$1,500 per program group member administering SSP (over and above what they would have spent administering the IA program for each program group member) and spent nearly \$3,200 more on transfer payments (primarily on SSP supplement payments, again compared with what would have been spent on income assistance). From society's point of view, however, the program cost less than the benefits it provided. When fringe benefits are included, program group members earned \$4,100 on average more than they would have without the program. Because spending on transfer payments does not cost society anything — some taxpayers pay, but others receive — these increased earnings cost society only the administrative and operating costs of the program. In other words, society gained nearly \$2,600 per program group member.
- **Combining the SSP earnings supplement with services to help people find and keep jobs resulted in larger effects than did the earnings supplement alone.** Anticipating that many long-term welfare recipients would have difficulty taking up the supplement offer, SSP also tested a program called SSP Plus, which combined the earnings supplement offer with an offer of services to help people find and keep jobs. About half of the people offered this SSP Plus program were able to take up the supplement offer. Although many of the people who took up the supplement offer because of the SSP Plus job services lost their jobs quickly, the effects of SSP Plus

were remarkably strong near the end of the follow-up discussed in this report, when parents were no longer eligible for SSP's earnings supplement. This finding suggests that the job-related services had helped some members of the SSP Plus program find more stable employment than their counterparts who did not receive services.

## **AN OVERVIEW OF THE SSP PROJECT**

As has been noted, SSP offered long-term welfare recipients a financial incentive to encourage them to leave welfare for work. Briefly, SSP offered a supplement to earnings, in the form of a monthly cash payment, to people who left income assistance and worked full time (30 or more hours per week). The restriction to full-time work was designed to limit the extent to which people received the supplement without increasing or maintaining their work effort. The offer was limited to single parents who had been on income assistance for at least a year. This restriction targeted SSP benefits to a disadvantaged population that normally experiences difficulty in the labour market. The SSP supplement payment varied with individual earnings, rather than with family income, and was therefore unaffected by family composition, other family members' earnings, or unearned income. Finally, supplement payments were available for a maximum of three years, and only to program group members who initiated SSP payments within 12 months of their initial eligibility.

Understanding the structure of SSP's incentive is crucial to understanding the effects of the supplement offer. In brief, SSP's financial supplement paid parents who worked 30 or more hours per week an amount equal to half the difference between their actual earnings and a target level of earnings. In 1994 target earnings were set at \$30,000 in New Brunswick and \$37,000 in British Columbia, although they have been adjusted slightly over time to reflect changes in the cost of living and in the generosity of income assistance. For example, a participant in British Columbia who worked 35 hours per week at \$7 per hour earned \$12,740 per year and collected an earnings supplement of \$12,130 per year ( $\$37,000$  minus  $\$12,740$ , divided by 2), for a total gross income of \$24,870. In comparison, if that participant had decided not to work and instead to receive income assistance, she would have had an annual income of only \$17,111 if she had two children. When tax obligations and tax credits are taken into account, most families had incomes \$3,000 to \$7,000 per year higher with the earnings supplement program than if they worked the same number of hours without the supplement.

### **The SSP Research Design — Random Assignment**

Recruitment into SSP's main research study began in November 1992 and was completed in March 1995. Each month, Statistics Canada used IA administrative records to identify all people in selected geographic areas in British Columbia and New Brunswick who (1) were single parents, (2) were 19 years of age or older, and (3) had received IA payments in the current month and at least 11 of the prior 12 months. No other restrictions (for example, on health status) were imposed. Readers should keep in mind that the IA systems in British Columbia and New Brunswick include disabled people who would not be able to work. In the United States, some of these recipients would be in the Supplemental Security Income (SSI) program rather than in the welfare system. Thus, the sample of long-term welfare recipients in SSP may be more disadvantaged than the sample for a similar program for welfare recipients in the United States.

A random sample of people who were identified in this way were informed that they had been selected to participate in a study of IA recipients and were visited by Statistics Canada interviewers. During the visit, the interviewer administered a *baseline survey* lasting an average of 30 minutes and then described the SSP study, carefully read an informed consent form to the sample member, and answered any questions. Roughly 90 per cent of the fielding sample completed the baseline survey and signed the informed consent form.

Immediately after the baseline interview, the single parents who were recruited into the recipient study were randomly assigned to either the program group (2,880 parents), which was offered the SSP earnings supplement, or the control group (2,849 parents), which was not. Most results in this report are based on 4,852 people who completed a follow-up survey approximately 54 months after entering the study — 2,460 in the program group and 2,392 in the control group, or about 85 per cent of both groups.

For most outcomes, the period studied in this report consists of the 54 months after random assignment (including the month of random assignment) for each sample member. For the earliest sample members randomly assigned, the period studied is November 1992 through to April 1997; for those who were randomly assigned last, the period studied is roughly March 1995 through to August 1999. One exception is IA use, for which information is available for 70 months following random assignment.

## **Economic and Policy Context**

During the years after the project was initiated, major reforms altered the landscape of social policy in Canada. In 1996 the system of paying for welfare (the Canada Assistance Plan) was replaced with a block fund called the Canada Health and Social Transfer (CHST). The federal government's contributions under CHST have been substantially lower than they would have been under the earlier system. Faced with cutbacks in federal support, provinces have made a variety of changes such as reducing welfare benefit levels, tightening eligibility requirements, and imposing work requirements on welfare recipients.

Over the time covered in this report, economic conditions also changed in British Columbia and New Brunswick. In both provinces overall labour market conditions improved slightly from 1992 to 1995. Nonetheless, unemployment rates remained at historically high levels, and employment of 15- to 44-year-old women actually declined in British Columbia. From 1995 to 1998 unemployment increased somewhat in New Brunswick and remained stable in British Columbia, even though the national unemployment rate continued to fall. However, the job prospects for women might have improved during this period, because the employment rate of 15- to 44-year-old women increased in both provinces. Since 1992 the minimum wage in both provinces has been increased several times, although it is lower in New Brunswick than in British Columbia. When SSP was begun in 1992, the minimum hourly wage was \$5.50 in British Columbia and \$5.00 in New Brunswick. By 1998 the minimum wage had increased to \$7.15 in British Columbia and to \$5.50 in New Brunswick.

## **The SSP Applicant Study**

In addition to the SSP recipient study and SSP Plus, both of which are discussed in this report, SSP included a separate study of a group of people in British Columbia who had recently been approved to receive income assistance. This study is referred to as the SSP “applicant study.” This report does not describe results of the SSP applicant study, which are

presented for a four-year follow-up period in a separate report (Michalopoulos & Hoy, 2001). Results through to six years will be described in a separate, future final report.

Program group members in the applicant study received a letter and brochure informing them that if they stayed on income assistance for a year, they would become eligible for the SSP earnings supplement. The first question addressed by the SSP applicant study was whether people would stay on income assistance for a year to become eligible for the supplement. Results published elsewhere imply that the effect was small. This finding has important implications for an ongoing SSP supplement program, since it suggests that the generous SSP financial incentive would not incur substantial costs by encouraging welfare use in the short run.

Program group members who remained on income assistance for a year were then offered the same financial incentive offered in the recipient study. A second question was whether the SSP supplement would increase employment, earnings, and income for this group of welfare applicants. Reports on the applicant study indicate that the supplement offer had substantial effects on employment, earnings, IA use, and poverty. In short, results of the applicant study were similar to results of the recipient study. In one respect, however, results of the applicant study were remarkable. Employment and income gains in the applicant study were achieved without increasing government spending on after-tax cash transfer payments. This finding suggests that an ongoing program that offers the generous SSP supplement to a more employable group of welfare applicants would be even more cost-effective than for long-term welfare recipients.

## **LEARNING ABOUT THE SUPPLEMENT**

About 98 per cent of program group members received an orientation to SSP, usually within one month of random assignment and usually in person. At these sessions, an SSP staff member described the earnings supplement's main features (the work requirement, the one-year clock, the three-year time limit, and the calculation of supplement payments). The central message conveyed was that the supplement could "make work pay," even if a minimum-wage job was all that could be found. Program group members were also informed of the range of community services available to them to assist them in their efforts to enter the world of work. The SSP staff acknowledged, however, that the earnings supplement might not be the right choice for everyone, particularly those who preferred to stay home with their children or who wished to attend school full time.

