Learning *to* Save, Saving *to* Learn

Early Impacts of the *learn*$ave Individual Development Accounts Project

JANUARY 2008

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A project sponsored by

Human Resources and Social Development Canada | Ressources humaines et Développement social Canada

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January 2008

The *learn*$ave project is funded by Human Resources and Social Development Canada (HRSDC). The findings and conclusions stated in this report do not necessarily represent the official positions or policies of HRSDC.

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The Social Research and Demonstration Corporation (SRDC) is a non-profit organization and registered charity with offices in Ottawa and Vancouver. SRDC was created specifically to develop, field test, and rigorously evaluate social programs. SRDC's two-part mission is to help policy-makers and practitioners identify social policies and programs that improve the well-being of all Canadians, with a special concern for the effects on the disadvantaged, and to raise the standards of evidence that are used in assessing social policies. SRDC attempts to bridge the worlds of academic researchers, government policy-makers, and on-the-ground program operators. Providing a vehicle for the development and management of complex demonstration projects, SRDC seeks to work in close partnership with all levels of governments — federal, provincial and local — as well as with communities where these projects take place.

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Acknowledgements

This report would not have been possible without the efforts of many organizations and individuals. We would like to acknowledge and thank those who have contributed.

First of all, we would like to thank the Human Resources and Social Development Canada (HRSDC) for their support and funding. In particular, we are grateful to Satya Brink and Urvashi Dhawan-Biswal, who provided valuable input to the report.

We are also indebted to our partner, Social and Enterprise Development Innovations (SEDI), for their continuing input and support. We wish to thank in particular Peter Nares, Barbara Gosse, and Jennifer Robson-Haddow, who commented on our research; Simon Bailey who coordinated daily project activities — a task now undertaken by Adam Fair; May Wong who manages the management information system; and Suong Nguyen and Melissa Choi who take care of project administration.

We also wish to thank the numerous people who commented on various drafts of this report. These include Derek Hum of the University of Manitoba and Arthur Sweetman of Queen's University. Also helpful were comments received from representatives of each of the 10 community-based agencies delivering *learn*$ave locally, who attended a *learn*$ave all-sites meeting in June 2007 and provided valuable input to the report.

We are grateful for the assistance of many of our colleagues at the Social Research and Demonstration Corporation (SRDC) who contributed to our research activities. Jean-Pierre Voyer provided invaluable guidance during the analysis and writing of this report. Hongmei Cao provided data management assistance, and Doug Tattrie, David Gyarmati, and Taylor Hui provided helpful methodological advice throughout the analysis of the data. The report was edited by David McDonald and Eliza Bennett, who also managed its translation and production.

Data collection is a major activity of this project: POLLARA Incorporated, under contract with SRDC, has conducted all surveys of participants and control group members. We would like to thank Connie Cheng and her team for their ongoing efforts and advice.

Finally, we appreciate and rely on the co-operation of *learn*$ave program and control group participants in responding to ongoing surveys. Their assistance is vital in our efforts to demonstrate the extent to which *learn*$ave can make a difference to low-income individuals.

The Authors

Highlights

This report presents the early impacts of *learn*$ave, a research and demonstration project sponsored by Human Resources and Social Development Canada (HRSDC). The project is designed to test how matched savings incentives of $3 in credits for every $1 deposited in a special *learn*$ave account can encourage low-income adults to contribute their own resources to improving their economic prospects through participating in education or training, or starting a small business.

The early impact results presented in this report are measured by comparing savings and education outcomes of three similar research groups participating in the project: one receiving just the match incentive, another receiving the incentive plus financial management training and case management services, and a third being the control group, receiving neither the incentive nor the additional services, and thus representing the counterfactual.

SAVINGS IMPACTS

- ***Low-income adults can be encouraged to save in order to improve their human capital, but the additional financial management training has so far not made a difference in this regard.***
  The *learn*$ave matched saving credits had a large incremental impact on the total amount of savings held in chequing and savings accounts (including *learn*$ave accounts). By month 18, members of the *learn*$ave-only group had saved, on average, $679 — 71 per cent more than the control group. Similar impacts were observed for overall liquid assets, in which cash savings figure prominently. However, at the end of the first 18 months of program activity, the *learn*$ave financial management training and case management services had not played a role in increasing saving activity.

- ***Participants found the additional money for savings by delaying their purchases of household effects and by buying cheaper goods.***
  To find funds for increased cash savings, results to date indicate that participants were neither diverting funds from other savings vehicles, nor borrowing money to take advantage of the high rate-of-return on *learn*$ave account. Instead, *learn*$ave participants delayed or altered household purchases to have additional funds for *learn*$ave deposits.

- ***The increased savings did not come at the cost of increased hardship.***
  The change in consumption behaviour in favour of increased savings should be seen as a positive development insofar as it has not resulted in increased hardship for participants. This is further corroborated by the fact that program group participants did not take on additional debt to increase their deposits in their *learn*$ave account.

- ***Both the matched saving credit and the financial management training aspects***

of* learn*$ave had a beneficial effect on budgeting and financial goal-setting.
As a result of *learn*$ave, participants were more likely to have a budget. Approximately half of this positive impact can be attributed to the *learn*$ave matched savings credit, and the other to *learn*$ave financial management training and case management services. Budgeting habits may have positive effects for participants down the road in terms of savings and other asset accumulation.

- ***The program seems to work better for some participants.***
  Although the program improved financial goal setting for all participants independently of their level of education, participants with higher education levels have been saving more up to now. Also, *learn*$ave had particularly strong effects on immigrants in terms of enhanced saving and financial goal setting, suggesting a possible use for *learn*$ave as a niche tool to improve the economic situation of new immigrants and accelerate their integration into Canadian society.

EDUCATION, SMALL BUSINESS, AND EMPLOYMENT IMPACTS

- **learn*$ave had a significant positive effect on participants' attitudes to education.***
  The impact is largely a result of the matched saving credits, as *learn*$ave services made little incremental difference in that regard. This suggests once again that the very act of putting money aside for purposes of education or training, rather than being instructed in goal-setting, improves attitudes to education.

- ***At this early stage of the project,* learn*$ave had a modest effect on participation in education and training.***
  In terms of actual participation in educational programs or shorter courses, few impacts were observed for the education stream participants. The lack of such impacts at 18 months was not unexpected as it was anticipated that participants would take time to accumulate sufficient funds for education, especially since they have until month 48 to cash out their matched credits.

- ***Not surprisingly, no employment effects have been observed so far.***
  learn$ave did not make a significant difference to business start-up for the 20 per cent of the sample in the micro-enterprise stream. Again this was expected in the early stages of the project. Not unexpectedly, *learn*$ave did not produce any impacts on employment outcomes either. This was, for the most part, anticipated, given that it has been only 18 months since participants joined the project. A lack of impact on actual hours worked, however, was somewhat surprising as participants, in response to the generous savings match incentive, could have increased their work hours during the first 18 months to generate extra funds for *learn*$ave deposits.

Chapter 1:
learn$ave in Context

The *learn*$ave project was funded by Human Resources and Social Development Canada (HRSDC)[1] in 2000 to demonstrate the effectiveness of Individual Development Accounts (IDAs) in increasing the human capital of low-income Canadians. In the 1990s, it was recognized that the rising premium placed on human capital in a knowledge economy increased the risk of exclusion of those lacking sufficient education and skills, in which low-income Canadians figured prominently. IDAs, pioneered in the United States in the early 1990s, were seen as a promising way of enhancing the skills of this group. The objective of IDAs, on which *learn*$ave is modeled, is to encourage low-income individuals to contribute their own funds to the improvement of their economic well-being through the acquisition of human capital and other assets. This is done by providing generous incentives to save for education or small business start-ups, among other goals. IDAs are one type of asset-building activity which has been shown to generate such benefits as increased personal confidence, household stability, employment chances, social participation and welfare of offspring (see Sherraden, 1991; Bynner & Paxton, 2001; Williams, 2004; Zhan & Sherraden, 2003; and Page-Adams, Scanlon, Beverly, & MacDonald, 2001).

THE RATIONALE FOR INDIVIDUAL DEVELOPMENT ACCOUNTS

Existing Government Programs Addressing Skills Deficits

Governments have introduced a number of initiatives to promote human capital development, but with limited success for low-income Canadians. Among such asset-based measures are tax-deferred plans and programs such as Registered Educational Savings Plans (RESPs), Canada Education Savings Grants (CESGs), and the Lifelong Learning Plan (LLP).[2] These tax-based programs were introduced to help Canadians save and built assets that can be used to meet educational needs. However, RESPs and CESGs are directed mainly at youth, and not adults. Moreover, whereas these savings measures are available to everyone, they tend to be underused by those at the lower end of the income scale. For example, a 2003 evaluation of the CESG program found that the percentage of RESP subscribers who contributed to an RESP over the 1998–2001 period rose by income level, from 8.6 per cent of households with an income below $20,000, to 36.2 per cent for those with income of $80,000 or greater (HRDC, 2003). Also, low-

[1] HRSDC has been funding the project since the dissolution of Human Resources Development Canada (HRDC) in December 2003 and of Human Resources and Skills Development Canada in 2006. Reference is therefore made to HRDC when referring to events that occurred before December 2003.

[2] Canadians can deposit up to $4,000 per year into an RESP for up to 22 years and up to a lifetime limit of $42,000. They defer taxation on the resulting interest, dividends, and capital gains (although the contributions are not tax deductible). Each RESP has a beneficiary who can use the accumulated funds for post-secondary education. For RESP beneficiaries who are children, the CESG program provides a matching contribution of a percentage of the amount put into the RESP. Currently, if net family income is below $37,178, the grant is 40 cents for each dollar saved in an RESP; if the income is over this amount but below $74,357, the grant is 30 cents for each dollar contributed to an RESP; if income is over $74,357, the Grant is 20 cents for each dollar contributed. Under the RRSP Lifelong Learning Plan, individuals may withdraw up to $10,000 per year (up to a maximum of $20,000) from their RRSPs, provided they (or their spouses) are enrolled in full-time training or higher education for at least three months during the year; withdrawals must be repaid in instalments over a 10-year period.

income people in receipt of social assistance are discouraged from participating in savings programs because proceeds from them are typically not exempted in social assistance programs.[3]

There are a number of potential reasons why low-income Canadians would have and have had difficulty in taking advantage of asset-based measures. In addition to having low tax liability, low-income Canadians often lack the funds to set aside in these programs: most of what little income they take in must be used to maintain themselves and their families. An additional challenge is that they often do not have the "mindset" for budgeting and saving for the future, having had a history of "living for the moment."[4] People with low incomes also typically do not have access to financial institutions, as their lack of assets and income prevents them from a establishing a credit history, leading these institutions to consider them high risk. Similarly, they face barriers in the capital market: when seeking funds to acquire human capital through education, they cannot use this capital as collateral.

The government has also introduced a number of non-asset based student aid measures, but these too have little appeal for low-income adult learners. Whereas government student loan programs provide low-interest loans to students from economically disadvantaged backgrounds, they cater to full-time students.[5] By contrast, low-income adults desiring to return to school are able to do so typically only on a part-time basis. Similarly, the federal Canadian Millennium Scholarships benefit full-time students. The federal Canada Study Grants program provides grants to low-income students wishing to study part-time and to low-income students with dependants, but the value of the grants is relatively low. Finally, human capital development measures are provided to Employment Insurance (EI) recipients, but to qualify for EI, an individual must have had some labour market attachment, which is not the case for all low-income Canadians.

The Promise of Individual Development Accounts

The Individual Development Account (IDA) is an asset-based policy that has the potential to overcome the abovementioned barriers low-income groups face with regards to skill development. First, IDAs offer generous saving incentives to low-income adults in the form of matched saving credits or contributions for the purpose of acquiring human capital or other assets; these have been shown to induce them to overcome resistance to saving. Rather than simply receiving a monthly stipend as in traditional income support schemes, or a grant or bursary, IDAs encourage participants to regularly set aside their

[3] In Canada eligibility for social assistance is based on a "needs test," which compares the budgetary needs of applicants and their dependants with the household's total income and assets. Applicants are usually required to convert non-exempt assets into liquid assets and to live off the proceeds before qualifying for assistance. Even though asset-limit rules can be justified on the basis that assets that can be easily converted into cash should not be given preferential treatment over ordinary income when assessing individuals' private resources, these rules seem to work against the goal of promoting savings among economically disadvantaged groups. In most Canadian provinces and territories, the amount of exemption varies according to household size and applicants' employability status. Assets such as a principal residence, business property, equipment required for employment, and, in some cases, the value of a car are generally considered exempt. In some provinces amounts saved in registered savings plans are also exempt. For empirical investigation of the impact of welfare rules on asset accumulation, see Golosov & Tsyvinski (2004), Hurst & Ziliak (2001), and Orszag (2001).

[4] There is also evidence to suggest that lower levels of financial literacy are associated with lower levels of income and education (Kim, 2001; Hilgert & Hogarth, 2002).

[5] These are the federal Canada Student Loans Program (CSLP) and its province-specific counterparts.

own money, and thereby contribute to their personal development, and potentially change their behaviour and attitude towards saving and the future. At the same time, participants are given a choice in how they increase their skills. Second, IDAs can be seen as a way of compensating low-income Canadians for perceived inequities in the tax and transfer system in which extensive preferential treatment of savings and capital income benefits mainly middle- and higher-income persons. Third, IDAs typically involve financial institutions and thus could correct financial market inequalities caused by the inherent problem of asymmetric information and distrust between low-income individuals and these institutions.[6] Finally, IDAs, through the provision of financial management training, are seen as ways of enhancing financial literacy and budgeting ability that are typically lacking among low-income groups.

Experience with IDAs, however, has been limited in Canada (see Appendix A for examples and details). Prior to *learn*$ave, most Canadian IDA initiatives were limited in scale and scope. While the United States has had greater experience with IDAs, overall penetration remains low. In recent years, pilot IDA projects have also been implemented in the United Kingdom and Australia.

There are two main stumbling blocks potentially undermining the effectiveness of IDAs in increasing saving. The first of these is the "tied use" challenge. The goal of accumulating liquid assets to buy non-liquid assets such as higher education or establishing a small business may conflict with low-income individuals' needs for liquidity as insurance against adverse economic events. Whereas funds accumulated in IDAs can serve more immediate purposes, this type of usage is discouraged since such unmatched withdrawals diminish the savings eligible for matched contributions. The objective of IDAs is to move savers beyond such precautionary shorter-term goals, so that they can make an investment in the future. This may seem illogical to the means- or economically disadvantaged who may be more concerned with meeting short-term expenses and needs.

A second difficulty is potential "crowding out" or negative substitution effects. This translates as concern that IDA contributions may reduce other forms of savings (such as Guaranteed Investment Certificates or pensions) or, in other words, that instead of creating "new" savings, IDAs may shift amounts saved from non-subsidized measures to subsidized ones (i.e. the IDA). When subsidized savings replace at least some saving that would have taken place even in the absence of the subsidy, this represents a deadweight loss for society and a windfall gain for individuals.[7] Other potential substitution effects include borrowing from friends or businesses just to qualify for additional savings credits, and not making "necessary" consumption expenditures that would otherwise be made, leading to hardship. The latter concern is not dissimilar to the aforementioned challenge of convincing those typically used to coping only with immediate needs to save for the longer-term. Another source of savings would be increased work hours. Thus, the

[6] Like any other borrowers, low-income individuals know more about their own traits than financial institutions do. However, lacking income or assets that can mediate some aspects of asymmetric information, the less well-off must rely on a bank's ability to assess their "human capital" and chance for success (or risk of failure). Because this is more difficult to communicate and assess than assets or income, low-income groups are effectively denied access to credit or even savings opportunities because financial institutions generally treat these groups as "bad customers." This market failure results in a miscommunication between the two parties, where neither party can perceive an interest on the part of the other in finding a mutually beneficial solution, even though such interests might exist.

[7] While recognizing the importance of this issue, some have pointed out that given the relatively low level of financial wealth among the target group, deadweight costs are likely to be small. See for instance Paxton & Regan (2002).

evaluation of *learn*$ave included examination of impacts on all components of net worth — including household assets — as well as impacts on hardship and employment measures.

Evidence from laboratory experiments[8] conducted by the Social Research and Demonstration Corporation (SRDC) and CIRANO suggests that low-income Canadians would invest in their post-secondary education if the investment were subsidized. When low-income subjects (earning less than 120 per cent of the Low-Income Cutoff [LICO]) were offered $400 in educational expenses or $100 immediately in cash, 42 per cent forewent current income and accepted the offer of education and training (basically a 3:1 match) (Eckel, Johnson, & Montmarquette, 2002).

Some international evidence indicates IDAs can be effective (see Appendix A). First, IDAs have been shown in the United States (US) and Australia to induce the economically disadvantaged to save and use those savings for education or other purposes. Second, evidence from the United Kingdom and Australia suggests that IDAs have lasting impacts on establishing behaviour beyond the program period. Third, experimental research in the US showed that IDAs can have an incremental impact on home ownership and participation in non-credit post-secondary education courses. Finally, results from a US survey of IDA participants indicate that a great majority report that the IDA had positive impacts on their confidence in the future and perceptions of economic security and control of their lives.

The preceding discussion indicates that IDAs have the potential to enhance the human capital of low-income Canadians but there is limited hard evidence of their effectiveness in this regard, particularly in Canada. This is the main reason why HRSDC decided in 2001 to commission *learn*$ave.

[8] In a controlled laboratory experiment, subjects make real decisions in response to the offer of real cash or having their educational expenses paid for, instead of responding to a survey question about whether they would or not.

Chapter 2:
learn$ave Program Design

This report presents the early impact results of the *learn*$ave project; future reports, to be released over the next two years, will present intermediate and final impacts of *learn*$ave and address delivery and cost issues. This chapter looks at issues of eligibility and provides a brief overview of the *learn*$ave design.

ELIGIBILITY

To be eligible for *learn*$ave, applicants had to meet the following criteria:

- ***Annual household income cannot exceed 120 per cent of Low-Income Cutoff (LICO).***[1] The threshold of 120 per cent of Statistics Canada's LICO allowed a wide spectrum of individuals from low-income households[2] to apply to *learn*$ave. It was also high enough to include families with sufficient income to save without serious hardship. Moreover, this criterion effectively excluded those whose income had temporarily fallen. This threshold translated to about $36,000 in annual household income for a family of three in Toronto and Vancouver at the time of recruitment, and to $31,000 per year in Halifax.
- ***Liquid assets cannot exceed the lesser of 10 per cent of annual income or $3,000.*** *learn*$ave was intended to reach the large numbers of low-income individuals who had not previously been able to save significant amounts. Incorporating an asset threshold excluded those who had already saved successfully and were thus less likely to need the incentives that *learn*$ave provides. Liquid assets include balances held in savings accounts, investment funds or certificates, stocks, bonds, retirement funds, and education funds. Chequing account balances were not considered for eligibility purposes because these funds are needed to cover normal living expenses.
- ***Value of household home cannot exceed median value of homes in area.*** Some individuals who own their own homes may have low household incomes and low liquid assets. These individuals were eligible for *learn*$ave as long as the market value of their home when they applied did not exceed the median market value of homes in their community.
- ***Applicants must be 21–65 years of age.*** Since the primary focus of the demonstration was adult learning and small business development, individuals who were of working age form the appropriate target population. Thus, *learn*$ave

[1] Newcomers to Canada who immigrated in the year prior to application or the year of application were assessed using a special formula that took into consideration world income, funds brought into Canada at the point of entry and funds transferred from overseas between the time of arrival and the date of application completion. For further description of this formula see Kingwell, Dowie, Holler, Vincent, Gyarmati, & Cao (2005, pp. 48–50).

[2] Household income, rather than individual income, determined eligibility for *learn*$ave. Under the assumption that family members share incomes, individuals with a low personal income may have access to considerable funds in relatively wealthy households. The use of household income as an eligibility criterion limits this possibility.

was restricted to individuals who were 21 to 65 years of age at the time of application.[3]

- ***Applicants cannot be enrolled in full-time schooling***. Full-time students at the time of their application were not eligible for *learn*$ave as they had already found a way to finance their education and thus were not among those most in need of *learn*$ave. For purposes of determining eligibility, a full-time student is defined as any post-secondary student carrying at least 60 per cent of a full course load, as per the definition used by the Canada Student Loans Program.
- ***Applicants must reside within the boundaries of a* learn*$ave site.*** Applicants had to have been living within the designated boundaries of one of the sites to qualify.
- ***Only one person per household may apply.*** In the interests of promoting equality of opportunity and for technical reasons related to the research methodology, eligibility was limited to one person per household.[4]
- ***Applicants must possess a social insurance number.*** Individuals had to have a valid Social Insurance Number (SIN). This criterion allowed non-permanent residents to join Canadian citizens in having access to *learn*$ave and enabled *learn*$ave to reach the broadest possible number of low-income Canadians.

MATCHED SAVINGS CREDITS: SAVING AND CASH-OUT

At the core of the *learn*$ave Individual Development Account (IDA) program, as with all IDA programs, is the financial incentive offered to participants to encourage them to save. Eligible participants are offered $3 for every dollar they save (a 300 per cent rate of return), subject to certain conditions. To encourage participants to save on a regular basis, participants must make net matchable deposits of at least $10 in 12 not necessarily consecutive months before their withdrawals will qualify for matched credits. Amounts deposited in *learn*$ave accounts by participants within three years of their enrolment in *learn*$ave are eligible for matched credits. In contrast to their savings in their *learn*$ave accounts, which are under their full financial control and can be withdrawn at any time, participants' "matched credits" are held in trust until they are ready to spend the proceeds (i.e. withdraw them or cash them out) for designated purposes.

The amount of savings qualifying for a *learn*$ave matched credit is capped. Deposits up to $250 per month and $1,500 overall are eligible for matched credits. Participants who save $1,500 will be eligible to receive $4,500 in matched credits, making available to them a maximum amount of $6,000.

Access to *learn*$ave matched credits is allowed only in conjunction with "cash-outs" (withdrawals) for an approved use of funds. Approved purposes are twofold: (1) education and training including enrolment in either degree-granting programs or in less formal, shorter skills development courses, and (2) small business (or micro-enterprise or self-employment) development. A participant may cash out his or her credits any number of times or all at once.