In a phone survey of the 700 program group members who received the orientation up until April 1993, over 90 per cent said they recalled being told by SSP staff about the one-year clock, the 30-hour work requirement, and the way the supplement was calculated. They also remembered being told they must leave income assistance to qualify for the supplement. Nine out of ten respondents said they thought they would be financially better off on the supplement, and eight out of ten said they had no questions about the supplement.

After the orientation session, contacts between program group members and program staff were usually of modest duration (e.g. a 10- or 15-minute phone call). One or two additional workshops (such as one on money management) were offered. The program offered information and referrals to existing services in areas such as job search, education, and training, but did not directly provide these services. Doing so would have made it impossible to

determine the extent to which differences between the program and control groups' experiences could be attributed to SSP's financial incentive, as opposed to the services.

In order to initiate supplement payments, program group members who found full-time work within the one-year qualifying period had to come into the SSP office to provide evidence of their qualifying employment and sign a letter directing the IA office to end their IA payments. After initiation, participants filled out a voucher (documenting the dates, hours, and wages of their employment) after receiving each paycheque and mailed it, along with a copy of the corresponding pay stubs, to the SSP payment office. The supplement amount was then calculated according to the earnings received during a four-week or monthly accounting period. Payment system records were cross-matched with IA records every month to ensure that supplement takers were complying with the rules of the program and not drawing simultaneous benefits.

## **SUPPLEMENT TAKEUP**

- **About 36 per cent of program group members received at least one supplement.**

As has been explained, program group members had to find a full-time job within 12 months in order to qualify for supplement payments. Overall, about 36 per cent of the program group became supplement takers during that year.

Although 36 per cent of the program group received at least one supplement payment, the number receiving supplement payments in any given month was never that large, peaking at about 25 per cent of the program group near the beginning of the second year. This means that 11 per cent of the program group — the difference between the 36 per cent who ever received a supplement and the 25 per cent receiving it at the beginning of the second year — worked full time and received the supplement at some point but had stopped receiving the supplement by the beginning of the second year. In other words, about 11 per cent of the program group had already lost their full-time employment by the beginning of the second year.

During the three years they were eligible for the supplement, supplement takers received \$18,256 in supplement payments on average, and they received supplement payments for 22 months on average. However, some takers received more than others. One quarter of supplement takers received nearly \$27,000 during their three years of supplement receipt, while one quarter received less than \$10,000 in supplement payments. While one fourth of supplement takers who received the supplement most frequently received it for 33 or more months, the one fourth of supplement takers who received the supplement least frequently received it fewer than 13 months.

- **People who did not take up the supplement offer faced a number of barriers to full-time work.**

People who did not take up the supplement offer had less work experience and less education than those who did take up the supplement offer. For example, supplement takers were more than three times more likely than non-takers to be working at baseline and were substantially more likely to have a high school diploma or equivalent. Those who did not take

up the supplement offer were also more likely to say they could not work because they had an illness or disability, because they could not find good child care, or because of other family responsibilities.

Focus groups of takers and non-takers found that many who were offered the supplement appeared hindered even in making the decision to start a job search. Some rationalized their reluctance in terms of the practical hurdles they perceived: the hopelessness of finding a job and low expectations regarding child care. For others, the risk in searching for work was more emotional. Participants commonly exhibited low self-esteem and feared disappointment if they embarked on a venture that they personally expected to fail. Although a majority of non-takers initially expressed interest in the supplement offer, case note reviews suggested that fewer than one third of non-takers actually ever looked for work during the 12 months permitted for initiating the supplement.

## **IMPACTS ON EMPLOYMENT, EARNINGS, INCOME ASSISTANCE, AND SSP SUPPLEMENT PAYMENTS**

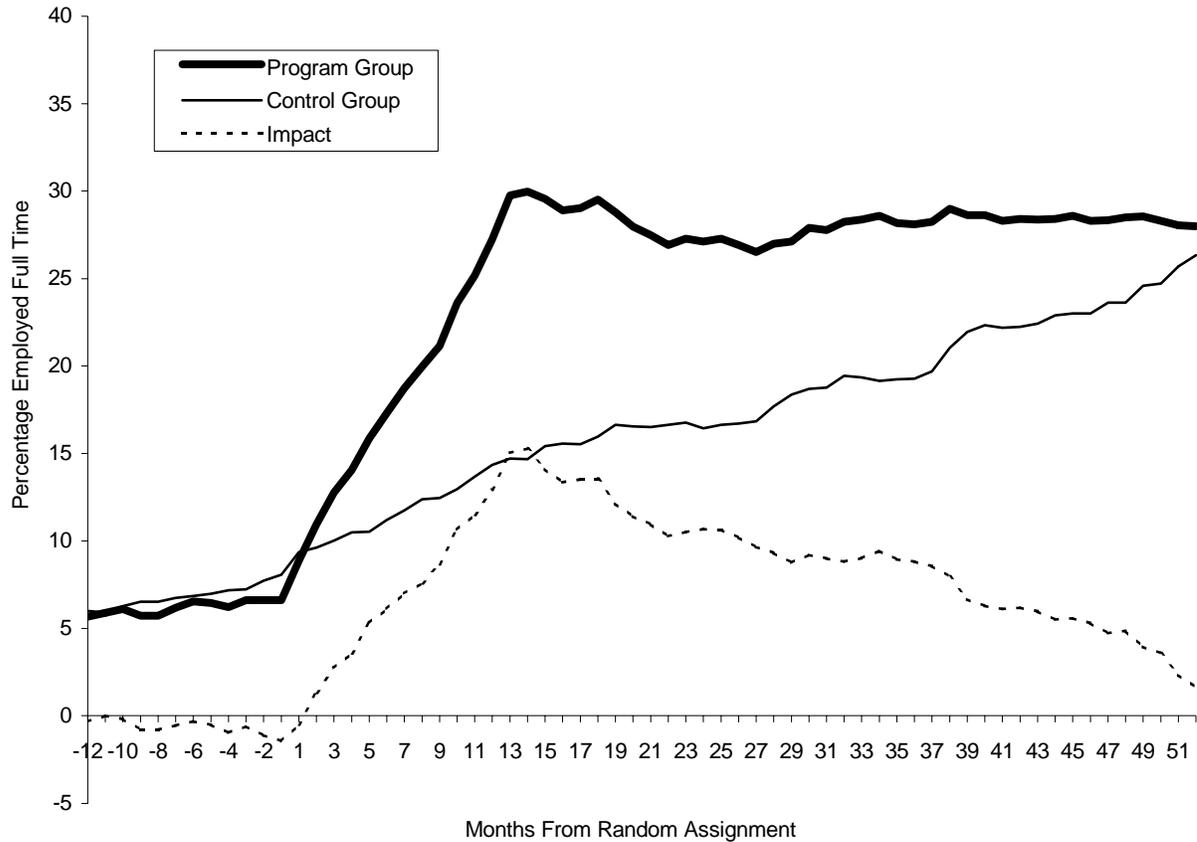
- **SSP increased employment and earnings and reduced IA use.**

Figure ES.1 represents the basic story of SSP's effects. During the year after entering the study, when program group members had to find full-time work to begin receiving the SSP supplement, the proportion of the program group working full time gradually climbed, from about 9 per cent at the time of random assignment to about 30 per cent at the beginning of the second year. During the same period, full-time employment for the control group increased more gradually, from about 9 per cent at the time of random assignment to about 15 per cent at the beginning of the second year. The difference between the two groups — 15 percentage points at the beginning of the second year — is a measure of SSP's impact on full-time employment. It is one of the largest effects on employment generated in a random assignment study of a policy designed to encourage welfare recipients to work.

SSP's effect on full-time employment declined steadily through the remainder of the follow-up period. Three factors contributed to this decline. First, people who did not qualify for a supplement payment in the first year lost the chance to receive it in the future. SSP therefore ceased to provide an incentive to members of the program group who did not qualify for the supplement during that first year. Second, the supplement may have encouraged some people to take full-time work before they were prepared to do so, and some supplement takers subsequently lost their full-time jobs. Finally, more control group members began working full time even without the supplement offer, as normally happens among welfare recipients.

SSP could have increased full-time employment either by encouraging people who would have worked part time to increase their hours slightly or by encouraging people who would not have worked in the absence of the supplement offer to move to full-time work. If people had primarily moved from part-time to full-time work, then the program's effect on employment overall would have been small. If, in contrast, people had moved primarily from not working to working full time, the program's effect on employment would have been similar to its effect on full-time work.

**Figure ES.1: Percentage Employed Full Time, by Months From Random Assignment**



**Sources:** Calculations from baseline survey data and 18-month, 36-month, and 54-month follow-up survey data.

**Note:** “Employed full time” is defined as working 30 hours or more in at least one week during the month.

The first two panels of Table ES.1 imply that SSP increased full-time work primarily by persuading people who would not have worked otherwise to work full time. In the second year after random assignment, for example, SSP increased full-time employment by more than 12 percentage points (from 16 per cent of the control group to more than 28 per cent of the program group), and it increased employment overall by more than 10 percentage points (from about 30 per cent of the control group to more than 40 per cent of the program group).

Because SSP primarily increased full-time employment, it also had a substantial effect on earnings. As with employment, the program’s effects peaked in the second year, when program group members earned \$370 per month on average compared with \$269 for the average control group member, for an impact of \$101 per person each month. When the program’s effect on employment declined after the second year, the effect on earnings also declined. In the fourth year after random assignment, when some parents were still eligible for the earnings supplement, the program increased earnings by \$52 per person each month.

**Table ES.1: SSP Impacts on Employment, Earnings, Income Assistance, and Cash Transfers**

<b>Outcome</b>	<b>Program Group</b>	<b>Control Group</b>	<b>Difference (Impact)</b>
<b>Monthly full-time employment (%)<sup>a</sup></b>			
Year 1	18.0	11.6	6.4 ***
Year 2	28.5	16.0	12.6 ***
Year 3	27.7	18.4	9.3 ***
Year 4	28.5	22.3	6.1 ***
Year 5, Quarter 1	28.3	25.0	3.3 ***
Year 5, Quarter 2	28.0	26.5	1.5
<b>Monthly employment (%)</b>			
Year 1	29.7	25.4	4.3 ***
Year 2	40.6	30.1	10.4 ***
Year 3	39.9	32.6	7.3 ***
Year 4	41.2	36.8	4.4 ***
Year 5, Quarter 1	42.1	39.8	2.3 *
Year 5, Quarter 2	41.8	41.9	0.0
<b>Average monthly earnings (\$)</b>			
Year 1	233	186	47 ***
Year 2	370	269	101 ***
Year 3	387	317	70 ***
Year 4	476	424	52 **
Year 5, Quarter 1	499	462	36
Year 5, Quarter 2	496	488	8
<b>Monthly IA receipt (%)</b>			
Year 1	85.3	91.5	-6.2 ***
Year 2	65.8	78.7	-12.9 ***
Year 3	60.9	70.1	-9.2 ***
Year 4	57.1	63.0	-5.9 ***
Year 5	52.8	56.2	-3.4 ***
Year 6, Quarter 1	49.2	52.0	-2.8 **
Year 6, Quarter 2	47.2	49.3	-2.1
<b>Average monthly IA payments (\$)</b>			
Year 1	759	794	-35 ***
Year 2	587	690	-103 ***
Year 3	516	591	-75 ***
Year 4	458	506	-48 ***
Year 5	411	437	-26 **
Year 6, Quarter 1	381	399	-18
Year 6, Quarter 2	369	379	-11
<b>Average monthly payments from IA and SSP (\$)</b>			
Year 1	853	794	59 ***
Year 2	778	690	88 ***
Year 3	680	591	89 ***
Year 4	547	506	41 ***
Year 5	414	437	-23 **
Year 6, Quarter 1	381	399	-18
Year 6, Quarter 2	369	379	-11
<b>Sample size (total = 4,852)</b>	<b>2,460</b>	<b>2,392</b>	

**Sources:** Calculations from income assistance (IA) administrative records, payment records from SSP's Program Management Information System, the baseline survey, and 18-month, 36-month, and 54-month follow-up surveys.

**Notes:** Average monthly earnings are calculated by dividing the total yearly earnings by the total number of months in which information is not missing.

Sample sizes vary for individual measures of employment and earnings because of missing values.

Two-tailed t-tests were applied to differences between the outcomes for the program and control groups.

Statistical significance levels are indicated as: \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

All analyses were only for those who responded to the 54-month survey.

<sup>a</sup>“Full-time employment” is defined as working 30 or more hours in at least one week during the month.

The rules of SSP prohibited people from simultaneously receiving the earnings supplement and income assistance. In other words, whenever SSP encouraged someone to work full time, it also encouraged her to stop receiving income assistance. The program's effects on IA receipt grew from about 6 percentage points in the first year to about 13 percentage points in the second year, and was still about 6 percentage points in the fourth year. Its effect on monthly IA payments grew from \$35 per person in Year 1 to \$103 per person in Year 2, and was still \$48 per person in Year 4.

Although SSP reduced IA payments, it did so by paying earnings supplements that often were higher than the IA payments they replaced. As a result, supplement payments and IA payments to the program group, when taken together, averaged more per member than average IA payments to control group members. In the second year after random assignment, for example, payments to program group members averaged \$778 per month, while IA payments to control group members averaged \$690. In Year 4, when the program's effects on employment and IA use had declined, program group members received \$41 more each month in IA and SSP supplement payments than control group members received in IA payments.

- **SSP substantially increased income and reduced poverty.**

Table ES.2 summarizes the effects of SSP on income, taxes and other transfers, and poverty during the six-month periods prior to the three follow-up surveys. Results from the 18-month and 36-month surveys tell a similar story. At both points in time, SSP significantly raised individual and family income, even after taking taxes into account. For example, during the six months prior to the 18-month survey, the program increased individual monthly after-tax income by \$165 per program group member (from a level of nearly \$1,200 for the control group). During the six months prior to the 36-month survey, the program increased individual after-tax income by \$102 per month (again from a control group level of about \$1,200).

By increasing income, SSP also substantially increased the number of families with income above Statistics Canada's low income cut-off. While about 14 per cent of the control group had income above the cut-off in the six months prior to the 36-month interview, for example, about 24 per cent of the program group had income above the cut-off, implying that the program reduced poverty by more than 9 percentage points. The reduction in poverty was even larger (about 12 percentage points) prior to the 18-month survey, when the program's effect on income was also larger.

One of the concerns about policies that supplement earnings is that people who would have worked without the supplement may take advantage of their extra income to cut back their work effort somewhat and rely somewhat more on cash transfers. Because SSP required full-time work and because people had to pay taxes on their extra earnings and their extra supplement payments, SSP was rather more efficient than earlier earnings supplement programs. At both the 18-month and the 36-month follow-up periods, every \$1 increase in government cash transfer payments increased monthly after-tax income by \$2 to \$3. For example, within six months prior to the 36-month survey, the government spent \$55 per month more in after-tax cash transfer payments, and individual after-tax income increased by \$102 per month.