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[3] Those who were 18 to 20 years of age were eligible only if they had been out of school for 24 months immediately prior to their application; students taking a year off from their studies to earn more income and return to school were not considered part of the target population.

[4] Throughout this report, the term "household" refers both to family members living together in the same dwelling and to unattached individuals who are not living with family members.

At the outset, participants indicate on their application forms their intentions for the use of their matched credits: education/training or micro-enterprise. On the basis of this, participants are assigned to either the education or micro-enterprise stream.[5] Participants in the education stream must use their credits solely for education or training purposes, whereas micro-enterprise stream participants are allowed to use their savings and credits for *either* education/training *or* micro-enterprise (starting a small business). A maximum of 20 per cent of participants can enter the micro-enterprise stream at each site. Applicants are informed of the cap in the initial information session and asked to select such an option only if they are serious about it. It is possible that the micro-enterprise group could consist of participants uncertain as to which option to select, choosing it to give them the flexibility of education or micro-enterprise. Also, the education group could consist of participants who would have preferred to start a small business but applied at a time when no spaces remained in the respective stream (because the 20 per cent limit was reached).

For every purchase for approved purposes, at least one-quarter of the cost must come from the participant's own *learn*$ave savings. The remaining three-quarters comes from their matched credits. In this way, participants are contributing their own funds towards their own betterment. Note that this could also be seen as discounting by 75 per cent the price of education and small business start-ups for participants.

Participants have a total of four years to make matched savings and cash out their credits. After attaining 12 active saving months, participants can cash out their credits for allowable uses any time during the initial three-year saving period. They also have one further additional year in which to cash out.[6]

To withdraw their credits for education and training, participants must be enrolled in a designated institution of their choice. A designated institution is a university, community college, technical institute, or private career college listed by the Canada Student Loans Program as a "Designated Educational Institution" (HRSDC, 2007). The *learn*$ave project pays tuition fees directly to the approved educational institution when the participant enrolls at the institution.

Learning supports are also covered. These include books, computers, and other materials required for the course as well as childcare services and disability supports that are unavailable from government programs. Participants can use up to 50 per cent of their accumulated funds at any point to a maximum of $1,500 (individual savings plus matched credits) for supports to learning. Expenditures on supports to learning are limited to the period when the participant is enrolled in an approved adult education or training course.

Matched credits can also be used to start a small business, which is defined as a business that requires up to $10,000 in start-up capital. The credits cannot be used to support an existing enterprise. As a prerequisite to using their credits for micro-enterprise activities, participants are required to present a business plan that identifies the following: the nature of the business; a marketing and sales strategy; an outline of the administrative

[5] On the application form participants are actually asked to distinguish between "education" and "training," as well as "micro-enterprise." However, there is no real difference in how the education and training streams can use their funds so in this report the education and training streams are referred to together as the education stream.

[6] A six-month cash-out grace period was added, which may assist in some situations where the end of the four-year saving and cash-out period does not coincide with the start of a school term.

and production processes; a human resources plan including investors, management, and employees; and a financial plan including sources of financing and projected revenues, costs, and profits. Participants are then referred to a reputable business development agency in their local area that provides training and assistance for the development of the business plan, and is responsible for its approval. After the plan is approved, the matched credits are released.[7] The credits cannot exceed the amount of the capital costs identified in the business plan.

Participants are allowed to transfer their matched credits to other adult family members in their household under certain conditions. Participants who have met the savings requirements and earned a corresponding amount of matched credits can transfer their credits to other adults who lived with them at the time of their enrolment in the program (a new spouse following enrolment cannot be a beneficiary, but a beneficiary can later leave the household and continue to receive transfers). Beneficiaries must meet the same age requirements as the participants themselves.

The design of the *learn*$ave IDA program varies to some extent across the 10 delivery sites. At the three experimental sites — Halifax, Toronto, and Vancouver — the design is the same. At these sites, experimental evidence forming the basis for this report is being gathered from program participants and a comparable group of non-participants (the control group). At the other seven sites, the design of the program varies somewhat from site to site and from that of the experimental sites. For a description of the design of *learn*$ave as delivered across all sites see Kingwell et al. (2005).

FINANCIAL MANAGEMENT TRAINING AND CASE MANAGEMENT SERVICES

IDAs typically provide instruction in managing personal finances as well as encouragement to save. Consistent with other IDA programs, *learn*$ave provides this kind of assistance in the form of financial management training and case management services, which provide reinforcement of savings goals.

The primary objective of the *learn*$ave financial management training is to help participants meet their savings goals. The course consists of 15 hours of instruction organized into five three-hour modules with most of the training devoted to financial management. The financial management training curriculum covers the principles of money management, including strategies for budgeting, spending, and the use of credit. In addition, a section of the curriculum offered at most sites is devoted to assisting participants in developing realistic goals. To this end, the training sessions encourage participants to identify their existing skills and attributes, identify strategies to help overcome barriers that may prevent them from achieving their goals, and build a practical and positive approach to meeting these goals. Note that the financial management training curriculum is not stream-specific: no instruction specific to either education or micro-enterprise is provided.

Case management is intended to encourage participants to meet their savings targets, to identify and address problems that they may be experiencing in meeting those targets,

[7] By providing an outline of their business plan, participants can withdraw a portion of their matched credits to complete the business plan and to conduct related activities such as market research, business training, and technical consulting.

and to provide referrals to appropriate agencies to deal with other problems that may arise during the savings period. Case managers are expected to undertake a quarterly review of participants' savings activity, attendance at financial management training sessions, and progress towards goals. If a participant is having difficulty in any of these areas, the case manager contacts him or her to offer assistance. Participants are also free to contact their case manager on their own initiative at any time.

DELIVERY PARTNERS

There are two main partners in *learn*$ave. Social and Enterprise Development Innovations (SEDI) is primarily responsible for the delivery of *learn*$ave in partnership with 10 community-based organizations, one in each of 10 sites across 7 provinces. The Social Research and Demonstration Corporation (SRDC) is primarily responsible for the evaluation research, described in the next chapter.

SEDI and SRDC form the consortium responsible for designing, implementing, and evaluating *learn*$ave. Because the project is delivered in 10 sites across Canada and has an important financial component, the assistance of local agencies in each of the site venues is essential to provide services to participants. Financial institutions play a major role in maintaining the *learn*$ave accounts.

SEDI established a network of 10 local not-for-profit agencies (one at each site) to operate *learn*$ave and provide services. Three of these participated in the experimental research, as noted. These agencies were responsible for recruiting and screening eligible participants and for providing financial management training sessions and case management services. They are also responsible for collecting relevant data on participants (via the Participant Management Information System) and their savings activities and for sharing these data with SEDI and SRDC.

SEDI secured an agreement with financial institutions to provide specific financial services at the 10 sites. These institutions maintain participants' *learn*$ave accounts, monitor activity in those accounts, and provide a monthly report of individual transactions to the local delivery agency. RBC Royal Bank fulfilled this role at the three experimental sites and six others. At the Winnipeg site, the host organization decided to use the services of Assiniboine Credit Union instead of RBC. In Montreal, the host organization gave participants the choice of opening their *learn*$ave account with RBC or the Caisse d'économie Desjardins. Note that these are highly visible, established institutions that should have provided a high degree of credibility to the project in the eyes of potential participants.

TIMELINE FOR THE PROJECT AND OUTLINE FOR THIS REPORT

The *learn*$ave demonstration project is taking place over a nine-year period. The project began in June 2000 when planning started on the design of *learn*$ave's operations and its evaluation. From June 2001 to December 2003, participants were recruited and screened — the last applicants were enrolled in February 2004 after they completed the baseline survey. By February 2008, all participants who wanted to cash out their matched credits will have done so. Throughout the life of this project, reports have been and will be released documenting various aspects of *learn*$ave, including implementation,

delivery, and impacts.

The rest of this report provides details on the methodology used to evaluate the *learn*$ave IDA at the 18-month mark (Chapter 3), examines participation results with respect to recruitment, project acceptance, account opening, saving, and cashing out (Chapter 4), and presents the results on savings impacts (Chapter 5) — which are the focus of this report — followed by education and employment impacts (Chapter 6).

Chapter 3:
Methodology and Research Design

This chapter describes the methodology employed to measure *learn*$ave's impacts on participants at the three experimental sites at the 18-month mark following random assignment. Estimates of impacts at later stages of the project, as well as other aspects of the evaluation such as the case study of partner delivery organizations, are discussed in Text Box 3.1.

The first section of this chapter provides a description of the experimental design concept and the random assignment process used to create the research groups. This is followed by a description of the expected outcomes and research hypotheses for the study. In the third section, the data sources for this report — the baseline and 18-month follow-up survey of participants and the Participant Management Information System (PMIS) — are described. The final section of this chapter looks at how impacts were estimated.

EXPERIMENTAL DESIGN AND RANDOM ASSIGNMENT

Impacts on *learn*$ave participants are measured using an experimental study design. The main advantage of this approach is that it permits consideration of the counterfactual: what would have occurred in the absence of a particular intervention, or, in this case, what might individuals have done had they not participated in that intervention — the *learn*$ave Individual Development Account (IDA). It is quite possible that some low-income individuals would decide to save more to meet their goals and continue their education or start new businesses even without *learn*$ave, and in many cases, their employment situation and earnings would improve over time as a result. Therefore, to control for this possibility and thereby paint a true picture of *learn*$ave's effectiveness, the evaluation design included an experimental study involving program and control groups. This is a way of measuring the incremental impact of the program, that is, isolating (1) improvements in an individual's circumstances resulting from their participation in *learn*$ave, from (2) improvements that would have occurred had they not participated in the program. The latter are captured by observing the experiences and activities of a control group of individuals similar in every way to participants in the *learn*$ave IDA, except that they do not receive *learn*$ave incentives or services.

In the case of *learn*$ave, there are two program groups and one control group; eligible applicants were randomly assigned to one of the three research groups. Thus, qualified applicants had a two in three chance of being assigned to a program group. The three research groups are as follows:

- the "*learn*$ave-only" group, which receives only matched saving credits;
- the "*learn*$ave-plus" group, which receives credits plus financial management training and case management services; and
- the control group, which receives neither *learn*$ave credits nor services.