**Table ES.2: SSP Impacts on Monthly Income and Net Transfer Payments in the Six Months Prior to the 18-Month, 36-Month, and 54-Month Follow-Up Interviews**

Outcome	6 Months Prior to 18-Month Interview		6 Months Prior to 36-Month Interview		6 Months Prior to 54-Month Interview	
	Control Group	Difference (Impact)	Control Group	Difference (Impact)	Control Group	Difference (Impact)
<b>Sources of individual income (\$/month)</b>						
Earnings	227	127 ***	355	59 **	485	19
SSP supplement payments	0	193 ***	0	162 ***	0	4 ***
Income assistance payments	723	-109 ***	573	-71 ***	446	-31 ***
Other transfer payments <sup>a</sup>	207	-9 **	238	2	300	0
Other unearned income <sup>b</sup>	54	2	93	-11	96	-17 **
<b>Projected taxes and net transfer payments (\$/month)</b>						
Projected income taxes <sup>c</sup>	4	27 ***	63	33 ***	63	-4
Net transfer payments <sup>d</sup>	925	58 ***	758	55 ***	691	-26
<b>Total individual and family income</b>						
Total individual income (\$/month)	1,222	210 ***	1,270	135 ***	1,340	-29
Total individual income net of taxes (\$/month)	1,198	165 ***	1,207	102 ***	1,278	-25
Total family income (\$/month) <sup>e</sup>	1,298	199 ***	1,450	148 ***	1,635	-10
Percentage with income above the low income cut-offs <sup>f</sup>	10.7	12.4 ***	14.3	9.4 ***	18.7	0.9
<b>Sample size (total = 4,826)</b>	<b>2,373</b>		<b>2,373</b>		<b>2,373</b>	

**Sources:** Calculations from 18-month, 36-month, and 54-month follow-up survey data, income assistance (IA) administrative records, and payment records from SSP's Program Management Information System.

**Notes:** Sample sizes vary for individual measures because of missing values. This may cause slight discrepancies in sums and differences. All analyses were only for those who responded to the 54-month survey.

Two-tailed t-tests were applied to differences in outcomes between the program and control groups. Statistical significance levels are indicated as: \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

<sup>a</sup>Includes the Child Tax Benefit, the Goods and Services Tax Credit, Employment Insurance (EI), provincial tax credits, and, for the 54-month sample only, the Family Bonus.

<sup>b</sup>Includes alimony, child support, income from roomers and boarders, and other reported income.

<sup>c</sup>Includes projected EI premiums and Canada Pension Plan premiums deducted through payroll, and projected income taxes. Payroll deductions and income taxes were projected from federal and provincial tax schedules and data on earned and unearned income and SSP supplement payments; the actual taxes paid by sample members may differ from these projections.

<sup>d</sup>Includes public expenditures on SSP, IA payments, and other transfers, net of income tax revenue.

<sup>e</sup>Family income is measured by the sum of the sample member's income and the labour earnings of any other members in that person's family.

<sup>f</sup>Calculated by comparing annualized family income with the low income cut-offs defined by Statistics Canada for the sample member's location and family size.

- **At the end of the follow-up period, program group and control group members were equally likely to work and receive income assistance.**

Program group members had to initiate supplement receipt in the year after entering the study. Since they could receive the supplement for three years, their eligibility for the supplement ended sometime during the fourth year after random assignment. The effects of SSP were generally small at the end of the follow-up period, after parents could no longer receive the earnings supplement. For example, in the middle of the fifth year, about 27 per cent of the control group worked full time compared with 28 per cent of the program group, and average earnings for both groups were close to \$500 per month. Moreover, a comparison of IA use in the sixth year found virtually no difference between the program and control groups.

Likewise, the effects of SSP on poverty were small at the end of the follow-up period. In the six-month period prior to the 54-month interview, close to 20 per cent of both the

program and control groups had income above the low income cut-offs, and the average individual in both groups had about \$1,250 per month in after-tax income.

An analysis of the employment patterns of supplement takers and control group members implies that job loss among supplement takers was primarily responsible for the reductions in the program's effect in the second and third years after random assignment, but that *control group catch-up* was primarily responsible for reduced effects in the fourth and fifth years. If this is true, then the fact that the supplement was available for only three years was not responsible for the small impacts at the end of the follow-up period.

Put another way, many control group members went to work without the supplement offer, but SSP accelerated the return to work of many people in the program group. By accelerating the return to work, SSP had considerable cumulative effects over the entire follow-up period. For example, program group members worked full time for 14 months on average compared with fewer than 10 months for control group members, and the average program group member earned nearly \$3,400 more than the average control group member over this period. Counting earnings and payments from income assistance and SSP supplements, the income for the average program group member was about \$6,350 higher than for the average control group member over the entire follow-up period.

These results are even more impressive considering that they were probably concentrated among the 36 per cent of the program group that took up the supplement offer. Per supplement taker, SSP increased full-time work experience by nearly a year, increased earnings by more than \$9,000, and increased combined income from earnings, IA payments, and supplement payments by about \$17,600.

- **SSP benefited a wide range of IA recipients.**

SSP's impacts on full-time employment were spread quite evenly across a broad range of subgroups of sample members. By making work pay better than welfare, SSP increased full-time employment among high school graduates as well as dropouts, those with and those without health barriers, those with and without young children, and those with limited prior work experience as well as those with considerable experience. Even among people who thought they could not work because of physical disabilities, problems with child care, or family or personal responsibilities, SSP had more than doubled full-time employment by the beginning of the second year after random assignment.

SSP was successful in both British Columbia and New Brunswick, two very different places with different populations, economies, and IA systems. Moreover, many of the program's effects were similar in the two places, in part because the generosity of SSP was set at different levels in the two provinces to achieve similar effects. In both provinces, for example, about 35 per cent of program group members ever received the supplement, and the program's effect on cumulative income was about \$6,000. The fact that SSP was effective in such different locations adds credibility to the notion that the offer of an earnings supplement can have important effects in a variety of circumstances and locations.

Although supplement receipt and income gains were similar in the two provinces, impacts on IA receipt and full-time employment were somewhat higher in New Brunswick than in British Columbia. For example, in Quarter 5, SSP reduced IA receipt by 16.3 percentage points in New Brunswick, compared with 10.3 percentage points in British Columbia. The differences

were particularly striking at the end of the follow-up period. While the effects of SSP were close to zero in British Columbia, in New Brunswick the program continued to reduce IA receipt (by 6.5 percentage points) and increase full-time employment (by 5.4 percentage points).

## THE EFFECTS OF SSP ON CHILDREN

SSP was intended primarily to encourage parents to go to work, but the extra work and income stemming from the program might have had a host of other effects on children of the parents who were affected by the supplement offer. SSP collected data to determine whether policies that increase employment and income among single parents benefit children or whether children suffer because increased employment (particularly full-time employment) reduces the time that children spend with their parents and increases their parents' stress.

Table ES.3 summarizes the effects of SSP on young children.

**Table ES.3: SSP Impacts on Child Outcomes at the 36-Month and 54-Month Follow-Ups, for Infants/Toddlers and Preschoolers at Random Assignment**

Outcome	36-Month Follow-Up			54-Month Follow-Up		
	Program Group	Control Group	Difference (Impact)	Program Group	Control Group	Difference (Impact)
<b>Infants/Toddlers (1–2 years old at random assignment)</b>						
Academic functioning						
PPVT-R score <sup>a</sup>	92.0	90.7	1.3	—	—	—
Above average, any subject (%)	—	—	—	77.3	73.7	3.6
Below average, any subject (%)	—	—	—	9.9	11.5	-1.7
Behaviour and emotional well-being						
Behaviour problems <sup>b</sup>	1.5	1.5	0.0	1.3	1.3	0.0
Positive social behaviour <sup>b</sup>	2.5	2.6	0.0	2.7	2.7	0.0
<i>Sample size</i>	369	396		554	605	
<b>Preschoolers (3–5 years old at random assignment)</b>						
Academic functioning						
PPVT-R score <sup>a</sup>	93.6	91.7	1.9	—	—	—
Math score <sup>c</sup>	0.4	0.3	0.1 **	—	—	—
Above average, any subject (%)	74.8	70.9	3.9	78.7	73.7	5.0 **
Below average, any subject (%)	15.7	21.7	-6.0 *	17.0	21.8	-4.8 **
Behaviour and emotional well-being						
Behaviour problems <sup>b</sup>	1.4	1.4	0.0	1.3	1.3	0.0
School behaviour problems <sup>d</sup>	1.2	1.2	0.0	—	—	—
Positive social behaviour <sup>b</sup>	2.6	2.6	0.0	2.7	2.7	0.0
<i>Sample size</i>	387	374		577	560	

**Sources:** Calculations from the 36-month and 54-month follow-up surveys.

**Notes:** Only children who were in the home at random assignment were analyzed.

Two-tailed t-tests were applied to differences between the outcomes for the program and control groups. Statistical significance levels are indicated as: \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Standard errors were adjusted to account for shared variance between siblings.