Text Box 3.1: Full Evaluation Design of *learn*$ave

The experimental study reported on in this report is one element of a five-component design being used to evaluate *learn*$ave. The other four components are as follows:

- **Implementation Research**: This research covered information on recruitment and enrolment, participant characteristics and the target population, financial management training and case management, and basic information on savings patterns and withdrawal of matched credits. This was based on interviews with site representatives, focus groups with participants, and a market research survey. It drew lessons learned on the implementation of an IDA program and sets the context for interpreting subsequent impact results (the results of this study are provided in summary form in this report and presented in detail in *Design and Implementation of a Program to Help the Poor Save: The* learn*$ave Project*, published in August 2005).
- **Case Studies of Delivery Organizations**: Case studies of the 10 Community-based *learn*$ave delivery organizations participating in *learn*$ave are being conducted in order to identify organizational characteristics that have contributed to and hampered delivery of the *learn*$ave IDA. The results of this study will contribute to the discussion of how best to deliver an IDA, taking into account the actual and potential roles played by financial institutions and the government.
- **Measuring the Role Played by Program Parameters and Income Assistance**: This study will take advantage of the variations in program parameters across the seven non-experimental sites and the three experimental sites to measure the role played by program parameters in *learn*$ave saving activity among *learn*$ave-plus participants. The role of Income Assistance (IA) will also be measured in this study, including consideration of the 225 IA recipients participating in the program at the experimental sites who do not form part of the experimental study and the IA recipients who represent up to 25 per cent of the participants at the seven non-experimental sites.
- **Cost-Effectiveness Study**: A cost-effectiveness study will attempt to derive an estimate of the cost of delivering an asset-based program like the *learn*$ave IDA. One source for this study is the cost data provided by the sites on various activities conducted under *learn*$ave, including recruiting, training, case management, and so on. The other source is the PMIS, which will provide data on the amount spent on cash-outs. Together, these data will enable a measure of the delivery cost per unit of "output," such as the number of participants or the number of participants who participate in education or training.

The reason for having two program groups in the experiment was to isolate the impact of the financial management training and case management services from that of the matched saving credits. Thus, to measure the pure impact of the credits, outcomes of the *learn*$ave-only group are compared to that of the control group. To measure the incremental impact of the financial management training and case management services over and above the credits, the outcomes of the *learn*$ave-plus and *learn*$ave-only program groups are compared.

The *learn*$ave experimental study is being undertaken at 3 of the 10 *learn*$ave sites — namely Halifax, Toronto, and Vancouver. These primary sites were chosen because of their potential to recruit the substantial numbers of individuals required for a randomized

trial and represent different regions of Canada. The benefits and services offered at the three sites are identical. For example, all three sites offer a 3:1 match rate for savings deposited in *learn*$ave accounts and offer similar financial management training, thus allowing the samples of program group participants across the three sites to be combined for analytical purposes.[1]

A total of 3,584 applicants at the experimental sites qualified for and were enrolled into *learn*$ave,[2] and then randomly assigned to the three research groups. This is just short of the 3,600 target set out in the original research plan for the experimental study. Across the three experimental sites, there were 1,194 participants in the *learn*$ave-only group, 1,195 in the *learn*$ave-plus group, and 1,195 participants in the control group. The 3,584 participants comprised 1,649 in Vancouver, 1,681 in Toronto, and 254 in Halifax.

RESEARCH HYPOTHESES

The research hypotheses being tested in this study fall under three headings: (1) savings, net worth, budgeting, and hardship; (2) education and small business development; and (3) employment and earnings. The role of financial management training and case management services in addition to the matched saving credits in determining these outcomes is also being assessed. In very simplistic terms, the matched credits and services are predicted to increase savings in the short term, which in the medium term will permit participation in human capital development activities of education, training and small business start-ups; in the longer term these should enhance employment prospects. The details of these hypotheses are specified below.

Impacts on Savings, Other Aspects of Net Worth, Budgeting, and Hardship

The *learn*$ave IDA provides a substantial financial incentive to save for approved goals. Each dollar of savings deposited by a participant in his or her *learn*$ave account leverages $3 in matched credits, representing a rate of return of 300 per cent. Thus, the expectation is that the incentives will induce *learn*$ave participants to save more than is their normal practice. However, it should also be acknowledged that the matched credits could also induce participants to actually deposit less because of the high rate of return.

The saving match rate may also change participants' behaviour with regard to their other financial assets and debts. In order to take advantage of the high rate of return in the *learn*$ave account, participants might reduce their investment in other (unsubsidized) saving vehicles such as saving bonds or guaranteed investment certificates, or might borrow money from friends or financial institutions. Another possible response is increased consumptive efficiency, that is, making smarter purchases with regard to non-durable goods as well as household assets, furniture and appliances (which figure in net worth). Therefore, because the increased savings might come from changes in other

[1] However, as noted in the Implementation Report, there are differences among the sociodemographic profiles of participants in the three cities. This is the reason why, as will be described further on, the impact estimates were compared across sites and why a site variable was introduced into the regression model used for the study to adjust the impact estimates.

[2] In fact, a total of 3,601 were recruited, and of these 17 were disqualified. These numbers exclude 225 Income Assistance (IA) recipients who were accepted at the experimental sites but who are not be part of the experimental study. These will be included in other research for this project.

components of net worth, including financial and physical assets and debts, the impact on these items is measured in this study.

Similarly, the saving incentive might encourage participants to alter their budgeting behaviour. This would include setting financial goals and establishing a household budget. This would be expected to encourage more careful and reduced spending, so as to save more than previously. This may be particularly true for participants who have access to financial management training, which provides instruction in budgeting, among other areas. Thus, it is hypothesized that participation in *learn*$ave will lead to an increase in household budgeting.

It is possible that greater savings from altered consumption behaviour will increase the hardship to which participants are exposed. However, the expectation is that the increased savings and altered consumption patterns resulting from *learn*$ave participation will *not* create increased hardship among participants.

It was anticipated that most of these expected impacts would occur during the first 18 months of the program, covered by this report. However, implicit in all this is the expectation that these impacts will continue to occur following participants' final cash-out from *learn*$ave. Thus, it is hypothesized that benefits regarding saving and budgeting as well as use of financial institutions will translate into lasting impacts for participants. Of course, this hypothesis cannot be tested at this stage of the project.

Education and Micro-Enterprise Development Impacts

A major objective of *learn*$ave is to increase participation in adult education or training. It is hypothesized that *learn*$ave participants in both the education and micro-enterprise streams will take and complete more courses at eligible educational institutions than would otherwise have been the case. This is expected to be particularly the case for the education stream. This outcome is, however, not expected to manifest itself within the first 18 months to a significant extent as participants have three years to save and qualify for credits and another year to cash them out.

It may be expected that participation in *learn*$ave will improve participants' attitudes towards education, given that the act of saving for education and participation in *learn*$ave training courses might focus attention on the value of education. Thus, it is hypothesized that attitudes towards training and education will be enhanced through participation in *learn*$ave.

Participants in the micro-enterprise stream are expected to launch small business start-ups, which in turn are predicted to increase entrepreneurial skills and human capital — just as is the case for education and training. It is hypothesized that *learn*$ave participants will start and operate more small businesses than would otherwise have been the case. Again, it is not expected that this outcome will be observed to a great extent at the 18-month stage.

Contrary to the record of small businesses that tend to fail soon after starting up, it is hypothesized that small businesses established by *learn*$ave participants will survive longer, on average, than would otherwise have been the case. The reason is that small businesses set up by *learn*$ave participants may be better financed; the financial management training undertaken by some *learn*$ave participants may prove effective;

and participants are required to have an approved business plan before receiving their credits. Again, this outcome will likely not be observed at the 18-month stage.

Employment and Earnings Impacts

Ultimately, the objective of *learn*$ave is to increase the economic well-being of participants by increasing their employment and earnings. The offer of incentives should lead to greater savings that, in turn, lead to more education, training, and small business start-ups. This incremental activity should result in increased employment and earnings further down the road. Thus, it is hypothesized that in the long run, *learn*$ave participants will have a higher rate of employment and higher earnings than would otherwise have been the case.

It is also expected that few employment impacts will be observed at 18 months. The one possible exception is work hours. It may be that the generous matched saving credits will induce participants to increase work hours to generate additional funds to deposit in their *learn*$ave accounts.

Impact of Financial Management Training and Case Management Services

Like most IDA programs, the *learn*$ave IDA provides financial management training and case management services to help participants find ways to save. IDA practitioners view training and case management as instrumental in ensuring that participants can make successful use of their matched credits (Mills, Campos, Ciurea, DeMarco, Muchlin, & Welch, 2000). It is therefore hypothesized that, over and above the credits themselves, the provision of financial management training sessions and case management services will increase the likelihood of positive changes in saving and budgeting behaviour and educational attitudes**.** The services are also expected to impact positively on educational courses taken, small business start-ups, as well as employment and earnings, but these impacts are anticipated only in the longer term.

DATA SOURCES AND PREPARATION OF ANALYSIS FILE

Two main data sources were used to test the above research hypotheses: the Participant Management Information System (PMIS) and the baseline and follow-up surveys.

First, the *learn*$ave PMIS was implemented at all sites to support both program operations and evaluation needs. The PMIS generates saving and service utilization data on all original program group members. Specifically, the PMIS yields important information on participants' saving behaviour; use of the *learn*$ave financial management training and case management services, and use of matched credits ("cashing out" for training, education, or small business start-up).

Second, baseline and follow-up telephone surveys conducted by POLLARA Inc. (under contract with the Social Research and Demonstration Corporation [SRDC]) are being used as the primary method of collecting outcome data for the experimental evaluation. Shortly after being found to have met the eligibility criteria and before random assignment to one of the three groups, the applicants were surveyed by telephone. The survey gathered relevant baseline information about personal and family characteristics to contribute to the testing of the hypotheses. At 10 months, a subsample

of *learn*$ave-only and *learn*$ave-plus participants was surveyed to address implementation issues. Participants were then surveyed at 18 months from the date of their random assignment to update their baseline information and to address early impact issues. The 18-month survey began in April 2003 and ended in January 2006, each with an average length of 30 minutes. The data collected form the basis of this report. Note that participants are also being surveyed at 40 months and 54 months following assignment; the former came out of the field in July 2007, while the latter will end in the summer of 2008. The data generated from these surveys will be the focus of forthcoming reports in the *learn*$ave series.

A total of 2,583 participants responded to the 18-month survey, of the 3,584 randomly assigned and enrolled into the program. This represents a 72.1 per cent response rate. The response rate varied little across the three experimental sites: 73.0 per cent in Vancouver, 70.7 per cent in Toronto, and 75.2 per cent in Halifax. It should be noted that responding to the survey was not a requirement to cash out the matched credits earned, nor was remaining at the original location.

As expected, the response rate for the control group was lower than for the two program groups *learn*$ave-only and *learn*$ave-plus (Table 3.1). It was felt that members of the program groups would likely feel more engaged in the project than control group members and therefore more inclined to participate in the survey. Most of the differences in response rates can be attributed to the higher incidence of refusals (including withdrawal refusals) in the control group compared to the program groups (10.5 per cent versus 3.3 and 2.6 per cent, respectively), as well as the somewhat higher incidence of untraceables (21.0 per cent versus 15.5 and 16.3 per cent, respectively).

Table 3.1: *learn*$ave 18-Month Survey Call Response, by Research Group

	Total	*learn*$ave-only	*learn*$ave-plus	Control
Baseline Analysis Sample (Number)	3,584	1,195	1,194	1,195
Completed Survey (%)	72.1	77.0	76.6	62.6
Incompletes (%)	27.9	23.0	23.4	37.4
Refusal and request withdrawal	5.5	3.3	2.6	10.5
Untraceable	17.6	15.6	16.3	21.0
Living outside Canada or other reason for non-completion of survey[1]	2.6	2.5	2.2	2.9
Reached maximum number of calls	2.3	1.6	2.3	2.9

Source: Reports provided by POLLARA.