Rounding may cause slight discrepancies in sums and differences.

Sample sizes may vary for individual items because of missing values.

<sup>a</sup>The Peabody Picture Vocabulary Test–Revised (PPVT-R) is a test of children's understanding of words. Scores reported are standardized scores.

<sup>b</sup>Behaviour problems and positive social behaviour are rated on a scale from 1 (never) to 3 (often).

<sup>c</sup>The math score reflects the proportion of items answered correctly in a math skills test.

<sup>d</sup>Parents of children were asked how often in the past school year they were contacted by the school about their child's behaviour problems in school. Responses range from 1 (never contacted or contacted once) to 3 (contacted four or more times).

- **SSP neither harmed nor benefited the youngest children.**

On the basis of a standardized test of vocabulary skills given at the 36-month follow-up and parent reports at both the 36-month and the 54-month follow-ups, program group and control group children who were infants or toddlers (1 or 2 years of age) at the time of random assignment had similar levels of cognitive and academic achievement. SSP also did not significantly affect these children’s behaviour or health at either point. In short, SSP did not significantly affect very young children’s functioning and behaviour. Considering how young the children were at the start of the program, it is reassuring that the increases in full-time maternal employment did not result in negative effects for these children.

- **SSP improved cognitive and school achievement of young school-age children.**

For children who were pre-schoolers (3 or 4 years of age) at the time of random assignment, SSP improved both cognitive skills and academic achievement according to both a standardized math test (given at the 36-month follow-up) and parent reports. Moreover, the program improved their academic achievement both while parents were receiving the supplement and after they were no longer eligible for the supplement. These findings suggest that the benefits young school-age children experienced during the period of supplement eligibility set the children on a trajectory that was sustained after families reached the three-year time limit. There was little indication, however, that SSP affected children’s behaviour or health.

Table ES.4 summarizes the effects of SSP on adolescents.

**Table ES.4: SSP Impacts on Child Outcomes at the 36-Month and 54-Month Follow-Ups, for Young Adolescents and Older Adolescents at Random Assignment**

Outcome	36-Month Follow-Up			54-Month Follow-Up		
	Program Group	Control Group	Difference (Impact)	Program Group	Control Group	Difference (Impact)
<b>Young adolescents (13–15 years old at random assignment)</b>						
Academic functioning						
Parental report						
Above average, any subject (%)	68.5	70.2	-1.8	—	—	—
Below average, any subject (%)	33.3	35.1	-1.8	—	—	—
Adolescent report						
Above average, any subject (%)	80.9	86.9	-6.0	—	—	—
Below average, any subject (%)	85.5	74.8	10.7 **	—	—	—
Dropped out of school (%)	13.0	10.4	2.6	31.8	28.9	2.9
Completed 12th grade (%)	—	—	—	33.1	31.0	2.1
Attending college (%)	1.2	1.5	-0.3	9.4	8.6	0.7
Behaviour and emotional well-being						
Parental report						
School behaviour problems <sup>a</sup>	1.4	1.4	0.0	—	—	—
Adolescent report						
Ever had a baby (%)	—	—	—	16.2	14.1	2.1
Ever been arrested (%)	—	—	—	19.7	19.6	0.1
Frequency of delinquent activity <sup>b</sup>	1.4	1.3	0.1 **	—	—	—
Any smoking (%)	42.4	38.9	3.5	—	—	—
Drinks once a week or more (%)	18.1	8.3	9.7 **	—	—	—
Any drug use (%)	29.1	24.3	4.8	—	—	—
Sample size	230	202		461	406	

(continued)

**Table ES.4: SSP Impacts on Child Outcomes at the 36-Month and 54-Month Follow-Ups, for Young Adolescents and Older Adolescents at Random Assignment (Cont'd)**

Outcome	36-Month Follow-Up			54-Month Follow-Up		
	Program Group	Control Group	Difference (Impact)	Program Group	Control Group	Difference (Impact)
<b>Older adolescents (16–17 years old at random assignment)</b>						
Dropped out of school (%)	—	—	—	34.2	29.3	4.9
Completed 12th grade (%)	—	—	—	58.7	63.1	-4.4
Attending college (%)	—	—	—	13.9	11.4	2.5
Ever had a baby (%)	—	—	—	27.8	18.1	9.7 **
Ever been arrested (%)	—	—	—	17.1	18.0	-0.9
<i>Sample size</i>				257	247	

**Sources:** Calculations from the 36-month and 54-month follow-up surveys.

**Notes:** Only children who were in the home at random assignment were analyzed.

Two-tailed t-tests were applied to differences between the outcomes for the program and control groups. Statistical significance levels are indicated as: \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Standard errors were adjusted to account for shared variance between siblings.

Rounding may cause slight discrepancies in sums and differences.

Sample sizes may vary for individual items because of missing values.

<sup>a</sup>Parents of children were asked how often in the past school year they were contacted by the school about their child's behaviour problems in school. Responses range from 1 (never contacted or contacted once) to 3 (contacted four or more times).

<sup>b</sup>Frequency of delinquent activity is rated on a scale from 1 (never) to 4 (five or more times).

- **SSP had some negative effects for young adolescents while parents were receiving the supplement.**

At the 36-month follow-up point, young adolescents (13, 14, or 15 years of age at the time of random assignment) in the program group reported doing worse in school and being more likely to have committed minor acts of delinquency such as smoking and drinking. However, at the 54-month follow-up point, program group and control group parents provided similar reports regarding the behaviour, health, and academic achievement of these adolescents. After parents were no longer eligible for the supplement, there were no significant differences between the program group and control group adolescents, although information about the outcomes on which young adolescents performed significantly worse at the earlier follow-up period was not collected in the final follow-up interview. This finding suggests that young adolescents may have been harmed by a lack of supervision when parents were working full time but that the negative effects of SSP were temporary.

- **SSP had few significant effects for older adolescents.**

SSP did not significantly affect school progress or involvement in school and work for older adolescents, who were 16 or 17 years of age at the time of random assignment. Older adolescents in the program group were more likely to have had a baby by the 54-month follow-up, but this increase in fertility was not associated with other negative outcomes, such as dropping out of school or being unemployed. Moreover, the adolescents in this group were adults by the end of the follow-up period, and there may be less reason to be concerned about whether they had given birth.

## WHAT HAPPENED TO FAMILIES AFTER THE CLIFF?

As has been discussed, about 36 per cent of the program group received at least one supplement payment. These families faced a “cliff” three years later when their eligibility to take home generous supplement payments ended.

- **Among regular recipients of SSP supplement payments, income dropped substantially after families were no longer eligible for the supplement. However, families did not alter their expenditures or experience increased hardship.**

Among supplement takers, 291 received the supplement regularly (in at least five of the last six months of their supplement eligibility) and therefore were most likely to experience the effects of the cliff (the “cliff sample”).

As is shown in Table ES.5, supplement payments represented a substantial portion of income for this group. A family in the cliff sample received about \$600 per month on average from the supplement, which they lost when they were no longer eligible for the supplement. Moreover, their average monthly income grew from about \$1,200 during the month of random assignment to about \$1,800 per month when they were eligible for the supplement and then diminished somewhat — to less than \$1,500 per month — after they were no longer receiving supplement payments.

**Table ES.5: Average Monthly After-Tax Income in the Six Months Prior to Each Interview for the Cliff Sample of Intensive Supplement Recipients, by Source**

Income Source (\$)	Interview Month			
	Baseline	18	36	54
Earnings	238	771	908	1,042
SSP supplement	0	576	593	20
Income assistance	725	177	38	75
Unemployment insurance	16	21	23	49
Child Tax Credit	129	133	149	153
Alimony/child support	31	49	56	55
Other income	64	54	53	67
<b>Total</b>	<b>1,204</b>	<b>1,780</b>	<b>1,821</b>	<b>1,460</b>

**Sample size: 291**

**Sources:** Baseline survey, 18-month, 36-month, and 54-month follow-up surveys and administrative records.

**Note:** A member of the “cliff sample” is a supplement taker who received supplement payments in five of the last six months of supplement eligibility.

Rounding may cause slight discrepancies in sums and differences.

To some extent, these families were able to replace the income lost when they could no longer receive the SSP earnings supplement. A few families returned to the IA rolls, and the average IA benefit doubled after the cliff (but was about only 10 per cent of what it had been at random assignment). A few families were able to make claims from the unemployment insurance system, and income from this source doubled after the cliff. Perhaps most important, the average earnings of cliff sample members increased slightly after the cliff, implying that the supplement was not the only reason they were working full time.

Families had less income after the cliff, but their total expenditures on basic necessities such as food, clothing, and rent decreased only slightly (not shown in Table ES.5). Likewise, families generally reported only slight increases in hardship after the cliff. For example, 16 per cent of families indicated they had difficulty affording groceries when they were receiving the supplement, compared with 18 per cent after the cliff. Perhaps the amount of hardship was kept relatively low and the amount of spending kept relatively high by borrowing money. For example, average debt on all items other than a mortgage increased from about \$2,100 to more than \$2,700 per cliff sample family.

Although earnings, income, IA use, and other outcomes for the cliff sample changed over time, it is important to remember that these changes do not represent how much the supplement changed these outcomes relative to what they would have been without the supplement offer. Income for other sample members — both supplement takers and non-takers — also changed over time, and earlier sections of this Executive Summary describe the overall effects of the supplement offer on income. When the entire study sample is considered, SSP did not have a significant effect on hardship or average debt at the end of the follow-up period.

- **Losing the SSP earnings supplement may have caused some people to leave work or return to the IA rolls, but most regular supplement recipients did not change their behaviour when they lost eligibility for the supplement.**

Full-time employment for the cliff sample did decline over time after sample members lost their eligibility for the supplement. Since the members of this group were consistently receiving the supplement, most of them were also working full time near the end of their eligibility period. Eight months after they had lost their eligibility for the supplement, about 70 per cent of the cliff sample were working full time, compared with more than 90 per cent six months prior to the cliff. In comparison, employment of other SSP takers (that is, those who received it sporadically) changed very little after the cliff.

IA receipt for the cliff sample likewise increased from virtually zero prior to the cliff (since everyone in the group was receiving SSP supplements in most months) to about 13 per cent eight months after the cliff. IA use for other supplement takers did not change in any obvious way when their eligibility for the supplement ended.

## **COSTS AND BENEFITS OF SSP**

SSP had impressive effects on employment, welfare use, income, and children's outcomes. To achieve these results, the program had to spend more on cash transfers, and it had to implement a new program with new rules and infrastructure. At what cost were the gains of SSP achieved, and were those costs outweighed by the benefits of the program? That is the primary question addressed by the SSP *benefit-cost analysis*.

Costs to one person may be benefits to another. For example, SSP supplement payments were paid by the government but provided vital income to many poor families. In studying costs and benefits, the benefit-cost analysis explores three perspectives: SSP program group members, the government, and society as a whole. The program group's perspective identifies net gains or losses for members of the SSP program group. For example, program group members earned more and received SSP supplement payments, but they paid more in taxes and had to give up IA payments to receive the supplement. The government's perspective identifies gains and losses incurred by a combination of the federal and provincial governments that fund such programs. The government paid for cash transfer payments and for administering the program, but it gained through increased income and sales tax receipts. The perspective of society as a whole combines the perspectives of the program group and those outside the program (that is, the taxpayers who fund the federal and provincial government budgets). A net loss to society occurs when a loss from one perspective is not a gain from another. For example, the government paid to operate SSP, but these costs did not directly provide income to the program group. Likewise, a net gain to society occurs when a gain to one group is not a loss to another. Transfer payments — such as IA and SSP supplement payments — represent neither a loss nor a gain to society, since some people pay for the benefits while others receive them.

The benefit-cost analysis presents results primarily for outcomes that can be easily measured in dollar amounts. It does not attempt to value outcomes such as children's cognitive achievement or the time that parents spend with children. For outcomes such as earnings and cash transfer payments, results in the benefit-cost analysis differ from results in the impact analysis for two reasons. First, the SSP benefit-cost analysis projected earnings through five years to account for the small ongoing effects of the program. Second, results in the benefit-cost analysis were adjusted for inflation and are expressed in present value terms to account for the notion that income gains early in the program could have been invested and therefore were more valuable than income gains later in the period.

- **SSP provided more than \$5,200 in extra income and other benefits to the average family in the program group.**

As was described earlier, SSP increased the income that program group members received in a number of ways, which are summarized in the first column in Table ES.6. SSP increased cash transfer payments, primarily through SSP supplement payments (on average \$3,173 more for program group members than for control group members). The program increased earnings and resulted in jobs that provided extra fringe benefits (on average \$4,100 more for program group members than for control group members in earnings and the value of fringe benefits). Program group members had to pay payroll and income taxes on their additional earnings and had to pay income taxes on their supplement payments (program group members paid on average \$2,126 more in estimated taxes and in lost tax credits than did control group members). Summing up the various gains and losses, program group members experienced a financial gain of \$5,256 because of SSP.

**Table ES.6: Five-Year Estimated Net Gains and Losses per SSP Program Group Member, by Accounting Perspective (in 2000 Dollars)**

Component of Analysis	Accounting Perspective		
	Program Group	Government Budget	Society
<b>Financial effects</b>			
Transfer payments	3,173	-3,173	0
Transfer payment administration	0	-232	-232
Operating cost of SSP <sup>a,b</sup>	0	-1,267	-1,267
Program management information systems <sup>b</sup>	0	-37	-37
Supports for work <sup>c</sup>	108	-108	0
Earnings and fringe benefits	4,100	0	4,100
Taxes and premiums <sup>d</sup>	-1,732	1,732	0
Tax credits	-394	394	0
<b>Net gain or loss (net present value)</b>	<b>5,256</b>	<b>-2,691</b>	<b>2,565</b>

**Sources:** Calculations from Income Assistance (IA) administrative records; payment records from SSP's Program Management Information System (PMIS), Employment Insurance (EI) administrative records; SRDC expenditure reports for Systemhouse, Vinge and Family services; annual reports for the provinces of British Columbia (1995–1996) and New Brunswick (1994–1995); 18-month, 36-month, and 54-month follow-up surveys; and federal and provincial tax regulations as provided in the 2000 Canadian Master Tax Guide, the Canada Customs and Revenue Agency (CCRA) 1999 Tax Guide and Forms, and government publications.

**Notes:** All costs are discounted and adjusted for inflation except operating and Program Management Information costs which are not discounted.

Five-year estimates include observed values of IA and SSP payments, but some months of earnings were imputed for those individuals who had fewer than five years of earnings data available.

Rounding may cause slight discrepancies in sums and differences.

<sup>a</sup>IA operating costs are part of payment administration. For IA this cost does not include any outreach or orientation.

<sup>b</sup>Operating and PMIS costs were not projected to five years. These estimates reflect the cost of operating SSP for the observed period, which is approximately four and a half years, but varies with the date of the 54-month survey interview.

<sup>c</sup>Includes imputed child care subsidies for both provinces and Transportation/Transition to Work benefits in British Columbia.