Note: [1] Includes those who could not respond because of illness or death, and those who withdrew from the research prior to the survey. The proportion of people giving those reasons could not be separately expressed for confidentiality purposes.

The difference in response rates between program and control groups was not a problem because the unbalanced attrition did not negatively affect the comparability of the groups to a great extent, at least sociodemographically. The sociodemographic profiles of the respondents in the 18-month survey, based on their characteristics at baseline, were compared and found to be fairly similar (see Table 3.2), as they had been

at baseline.[3] The variables where differences arose at 18 months (not all shown in table) and which suggest possible response bias include: marital status at baseline, level of higher education of mother, being unemployed at baseline, and total household income (from all sources) at baseline (see below for how this response bias is controlled for using regression). However, note that it is possible that the unbalanced attrition may have led to differences between groups in terms of unobservable characteristics.

Owing to the potential compound effect of missing values in the large number of assets and liabilities variables making up net worth, it was decided that missing values should be imputed. Imputation typically involves replacing the missing value on a particular variable with mean or randomly selected values on the variable among respondents sharing characteristics of the respondent who did supply a response to the respective question. Appendix B includes further information on this, including details on how the presence of outliers, typical of such data, were dealt with.

The evaluation dataset used for this report was formed by merging the three sources of data on *learn*$ave participants at the three experimental sites: the baseline survey, the 18-month follow-up, and the PMIS. Out of the 3,584 participants in the original baseline sample (Table 3.3), the dataset includes baseline and 18-month outcome data on saving, education, and employment outcomes for the 2,583 who responded to the 18-month survey. Among the latter there are 1,835 program group members, for which there are 18-month survey data.

Finally, outcome variables, corresponding to the research hypotheses laid out above, were selected from among potential variables available in the 18-month survey and PMIS datasets, extracted or derived from these datasets, and included in the analysis file:

- **Saving and asset accumulation**: proportion who opened a *learn*$ave account, *learn*$ave saving and cash-out incidence and levels, total saving and chequing account balance including the *learn*$ave account, amounts saved in various investment vehicles, value of physical assets and business, liabilities, and net worth;
- **Budgeting and hardship**: proportion who have a budget, set financial goals; proportion who had difficulty meeting expenses and making payments, had to borrow to meet needs and to visit a food bank, declared bankruptcy;
- **Education**: whether or not attitudes to education are positive; proportion who participated in education programs, in education courses (non-program); proportion who completed programs or courses; and
- **Employment**: proportion who worked since baseline, weekly hours worked in last four weeks, current labour force status, and employment earnings in last four weeks.

[3] Tests indicated that there were significant differences at baseline among the research groups for only four variables: activity limitation, education of mother, expected certification from continuing studies (prior to assignment), and duration of unemployment (prior to assignment). See Appendix H of Kingwell et al. (2005).

Table 3.2: Comparison of 18-Month Participants, by Research Group, Using Baseline Characteristics

Baseline Characteristic[1]	Outcome Levels: *learn* $ave-only	Outcome Levels: *learn* $ave-plus	Outcome Levels: Control	*learn* $ave-only vs. Control: Difference	*learn* $ave-only vs. Control: Standard Error	*learn* $ave-only vs. *learn* $ave-plus: Difference	*learn* $ave-only vs. *learn* $ave-plus: Standard Error	*learn* $ave-plus vs. Control: Difference	*learn* $ave-plus vs. Control: Standard Error
Gender									
Male	43.9	45.8	45.5	-1.5	2.5	1.9	2.3	0.3	2.5
Female	56.1	54.2	54.5	1.5	2.5	-1.9	2.3	-0.3	2.5
Age									
30 years or under	41.6	41.3	39.7	1.9	2.4	-0.3	2.3	1.6	2.4
31-40 years	42.7	43.4	43.9	-1.1	2.4	0.7	2.3	-0.5	2.4
Over 40 years	15.5	15.3	16.4	-0.9	1.8	-0.2	1.7	-1.1	1.8
Average age (years)	33.4	33.5	33.7	-0.3	0.4	0.1	0.4	-0.2	0.4
Marital Status									
Single	45.5	44.6	40.4	5.2 **	2.4	-1.0	2.3	4.2 *	2.4
Married	43.4	42.6	47.5	-4.1 *	2.4	-0.7	2.3	-4.8 **	2.4
Separated, divorced or widowed	11.0	12.7	12.2	-1.2	1.6	1.7	1.5	0.5	1.6
Equity Group									
Visible minority	63.7	63.4	64.3	-0.5	2.4	-0.4	2.3	-0.9	2.4
Aboriginal	1.2	1.0	1.2	0.0	0.5	-0.2	0.5	-0.2	0.5
Activity limitation	5.3	7.3	7.7	-2.4 *	1.2	2.0 *	1.2	-0.4	1.2
Years Since Arriving in Canada									
Born in Canada	33.8	34.1	33.3	0.5	2.3	0.3	2.2	0.8	2.3
Less than 4 years	46.7	45.5	48.5	-1.8	2.5	-1.3	2.3	-3.1	2.5
4 years or more	19.5	20.4	18.2	1.3	1.9	1.0	1.8	2.3	2.0
Basic Economic Family Type									
Unattached	44.9	45.5	40.6	4.2 *	2.4	0.6	2.3	4.8 **	2.4
Couples without children < 18 years	12.9	11.0	14.6	-1.6	1.6	-1.9	1.6	-3.5 **	1.6
Couples with one or more children < 18 years	28.0	29.3	30.9	-2.8	2.2	1.2	2.1	-1.6	2.2
Lone parents with one or more children < 18 years	7.9	8.2	8.6	-0.6	1.4	0.3	1.3	-0.4	1.4
Other	6.2	6.0	5.3	0.8	1.2	-0.2	1.1	0.7	1.2
Total Number Relatives in Household									
1	44.9	45.5	40.6	4.2 *	2.4	0.6	2.3	4.8 **	2.4
2	18.2	16.4	20.3	-2.2	1.9	-1.8	1.8	-3.9 **	1.9
3	22.9	22.2	23.5	-0.6	2.1	-0.7	2.0	-1.3	2.1
4 or more	14.0	16.0	15.5	-1.5	1.8	1.9	1.7	0.4	1.8
Average number in household	2.1	2.2	2.2	-0.1	0.1	0.0	0.1	-0.1	0.1
Highest Level of Formal Education									
High school or less	8.5	9.9	11.1	-2.6 *	1.5	1.5	1.4	-1.2	1.5
Some post-secondary education	17.1	17.8	15.1	2.0	1.8	0.7	1.7	2.7	1.8
Non-university certificate or diploma	21.6	19.0	21.5	0.1	2.0	-2.6	1.9	-2.5	2.0
University degree	52.8	53.2	52.3	0.6	2.5	0.4	2.3	1.0	2.5
Annual Household Income									
Under $5,000	16.4	14.8	13.6	2.8	1.8	-1.7	1.7	1.1	1.8
Between $5,000 and $9,999	17.6	17.8	17.1	0.5	1.9	0.2	1.8	0.7	1.9
Between $10,000 and $14,999	20.4	19.0	20.1	0.4	2.0	-1.4	1.9	-1.0	2.0
Between $15,000 and $19,999	19.9	21.7	20.2	-0.3	2.0	1.9	1.9	1.6	2.0
Between $20,000 and $24,999	13.2	13.6	13.8	-0.6	1.7	0.4	1.6	-0.2	1.7
$25,000 or higher	12.5	13.1	15.2	-2.7	1.7	0.6	1.6	-2.1	1.7
Average household income ($/year)	14,494	14,820	15,284	-789 *	451	326	428	-464	452
Sample size	920	915	748						

Source: SRDC baseline survey.

Note: [1] Percentage figures unless otherwise indicated

Sample sizes vary for individual measures because of missing values.

Two-tailed t-tests were applied to differences in characteristics between the treatment 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.

Table 3.3: Number of Participants, by Data Source and Research Group

Research Group	Baseline Survey	PMIS	18-Month Survey
learn$ave-only	1,195	1,195	920
learn$ave-plus	1,194	1,193[1]	915
Control	1,195	--	748
Total	**3,584**	**2,388**	**2,583**

Note: [1] One case that was included in the baseline survey analysis was excluded from the PMIS and 18-month survey files for this report, due to eligibility issues uncovered since the last report.

ESTIMATING IMPACTS

The first step in estimating impacts was to examine how the research groups' outcomes corresponded to the research hypotheses. The differences in outcomes are the estimates of *learn*$ave's impacts. Comparison is possible because of the similarity of the research groups, as per the experimental design. Thus, significant differences in outcomes can be attributed to *learn*$ave since other factors have been controlled for through random assignment.

In order to test the research hypotheses regarding the positive impact of the *learn*$ave matched credits (the financial "incentive") and financial management training and case management services (collectively known as the "services") on saving, other components of net worth, education and training, small business start-up and employment outcomes, paired comparisons were made between the three research groups in the following way:

- **Impact of incentive:** to measure the impact of the matched saving credit incentive alone, the outcomes of the *learn*$ave-only group were compared with those of the control group.
- **Impact of services:** to measure the *additional* impact of financial training sessions and case management beyond the impacts due to the matched credits alone, the experiences of the *learn*$ave-plus group were compared with those of the *learn*$ave-only group.
- **Total impact of incentive + services:** to measure the combined impact of the matched credit incentive and the financial management training and case management services, the outcomes of the *learn*$ave-plus group were compared with those of the control group.

The impact estimates presented in the body of this report have been regression-adjusted.[4] To take advantage of the wealth of sociodemographic detail on participants available from the participant surveys and to increase the statistical precision of the (unadjusted) impact estimates, regression adjustment models for each outcome variable were run. Further, running a regression adjustment model strengthens the impact

[4] As per Mohr (1995) and Orr (1999). In so doing, it should be said that unadjusted estimates are reliable estimates based as they are on randomly assigned program and control groups. The differences between adjusted and unadjusted estimates were not large.

estimates by controlling for the effect of differences in sociodemographic variables that existed at baseline and that arose as a result of differing response rates (although the research groups remained fairly comparable as noted). In the regression adjustment model, the outcome is "explained" in terms of a variable indicating affiliation with the respective research group plus a set of other "explanatory" variables capturing the site, baseline sociodemographic characteristics and the participant's attitude towards the future. See Appendix B for further details on the regression adjustment process and Appendix C for the unadjusted impact estimates. There were no differences of any note between the adjusted and unadjusted results.

Tests were run to determine if the measured impacts varied by particular policy-relevant subgroups of the participant population. Knowing what groups are suited or ill-suited for a program such as *learn*$ave should be of interest to policy-makers if implementation of a large-scale IDA program should ever be considered. Differences for subgroups are reported for the following baseline variables: gender, age, family type (marital status and presence of children under 18 years of age in household), number of years since immigrating to Canada, household income, whether home is rented or owned, whether or not participant received Employment Insurance benefits over the previous 12 months, and whether or not the participant was a saver prior to the project. The subgroup results are discussed in association with the respective outcome variable being presented in Chapters 5 and 6. The detailed results are presented in Appendix D.[5]

Finally, note that it is mainly statistically significant results that are reported herein. The degree of significance of the difference between groups (as in Table 3.2) and of the impact estimates (presented in Chapters 5 and 6) is based on a t-test and is indicated by the number of asterisks in the tables: * = at the 10 per cent level, ** = at the 5 per cent level, and *** = at the 1 per cent. See Appendix B for more details.