<sup>d</sup>Amounts shown include the employee portion of EI and Canada Pension Plan (CPP) Premiums. The employer contribution to these premiums is included as part of fringe benefits of employment. For simplicity, the employee portion of CPP premiums is counted as a cost to the program group. However, these costs would likely be more than offset by future pension payments.

- **SSP cost the federal and provincial governments about \$2,700 per program group member beyond what was spent on the control group.**

To provide the benefits that accrued to families from SSP, the government spent money on a number of activities, including operating and administering the program and paying for earnings supplements (shown in the second column of Table ES.6). The main cost of SSP to the government was in the form of cash transfer payments (\$3,173 more spent on program group members than on control group members on average), although the government recouped much of this in the form of higher taxes (\$2,126 more per program group member than control group member). The federal and provincial governments also paid for operational and administrative costs of SSP. SSP required staff to conduct the activities such as orientation and outreach that were described earlier. The cost of conducting these activities was \$1,536 per program group member (net of savings in the administration of the IA program when program group members left income assistance to receive SSP's earnings supplements). Summing up various payments and gains shows that the governments spent \$2,691 per program group member to achieve SSP's benefits.

- **From the perspective of society as a whole, SSP's benefits outweighed its costs.**

As was described above, the federal and provincial governments spent \$1,536 per program group member administering SSP, over and above what would have been spent administering the IA program if no program group member had left income assistance for SSP. The extra spending increased earnings and the value of fringe benefits to program group members by \$4,100 on average (again, compared with the earnings of the average control group member). Thus, SSP provided a net benefit to society of nearly \$2,600 per program group member (shown in the last column of Table ES.6).

SSP was one of the most efficient programs designed to encourage work by supplementing earnings. In comparison, the Negative Income Tax experiments run in the United States in the 1970s found that supplementing family income actually cost society by encouraging people to work less (Burtless, 1987). More recently, a program in Minnesota that allowed long-term welfare recipients to keep more of their welfare cheques when they went to work but required them to participate in services designed to help them find work neither benefited nor cost society when it increased parents' earnings (Miller et al., 2000).

It is important to recognize that these financial costs and benefits do not take into account nonfinancial benefits or costs, such as the benefit to society when children perform better in school, the costs to parents who give up their time with their children, or the benefits to parents if their emotional well-being improves because they work. Likewise, this accounting does not include many indirect financial costs and benefits, such as increased payments to child care providers from parents who go to work. It is not clear how these other nonfinancial costs and benefits would change the basic finding that society benefited from SSP.

## **ADDING SERVICES TO THE SSP INCENTIVE: SSP PLUS**

Although SSP's financial work incentive encouraged a substantial amount of work by itself, only about one third of the people who were offered the supplement were able to find the full-time jobs required to take up the offer. In addition, many of the people who took advantage of the supplement offer soon lost their jobs.

Anticipating these problems, SSP also tested an enhanced version of the earnings supplement program called SSP Plus. In SSP Plus, a small group of IA recipients in New Brunswick was offered both the earnings supplement and a range of employment services that were designed to help them find work, maintain that work, and advance in a career (described in greater detail in the accompanying box). Services in SSP Plus could be used whenever a group member thought she could benefit from them and in whatever form she thought she would benefit from them.

### Services Available to SSP Plus Program Group Members

**Employment Plan.** A blueprint for self-sufficiency was drawn up for each group member. It included information on employment barriers, goals, and anticipated use of SSP Plus services.

**Resumé Service.** SSP Plus program staff members were available to draft, type, format, proofread, and print resumé.

**Job Club.** Program group members were encouraged to enrol in job clubs led by SSP Plus job coaches. Emphasis was on early contact with employers, consistent follow-up, and the importance of maintaining a positive attitude.

**Job Coaching.** Program group members formed one-on-one relationships with SSP Plus program staff members, who offered practical advice and emotional support.

**Job Leads.** SSP Plus program staff collected and distributed news of job openings.

**Self-Esteem Workshop.** Program group members participated in exercises designed to build self-esteem.

**Other Workshops.** Workshops targeted program group members confronting job loss or looking for higher-paying positions.

For this study, examining the effects of combining the earnings supplement with voluntary job-related services, research sample members in New Brunswick who were recruited for SSP between November 1994 and March 1995 were randomly assigned to three groups. Those in the *SSP Plus program group* were offered both the earnings supplement and SSP Plus services, those in the *regular SSP program group* were offered only the supplement, and those in the *control group* were offered neither the earnings supplement nor SSP Plus services. Of the 892 recipients who were randomly selected and agreed to be part of the study, 765 completed the 54-month interview and are examined in this report — 256 in the SSP Plus program group, 258 in the regular SSP program group, and 251 in the control group.

- **SSP Plus program group members made substantial use of the employment services they were offered, and they used more services than did regular SSP program group members.**

Prior to finding work, nearly all members of the SSP Plus program group used the employment plan, and this was the service they usually received first. In addition, more than two thirds used the resumé service at least once, three quarters received job coaching, and nearly two thirds received job leads (primarily by phone). The job club was the service least likely to be used.

Fewer people used services after they went to work. For example, only about one fifth of supplement takers completed an employment plan or used the resumé service after they had initiated supplement receipt. In contrast, because job coaches made a conscious effort to step up contact with program group members after they found employment and because job coaching focused on job retention and job advancement, three in five supplement takers received job coaching after initiating supplement receipt. The intensive use of job-coaching

and job-leads services by supplement takers after the supplement take-up could have some bearing on outcomes such as supplement receipt and employment.

Although regular SSP program group members were free to use outside services, members of the SSP Plus program group used more job-search services than members of the regular SSP program group. The 18-month follow-up survey indicated that 48 per cent of SSP Plus program group members participated in organized job-search activities, compared with 32 per cent of the regular SSP program group and 27 per cent of the control group. Field data also indicated that the job-search and other services SSP Plus offered were qualitatively different from those offered by income assistance or other providers. Services focusing on job retention and job advancement were generally unavailable in program group members' communities.

- **The addition of employment services in SSP Plus significantly increased the likelihood of supplement receipt and had substantial effects on employment, earnings, and IA use.**

About half the long-term welfare recipients in New Brunswick who were offered SSP Plus services found full-time work in the year after entering the study and therefore were able to initiate supplement receipt. In contrast, only about 37 per cent of regular SSP program group members took up the supplement offer. Thus, adding voluntary employment services to the SSP supplement offer increased supplement take-up by about 16 percentage points.

Table ES.7 shows some of the subsequent effects of SSP Plus. The primary question for SSP Plus is whether adding services to the supplement offer produced larger effects than the supplement offer by itself. This incremental effect can be determined by comparing outcomes for the SSP Plus program group with outcomes for the regular SSP program group that was randomly assigned when random assignment for SSP Plus took place (that is, between November 1994 and March 1995). This comparison is shown in the far right-hand column of Table ES.7.

During the first three years, the effects of adding services to the supplement offer were quite small. For example, the effect on full-time employment of adding services to the incentives was not statistically significant. Likewise, the additional effect of services on earnings, IA use, and IA payments were all statistically insignificant.

In the fourth year, however, the incremental effects of services began to grow. For example, adding services to the supplement offer increased full-time employment by about 7 percentage points (from about 33 per cent of the regular SSP program group to about 40 per cent of the SSP Plus program group). Likewise, the additional services began to have substantial effects on earnings (an impact of \$132 per month), IA use (a reduction of about 11 percentage points), and IA payments (a reduction of \$72 per month).

**Table ES.7: SSP and SSP Plus Impacts on Employment, Earnings, Income Assistance, and Cash Transfers**

Outcome	Average Outcome Levels			SSP Plus vs. Control	Regular SSP vs. Control	SSP Plus vs. Regular SSP
	SSP Plus Program Group (1)	Regular SSP Program Group (2)	Control Group (3)	Impacts of Financial Incentives and Services (4)	Impacts of Financial Incentives Alone (6)	Added Impacts of Services (8)
<b>Monthly full-time employment (%)</b>						
Year 1	22.4	21.1	12.1	10.3 ***	9.0 ***	1.3
Year 2	33.6	35.9	16.5	17.1 ***	19.5 ***	-2.4
Year 3	36.6	34.1	19.5	17.1 ***	14.6 ***	2.5
Year 4	40.1	32.8	25.7	14.4 ***	7.0 **	7.4 **
Year 5, Quarter 1	38.0	33.2	30.9	7.1 *	2.3	4.8
Year 5, Quarter 2	39.7	33.4	31.3	8.4 **	2.1	6.3
<b>Average monthly earnings (\$)</b>						
Year 1	245	207	158	87 ***	49 **	38 *
Year 2	376	377	247	128 ***	130 ***	-2
Year 3	444	394	312	132 ***	82 **	50
Year 4	574	442	406	167 ***	35	132 **
Year 5, Quarter 1	580	481	484	96	-3	99 *
Year 5, Quarter 2	593	482	515	78	-33	111 *
<b>Monthly IA receipt (%)</b>						
Year 1	81.9	82.5	90.9	-9.1 ***	-8.4 ***	-0.6
Year 2	57.1	59.3	75.5	-18.4 ***	-16.2 ***	-2.3
Year 3	50.4	55.7	69.2	-18.8 ***	-13.5 ***	-5.3
Year 4	44.3	55.3	61.5	-17.3 ***	-6.2 *	-11.0 ***
Year 5	42.9	51.7	54.5	-11.6 ***	-2.8	-8.8 **
Year 6, Quarter 1	39.3	48.1	49.2	-9.9 **	-1.1	-8.8 **
Year 6, Quarter 2	39.7	46.2	46.0	-6.4	0.2	-6.6
<b>Average monthly IA payments (\$)</b>						
Year 1	590	595	646	-56 ***	-51 ***	-5
Year 2	420	429	539	-119 ***	-110 ***	-9
Year 3	372	414	503	-131 ***	-89 ***	-42
Year 4	333	404	452	-119 ***	-48 *	-72 **
Year 5	311	369	383	-72 **	-14	-58 **
Year 6, Quarter 1	288	338	350	-62 **	-12	-50
Year 6, Quarter 2	291	331	326	-35	5	-40
<b>Average monthly payments from IA and SSP (\$)</b>						
Year 1	712	702	644	68 ***	58 ***	10
Year 2	658	637	541	117 ***	96 ***	21
Year 3	602	606	504	99 ***	102 ***	-4
Year 4	489	502	454	35	48 *	-14
Year 5	317	372	383	-66 **	-12	-54 *
Year 6, Quarter 1	288	338	350	-62 **	-12	-50
Year 6, Quarter 2	291	331	326	-35	5	-40
<b>Sample size</b>	<b>256</b>	<b>258</b>	<b>251</b>			

**Sources:** Calculations from income assistance (IA) administrative records, payment records from SSP's Program Management Information System, the baseline survey, and 18-month, 36-month, and 54-month follow-up surveys.

**Notes:** Average monthly earnings are calculated by dividing total yearly earnings by total number of months in which information is not missing. Sample sizes vary for individual measures of employment and earnings because of missing values.

Two-tailed t-tests were applied to differences between the outcomes for the program and control groups.

Statistical significance levels are indicated as: \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

All analyses were only for those who responded to the 54-month survey.

<sup>a</sup>“Full-time employment” is defined as working 30 or more hours in at least one week during the month.

- **The effects of additional services were still substantial near the end of the follow-up period.**

Although the total effect of SSP Plus declined somewhat after the second year, the effects of the added services were still substantial near the end of the follow-up. In the first quarter of Year 5 — after program group members had ceased being eligible to receive the earnings supplement — the added services continued to increase earnings by about \$99 per month (from \$481 for the regular SSP program group to \$580 for the SSP Plus group). In the first quarter of Year 6, the added services reduced IA receipt by nearly 9 percentage points (from 48.1 per cent of the regular SSP program group to 39.3 per cent of the SSP Plus group).

The ongoing effects of SSP Plus are encouraging, but it is important to remember that SSP Plus was a small study. Only about 250 SSP Plus program group members are studied in this report compared with nearly 2,500 program group members in the main SSP study, and the SSP Plus study was conducted only in New Brunswick. The small number of people involved in the SSP Plus study makes it difficult to know how large the effects of a larger program would be, and further research on a larger version of SSP Plus would help to clarify how effective job-related services are at sustaining the effects of a generous financial incentive.

## **POLICY IMPLICATIONS**

Results from the SSP recipient study contain the following implications for welfare policy-makers.

- **Financial incentives alone can encourage long-term welfare recipients to work full time.**

It may sound obvious that incentives matter to welfare recipients, but when the SSP project began this opinion was associated more with conservative critics of welfare who decried the disincentives of the welfare system than with reformers who hoped to use positive incentives to encourage work. Skeptics of SSP thought that long-term welfare recipients had too many personal problems to make the leap to full-time work and that SSP's supplement offer would consequently have little effect on behaviour. They pointed to prior research that supposedly showed small effects from financial incentives allowing welfare recipients to keep more of their welfare cheque when they went to work. The skeptics were at least partly wrong. In SSP, more than one third of the long-term welfare recipients who were offered the earnings supplement went to work full time, and the program doubled full-time employment at its peak.

- **When structured properly, programs with financial incentives can be quadruple winners — encouraging work, increasing earnings, reducing poverty, and benefiting society.**

During the four-and-a-half-year period in which people were studied, SSP increased full-time employment by 44 per cent over control group levels, increased earnings by 20 per cent, increased income by 13 per cent, and substantially increased the number of families with income above Statistics Canada's low income cut-offs. By providing these benefits at

relatively low administrative costs, SSP also provided benefits to society estimated at nearly \$2,600 per program group member. This combination of such large effects on earnings, income, and poverty with net gains to society has rarely been seen in a random assignment study of a program to encourage welfare recipients to work.

The structure of the supplement offer contributed to this unique combination of effects. The supplement was offered only to people who had been on welfare for a year, it was given only to people who found full-time work within a year, it was available only for three years, and it was paid only to those who worked full time. All these features increased the efficiency of the program by offering the supplement to people who would be relatively unlikely to work on their own and by ensuring that people who received the supplement also gained a substantial amount of their income from earnings. A change in any of these rules would have made SSP more expensive and less efficient, or would have benefited fewer people.

- **Raising the income of poor families also provides benefits to their elementary-school-age children, and those benefits can be sustained.**

In SSP, children who were in elementary school at the end of three years performed better than their control group counterparts in school and on tests of cognitive skills, and some of these effects were sustained after parents were no longer eligible for the supplement. This result confirms other findings that income is important for children's development and that increased income can have long-lasting effects for children. However, very young children and adolescents did not benefit from SSP, suggesting that other policies such as after-school programs for adolescents may be important when parents are asked to work full time.

- **Combining other policies with financial incentives might increase their effects.**

About one third of the program group worked full time and received at least one supplement payment. Two thirds did not. The fact that many families did not benefit from the supplement offer does not reflect badly on SSP, since no program can help everyone. Nevertheless, results from the SSP study suggest some ways in which a financial work incentive could be augmented to provide broader benefits, to encourage more people to work, and to sustain the effects of the program over a longer period of time.

SSP Plus provided evidence of one type of augmented financial incentive and showed that adding voluntary employment services to a generous financial incentive could help many more people find full-time jobs. SSP Plus further indicated that the added services generated longer-lasting effects than the financial incentive alone. Perhaps future programs like SSP could include additional efforts to help people advance in their careers or find sustainable jobs while they are still eligible for the supplement.

Interviews of parents who did not take up the supplement offer provide additional suggestions. Most of the parents who did not take up the supplement offer said they were interested in the supplement but could not find full-time work or could not overcome various barriers to work within a year of entering the program. A challenge for policy-makers interested in implementing an SSP-like financial work incentive is to find other policies that would help welfare recipients benefit from the earnings supplement by overcoming barriers such as child care and transportation problems, physical and emotional disabilities, substance abuse, and domestic violence.