[5] Note that the subgroup results presented in Appendix D are not adjusted, but comparisons between them and the adjusted subgroup results revealed few differences in significance level and direction of the impacts.

Chapter 4:
Participation in *learn*$ave

This chapter describes participant activity up to 18 months following random assignment. The first section looks at actions prior to random assignment — recruitment, the application process, enrolment, and random assignment. The second section looks at *learn*$ave account opening, saving, cash-out, financial management training, and case management activity.

LEARN$AVE PARTICIPATION: FROM OUTREACH TO ASSIGNMENT[1]

Recruitment

With many research projects it is preferable to have participants chosen at random from a list of eligible people. For *learn*$ave there was no such list from which to enrol participants. Therefore, the local delivery agencies were charged with the task of recruiting participants from the general population using a broad outreach strategy.

Outreach in Halifax, Vancouver, and Toronto began in August 2001. Early in the recruitment period all three experimental sites — but especially Halifax and Toronto — relied heavily on outreach through networking with other local agencies, which they found through the first several months of *learn*$ave recruitment to be relatively ineffective. As a result, there were low levels of initial recruitment. That *learn*$ave did not sell itself is a finding consistent with the experience of other IDA programs, particularly the American Dream Demonstration, which included one experimental site in Tulsa, Oklahoma (Adams, 2005).

In response to the initial low take-up, the project offices implemented a multi-faceted recruitment campaign. Their methods included transit ads, newspaper ads, posters, brochures, and interviews with local media — but the exact timing and mix of methods varied from site to site.

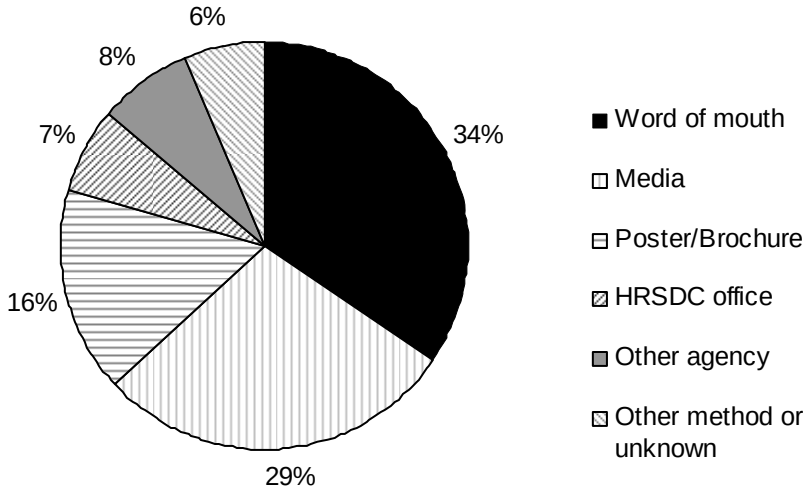
As recruitment grew and people learned about *learn*$ave through a variety of means, increasing numbers of people heard about *learn*$ave via word of mouth. Figure 4.1 shows that 34.5 per cent of participants heard about *learn*$ave in this way, making it the most successful recruitment "strategy." This was followed by media at 28.6 per cent and posters and brochures at 16.3 per cent. Despite the project staff's considerable efforts in working with partner community agencies, only 7.5 per cent of participants stated that they had heard about *learn*$ave through another agency.

The original *learn*$ave design plan called for each site to recruit 1,200 enrollees. However, as a result of the low response in Halifax (due in part to the relatively small population base of that city), the plan was altered and the unused places from Halifax were allocated to Toronto and Vancouver. The final distribution of participants recruited

[1] The following is based on the *learn*$ave implementation research. For details, see Kingwell et al. (2005).

was 254 in Halifax, 1,697 in Toronto, and 1,650 in Vancouver. Recruitment was completed in Halifax in July 2003, in Toronto in August 2003, and in Vancouver in December 2003.

Figure 4.1: Primary Method by which Participants Heard about *learn*$ave



Source: Participant Management Information System.

Notes: For this figure, data for the experimental study includes only participants in the *learn*$ave-only and *learn*$ave-plus groups. Total sample size is 2,383.

Application and Assignment

Most of the various advertising methods directed interested people to call the local project office. During this initial telephone conversation, the site staff member provided the caller with additional information about *learn*$ave and usually conducted a preliminary screening assessment. If the person appeared interested and was likely to be eligible, she or he was invited to one of the application sessions, held in different locations throughout the community.

Most application sessions included a standard slide presentation where people were given more information about *learn*$ave — including the random assignment process. Those who expressed interest in applying were given an application form, including an informed consent form. Once the application form was complete and all supporting documents were supplied, the site office conducted a final eligibility check. If the participant was deemed eligible for *learn*$ave, the completed application form was forwarded to POLLARA (the firm conducting the baseline and follow-up surveys) which entered the information contained on the form into a database and contacted the applicant for the baseline interview.

Once the enrollee completed the baseline interview, the participant's record was forwarded to the Social Research and Demonstration Corporation (SRDC) for random assignment. If the enrollee was assigned to one of the two program groups, the project office contacted the person for an orientation session. This session gave the participant further details about the savings rules and opening a *learn*$ave account.

The *learn*$ave IDA was implemented as originally conceived and designed. This was the conclusion of SRDC representatives who observed several application and orientation sessions throughout the recruitment period. In addition, a subset of participants was asked a limited number of questions in a telephone survey conducted 10 months after their first interview, in order to assess the degree to which they understood key program criteria. Their responses suggested that participants understood the key components of *learn*$ave. Therefore *learn*$ave is a valid test of an IDA promoting saving for learning or micro-enterprise.

Sociodemographic Profile of Participants and Take-Up

The sociodemographic characteristics of *learn*$ave participants were compared to those of the target (eligible) population group in order to determine whether or not enrollees represented the underlying eligible populations who could benefit from participating in *learn*$ave. Data on the characteristics of the target population group were obtained from Statistics Canada's Survey of Labour and Income Dynamics (SLID). Note that the SLID data are for people in the three experimental sites who would meet the *learn*$ave age, income, and student status criteria. Social assistance recipients are not included in the SLID numbers presented here as they are not part of the target group for the experimental study.

This comparison identified a number of important differences between those who enrolled in *learn*$ave and the underlying eligible population. As shown in Table 4.1, *learn*$ave attracted individuals who are more likely to be younger, single, well educated, and employed than the general eligible population. These results echo recent survey data that show that younger Canadians and those who have already completed some post-secondary education are more likely to be interested in work-related training, as indicated by the fact that they are more likely to have participated in such training (Canada Council on Learning, 2006).

A very high proportion of the *learn*$ave sample are recent immigrants who arrived in Canada within the five-year period before applying for *learn*$ave. Whereas a quarter of the eligible population in Halifax, Toronto, and Vancouver combined is made up of recent immigrants, they represent more than 50 per cent of the entire *learn*$ave sample. This result is consistent with results from the Longitudinal Survey of Immigrants to Canada, which states that the majority of newcomers reported that it was either very important (71 per cent) or important (18 per cent) to obtain education or training in Canada to improve their skills. At the time of arrival, about two-thirds of respondents had plans to get education or training (Statistics Canada, 2005).

Although the initial recruitment difficulties, the composition of the recruited sample and earlier *learn*$ave research would suggest low take-up and a possible lack of universal appeal for such a program, further considerations suggest take-up may be higher today. SRDC commissioned a market research survey (MRS) in 2003 to determine how many randomly selected eligible individuals would join *learn*$ave when given personal information about *learn*$ave by phone. The findings from the MRS indicated an estimated take-up rate at a given point in time of about 5 per cent.

Table 4.1: Comparison between *learn*$ave Participants at Baseline and Eligible Population

Characteristics	*learn*$ave Sample	Eligible Population
Gender (%)		
Male	49.0	51.1
Female	51.0	48.9
Mean Age (in years)	33.5	41.0
Household Type (%)		
Unattached individuals	45.5	23.1
Couples with children under 18 years of age	13.7	23.1
Couple without children under 18 years of age	27.8	31.5
Lone parents with children under 18 years of age	7.4	4.2
Other	5.6	18.1
Recent Immigrant (%)[1]	55.4	25.4
Highest Level of Education (%)		
Less than high school	2.5	11.0
High school graduate	6.9	14.3
Some post-secondary education	15.7	10.3
Non-university certificate or diploma	19.8	21.0
University degree	55.1	19.3
Don't know or refused	0.0	24.1
Dwelling Tenure (%)		
Owned by household	4.4	44.4
Employed (%)	65.8	54.5
Sample size	3,584	488,564

Source: *learn*$ave application form, baseline survey, and custom tabulations from Statistics Canada from the Survey of Labour and Income Dynamics (SLID) 2002.

Note: The sample profile shown represents the characteristics of the *learn*$ave sample that would have existed at baseline if each of the three experimental sites had enrolled the same proportion of participants as the sites represented of the eligible population. By weighting the experimental sample in this manner, it can be compared with the eligible population.

[1] The eligible populations include respondents who immigrated in the years 1998–2002. The *learn*$ave sample includes enrollees who immigrated in 1998 or later.

However, the MRS was not able to measure the extent to which individuals, once they learned of *learn*$ave, might have signed up for it beyond a one-month follow-up period. Moreover, it could be that an actual IDA program would attract a greater number

of applicants if, unlike *learn*$ave, it does not have a research/demonstration dimension (and therefore would not be considered temporary nor would it include participants in a control group not receiving benefits); if it has a longer track record of successful implementation and effectiveness; and if recruitment takes place in a climate where asset-building generally and skill development are actively promoted.

PARTICIPATION PATTERNS IN *LEARN*$AVE ACTIVITIES

The results in this section are based on data from the *learn*$ave Participant Management Information System (PMIS) and cover the first 18 months of participation in *learn*$ave. The results shown are for all participants in the *learn*$ave-only and *learn*$ave-plus groups regardless of whether or not they completed the 18-month survey.

Opening Accounts and Saving

Overall, the results indicate a high rate of program participation in the first 18 months for members of both the education and micro-enterprise streams. The first step for participants, once their orientation was complete, was to visit any RBC Royal Bank branch in their area and open a special *learn*$ave account. As shown in Table 4.2, the vast majority of participants opened an account — 93 per cent. Almost three-quarters of all participants (74 per cent) opened an account within 45 days of being accepted into *learn*$ave, and almost half (47 per cent) within 23 days.

Overall, participants saved quite regularly during the first 18 months. As noted, participants must accumulate 12 active saving months — months where their balance (net of any unmatched withdrawals) increases by a minimum of $10 — before they can use any of the matched funds. On average, participants had 11 active savings months in the first 18 months of participation, equivalent to 60 per cent of the time. The results also show that 67 per cent of participants saved in at least 12 of the 18 months and therefore became eligible to cash out some or all of their accumulated savings credits.

Participants deposited an average of $57 per month in their *learn*$ave account, and by month 18 had deposited $945, which was eligible to be matched at the 3:1 rate.[2] This is equivalent to 63 per cent of the maximum $1,500. At month 18, the average account balance net of matched withdrawals was $838. The $945 in deposits had leveraged or have the potential to leverage an average of $2,835 in 3:1 matching credits, assuming all participants had reached the threshold of 12 active saving months to qualify for the savings credits. Forty per cent of all participants were able to save the maximum amount of $1,500 in the first 18 months.

To put into perspective the $3,780 deposited and leveraged (broken down, this is equivalent to $945 deposited and $2,835 leveraged) in the first 18 months, this amount could have been used to purchase almost one year full-time at a community college. A Statistics Canada survey of students found that in 2001/02 the average full-time *college* student paid about $3,200 in tuition fees, books, and supplies. The $3,780 would not have been enough to purchase a year of university education, as in 2001/02, the average full-

[2] The $945 total includes any money that was taken out as a "matched withdrawal" for which participants received $3 in matching funds for each matchable dollar deposited in their *learn*$ave account.

time *university* student paid slightly over $5,200 for tuition fees, books, and supplies. However, the costs of education vary by program and province and therefore the number of courses *learn*$ave will pay for varies by location and may be determined as well by the choices of the participant (Ouellette, 2006).[3]

Table 4.2: Participation in *learn*$ave Saving and Cashing-Out Activity at 18 Months*, by Savings Stream

	Total	Education Stream	Micro-Enterprise Stream
Percentage who Opened a *learn*$ave Account	92.9	93.6	90.1
***learn*$ave Saving Activity**			
Average number of active saving months[1]	10.7	10.9	9.8
Average proportion of months actively saved in (% of 18)	59.5	60.7	54.6
% who actively saved in 12 or more of the 18 months	67.2	69.1	58.8
Average monthly amount deposited in *learn*$ave account ($)[2]	57	57	53
Average closing balance in *learn*$ave account (at 18 months) ($)[3]	838	844	808
Average matchable balance in *learn*$ave account (at 18 months) ($)[4]	945	960	879
Average excess deposits ($)[5]	73	72	79
Average proportion saved of the maximum (% of $1,500)	63	64.0	58.6
% who saved maximum amount (%)	39.8	40.3	37.7
Cashing-Out Activity (Matched Withdrawals)			
% who cashed out at least once	27.0	29.5	16.4
% of cash-out eligible people who cash out at least once	37.4	39.9	25.7
% who cashed out maximum amount (%)	4.1	3.3	7.9
Average number of months it took to become eligible to cash out[a]	13.6	13.5	13.8
Average number of cash-outs[b]	2.1	2.2	1.8
Average amount withdrawn for "legitimate reasons"			
per matched withdrawal ($) [b]	1,836	1,648	3,264
per person over the period ($) [b]	2,883	2,719	4,127
Sample size[6]	**2,388**	**1,931**	**456**

Source: Participant Management Information System.

Notes: [1] Months where balance increased by a minimum of $10.

[2] Month-to-month change in account balance. Matched withdrawals — funds put towards education, training, or micro-enterprise for which they received $3 in matching funds for each dollar deposited in their *learn*$ave account — do not reduce this figure. Includes funds that exceeded $250 per month, or a cumulative total of $1,500.

[3] Actual balance at the end of month 18. Excludes both matched withdrawals and "unmatched" withdrawals made for reasons other than education, training, or micro-enterprise.

[4] This total includes any money that was taken out as a matched withdrawal; however, it does not include unmatched withdrawals. Deposits which exceed $250 per month, or a cumulative total of $1,500, are not included.

[5] Deposits in excess of $250 per month or a cumulative total of $1,500.

[6] For this table and subsequent tables broken down by savings stream, one case was excluded from the education stream analysis because they wrongly cashed out for micro-enterprise.

[a] Among those who gained access to credits.

[b] Among those who cashed out. Includes both the personal savings and matching funds spent on approved uses.

*18 full calendar months after a participant is accepted into *learn*$ave. The month in which they are accepted is referred to as month 0.

[3] In 2003–2004 the average annual tuition of a full-time undergraduate program was $4,025 while the average college tuition was slightly more than $2,000 (Millennium Scholarship Foundation, 2004).

Total *learn*$ave deposits rose in the first 12 months and fell off thereafter: in effect, over the first 12 months, strong savings were observed (Figure 4.2). The average change in savings by month peaked at $79 in month 9, and was followed by a reduction in later months. This "leveling off" corresponds to the growing number of participants who accumulated the targeted $1,500 in matchable savings. In month 11, 11 per cent of participants reached $1,500. This figure jumps to 23 per cent in month 12 and then increases more gradually to 29 per cent by month 13 and 33 per cent by month 14.

Cashing Out

While participants have generally been quick to save, they were not as quick to cash out some or all of their match funds (also known as matched withdrawals). As noted, whereas approximately 67 per cent of all participants became eligible to cash out some or all of their accumulated savings credits in the first 18 months, only 27 per cent did so (see the third panel of Table 4.2) and only 4.1 per cent cashed out all their credits. Of those who were eligible to use their savings credits, 37.4 per cent actually cashed out some or all of them. This low incidence of matched withdrawals at month 18 is not surprising given that participants have up to month 48 to cash out their matched savings credits.

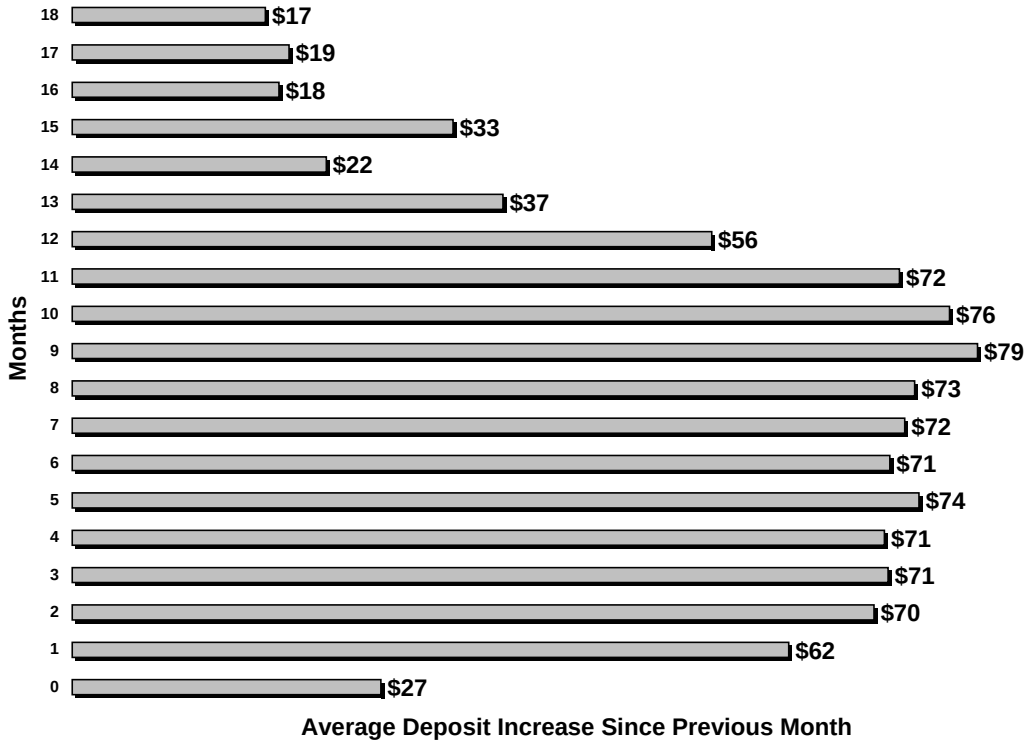
In general, participants did not spend their savings "all in one place." On average, participants who cashed out did so 2.1 times. Among participants who used any of their matched funds, the average combined amount of participant savings and credits over the 18 month period was $2,883 dollars per participant. The average value of each cash-out was $1,836. These participants took an average of 15 months to cash out, from the time they started *learn*$ave.

A limited number of participants cashed out on behalf of a beneficiary. Three per cent of all participants cashed out and transferred some of their funds to another member of their baseline family. This represents 11 per cent of participants who cashed out one or more times in the first 18 months.

It is interesting to note the differences in cash-out rates between the education and micro-enterprise streams. Participants in the education steam can use their funds only for educational activities and not for starting a micro-enterprise. In contrast, the micro-enterprise stream, which represents 20 per cent of the sample, can use their funds either for education or for starting a new micro-enterprise. In the first 18 months, education stream participants were about twice as likely as micro-enterprise stream participants to cash out some or all of their matched credits (29.5 versus 16.4 per cent). Project office staff indicated that a likely reason for this is that it often takes longer to develop an approved business plan necessary for a *learn*$ave small-business cash-out than to apply for post-secondary education.

Micro-enterprise participants withdrew larger amounts. Among those with matched withdrawals, education stream participants requested an average of $1,648 per cash-out whereas the micro-enterprise stream requested an average of $3,246 per cash-out. This suggests that, in general, the micro-enterprise stream is saving for a limited number of large cash-outs to finance the launch of their business.

Figure 4.2: Change in *learn*$ave Account Balance, by Month



Source: Participant Management Information System.

Note: Change is the month-to-month change in account balance. Matched withdrawals — funds put towards education, training, or micro-enterprise for which participants received $3 in matching funds for each dollar deposited in their *learn*$ave account — do not reduce this figure. Includes funds that exceed $250 per month or a cumulative total of $1,500, but excludes unmatched withdrawals (for purposes other than education, training, or micro-enterprise).

Participation in Financial Management Training and Case Management

Participants in the *learn*$ave-plus group were expected to attend 15 hours of financial management training prior to cashing out. The training curriculum combines the concept of Prior Learning Assessment and Recognition with the more standard elements of financial management training. The *learn*$ave-plus group also had access to case management services.

Table 4.3: Participation in Financial Management Training by *learn*$ave-plus Participants, by Savings Stream

	Total *learn*$ave-plus	Education	Micro-Enterprise
Proportion receiving any training (%)	85.4	86.0	82.8
Proportion receiving 9 or more hours (%)	79.1	80.0	75.5
Proportion receiving 15 or more hours (%)	73.1	74.5	67.4
Average number of hours spent in training[1]	14.2	14.2	14.0
Sample size	**1,193**	**959**	**233**

Source: Participant Management Information System.

Note: [1] Among those who took some financial management training.

On average, project staff at the sites spent a little over an hour with each participant. Table 4.4, based on staff notes in the PMIS,[4] shows that staff spent about 66 minutes, on average, with participants in the first 18 months. As intended, the services received by the *learn*$ave-only group were less intensive than those received by the *learn*$ave-plus group. The amount of time spent with the *learn*$ave-only group was about half of that of the *learn*$ave-plus group (43 versus 89 minutes). This is because, for *learn*$ave-plus participants, the services consisted of active case management in the form of encouragement to save, in addition to administrative assistance with paperwork, whereas *learn*$ave-only participants typically received only the latter.

Table 4.4: Provision of *learn*$ave Services to Participants, by Research Group

	Total	*learn*$ave-only	*learn*$ave-plus
Proportion receiving any referrals (%)	2.4	1.5	3.4
Average number of referrals	0.0	0.0	0.1
Proportion receiving any project-related contact (%)	79.0	63.5	94.5
Average number of project-related contacts	4.5	2.9	6.1
Proportion receiving any services (%)	80.1	64.6	95.6
Average number of contacts	4.8	3.0	6.5
Average number of minutes spent with participants	66.1	43.1	89.2
Sample size	**2,388**	**1,195**	**1,193**

Source: Participant Management Information System.

During the first 18 months, the case management requested and received seems focused directly on the *learn*$ave accounts and project-related goals. Case management was never intended to provide a full range of family and personal counseling. However, prior to *learn*$ave's launch some case managers felt that there may be many requests for such services — which would be handled by making referrals to other agencies. The PMIS data show that such requests were in fact infrequent. Almost all of the contacts are

[4] Each time project staff makes contact with participants or works on their particular file, he or she creates a staff note for that participant in the PMIS.

classified as project related. Only on relatively few occasions did case managers find it appropriate to make a referral to another agency.

SUMMARY

Despite some recruitment challenges, the *learn*$ave offices were able to enrol the requisite number of people into the project by using a wide variety of recruitment methods. There are, however, some important differences between the demographics of participants and the eligible population; on average *learn*$ave participants are more likely to be younger, living alone, well educated, working, and recent immigrants than the general eligible population. The *learn*$ave IDA was implemented as originally conceived and designed. Participants received clear and consistent information about the project through the application and orientation sessions. Therefore, *learn*$ave is a valid test of IDAs for learning.

Overall, during the first 18 months, participants exhibited high rates of program participation. In particular, participants had high rates of account opening and saving activity but considerably lower rates of matched withdrawals, as would be expected as participants have up to 48 months to use their match funds. Among *learn*$ave participants there was a high rate of Financial Management Training attendance — 73 per cent completed the requisite 15 hours. As intended, there were higher levels of services provided to the *learn*$ave-plus group than the *learn*$ave-only group.

Chapter 5:
Impacts on Savings, Assets, Budgeting, and Hardship

This chapter explores findings related to *learn*$ave participation, saving, budgeting, and hardship for the first 18 months following random assignment. The key hypothesis is that participants receiving *learn*$ave matched savings credits and/or associated financial management training and case management services will save more than they would have otherwise — without experiencing increased hardship.

The first section focuses on the incremental impact of *learn*$ave services — financial management training and case management services — on *learn*$ave program participation. The second section is devoted to an examination of the impacts of *learn*$ave matched savings credits as well as the services on overall savings and asset accumulation. Program impacts on budgeting and hardship are considered in the third section. Results of further analysis by subgroups of the participant pool are found in the last section of this chapter.

IMPACTS OF *LEARN*$AVE SERVICES ON PROGRAM PARTICIPATION

This section focuses on the effects of financial management training and case management services on the *learn*$ave activities discussed in the previous chapter: account opening, saving, and cashing-out activity. The analysis is based on data from the Participant Management Information System (PMIS); these are only available for program group members (*learn*$ave-only and *learn*$ave-plus research groups), not for control group participants. Significant differences between *learn*$ave-plus and *learn*$ave-only research groups are interpreted as incremental impacts of *learn*$ave services. The following sections use data from the survey to examine the impacts of *learn*$ave services on other saving outcomes.

A key activity of *learn*$ave is the opening of a *learn*$ave account. As shown in the previous chapter, almost all participants (93 per cent) took this step. Table 5.1 indicates that *learn*$ave services have a positive, statistically significant impact on whether or not participants open a *learn*$ave account. The 3.6 percentage point difference in account opening rate between participants in the *learn*$ave-only and *learn*$ave-plus, however, indicates that the difference is not great in absolute terms.

Other statistically significant differences between the two program groups relate to savings in the *learn*$ave account. At month 18, *learn*$ave-plus participants had, on average, $65 more in their account than *learn*$ave-only participants. Moreover, the results for average net monthly change in the *learn*$ave account indicate that the *learn*$ave services had a statistically significant impact over the first 18 months: *learn*$ave-plus participants deposited $4 more per month than *learn*$ave-only participants. The results further show that *learn$*ave services positively affected saving regularity: the average number of active saving months was statistically significantly

larger for the *learn*$ave-plus group than for the *learn*$ave-only group, although by only half a month. Finally, there were no significant differences between the two program groups with regards to cashing-out activity.

Table 5.1: Unadjusted Impacts of financial management training and case management services on *learn*$ave Account-Opening and Cashing-Out Activity at 18 Months

	Total	*learn*$ave -only	*learn*$ave -plus	Difference (Impact)	Std. error
***learn*$ave Saving Activity**					
Proportion who opened *learn*$ave account (%)	92.9	91.1	94.7	3.6 ***	1.0
Mean number of active savings months[1]	10.7	10.5	11.0	0.5 **	0.2
Mean proportion of months actively saved in (% of 18 months)	59.5	58.1	60.9	2.8 **	1.1
Average amount deposited in *learn*$ave account per month ($/month)[2]	57	55	58	4 **	2
Average balance in *learn*$ave account ($ at 18 months)[3]	838	805	870	64 **	29
Average matchable balance in *learn*$ave account ($ at 18 months)[4]	945	926	964	38	25
Average proportion saved of the maximum (% of $1,500)	63.0	61.7	64.3	2.5	1.7
Cashing-Out Activity (Matched Withdrawals)					
Proportion who have cashed out at least once (%)	27.0	26.1	27.9	1.8	1.8
Average number of cash-outs (per participant)	0.6	0.6	0.6	0.0	0.0
Average matchable amount withdrawn per participant over the period ($)	786	779	793	14	67
Sample size		**1,195**	**1,193**		

Source: Participant Management Information System.

Notes: Two-tailed t-tests were applied to differences in characteristics between the program 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.

[1] Months where balance increased by a minimum of $10.

[2] Month-to-month change in account balance. Matched withdrawals — funds put towards education, training or micro-enterprise for which they received $3 in matching funds for each dollar deposited in their *learn*$ave account — do not reduce this figure. Includes funds which exceeded the $250 per month limit, or the cumulative total of $1,500.

[3] Actual balance at the end of month 18. Excludes both matched withdrawals and "unmatched" withdrawals — made for reasons other than education, training, or micro-enterprise.

[4] This total includes any money that was taken out as a matched withdrawal; however, it does not include unmatched withdrawals. Deposits which exceed $250 per month, or a cumulative total of $1,500 are not included.

Together, these results suggest that, whereas *learn*$ave services had a statistically significant incremental impact on *learn*$ave account-opening and saving activity during

the first 18 months following enrolment, this impact was not large in substantive terms. However, it is still early in the program cycle and the impact of *learn*$ave services might manifest itself in the next analysis period (months 19 to 40). The Social Research and Demonstration Corporation (SRDC) will continue to monitor *learn*$ave-only/*learn*$ave-plus differences to see whether the impacts of financial management training and case management services change over a longer period of time, with a particular focus on whether case management services help participants make the necessary preparations for a matched withdrawal.

IMPACTS ON TOTAL SAVINGS, OTHER ASSETS, DEBTS, AND NET WORTH

This section presents information on *learn*$ave impacts on a variety of assets and liabilities and overall net worth for *learn*$ave participants.[1] The focus of this section is on savings in saving and chequing accounts, including *learn*$ave accounts, together referred to as bank account balance or savings.

Individual assets, debts, and net worth will also be examined to enable identification of substitution effects that *learn*$ave might have had on the composition of participants' asset and debt portfolio. One desirable effect of *learn*$ave is to induce program participants to defer or alter short-term consumption, or work harder, in order to increase savings for longer-term human capital or micro-enterprise development. It is important, therefore, to identify whether or not savings by program participants are "financed" by new savings (from reduced consumption or increased work effort) or from reallocating existing assets or even increased debt (Mills, Patterson, Orr, & DeMarco, 2004). The effects of *learn*$ave on net worth depend on where contributions to *learn*$ave accounts originate.

For this analysis, net worth was calculated as follows:

Net Worth = Assets + Net Property + Net Business Assets – Liabilities

where: *Assets* = the sum of personal financial and physical assets, excluding house, vehicle and other properties, and business assets;
Net Property = personal property (house, other property, and vehicle) less outstanding property debt;
Net Business Assets = business assets less outstanding business debt; and
Liabilities = the sum of personal liabilities, excluding mortgages, vehicle loans, and business debt.

The discussion begins with a presentation of *learn*$ave impacts on levels of various net worth items, and proceeds to a presentation of impacts on the distribution of some of these items.

[1] Please note that for this section missing values were multiply imputed. Multiple imputation is discussed in Appendix B.

Impacts on Levels of Net Worth

Overall, the difference in net worth between the program groups and the control group is not statistically significant at 18 months. Differences emerge when considering some important components of net worth.

Chief among the differences is the balance in bank accounts under the personal assets component of net worth. The results (Table 5.2) indicate that, at 18 months, *learn*$ave-only participants had $1,631 on average in their accounts, which was $679 or 71 per cent greater than the control group. Another way of looking at this is that without *learn*$ave, participants' savings would have been 41.6 per cent lower. This indicates that the *learn*$ave incentive had a large incremental impact on cash savings. The lack of significant difference between the two program groups, however, indicates *learn*$ave services did not play a significant role in this respect.

This difference carried over into the measurement of liquid assets, which are dominated by bank account balances. Liquid assets comprise, in addition to funds in all bank accounts (including the *learn*$ave account), savings at home, money in guaranteed investment certificates and bonds, and investments in stocks and mutual funds. Participants in the *learn*$ave-only group on average had liquid assets valued at $1,890. This was $528 or 38.7 per cent higher than that of the control group.

Program group participants appear to have changed the composition of their asset portfolio over the first 18 months so as to have funds to deposit in their *learn*$ave account and thereby earn matched credits. Two findings in particular from Table 5.2 support this conclusion.

First, the average value of household assets (such as appliances and furniture, as well as clothing) held by *learn*$ave-plus participants was significantly lower than that held by control group members (a difference of $908[2]). This suggests that *learn*$ave-plus participants, owing to the combination of *learn*$ave services and matched credits, delayed purchases of household effects, or bought lower cost items, to have money to set aside for their *learn*$ave account.

Second, *learn*$ave did not induce participants to go into greater debt to generate funds for their *learn*$ave account. The results indicate that *learn*$ave-only participants have on average $137 less in family loans than control group participants. While the difference is not large, it does suggest that program group participants, because of their *learn*$ave savings and matched credits, may have had less need to borrow from family members. Also, it should be noted that the average liabilities of participants are not significantly different from those of control group members.

[2] Attention should be paid to the direction and relative size of the impact rather than its actual value. The reason for this is that, among all the questions regarding assets and debts on the 18-month survey, respondents would likely have had the most difficulty in answering the question on household assets. Contrary to financial assets such as bank balances and RRSPs, for which respondents would likely have written records of the current value, individuals typically would not know the market value of appliances and furniture that they may have owned for some time.

Table 5.2: Impacts on Savings and Other Components of Net Worth at 18 Months ($)

	Outcome Level (Average)			*learn* $ave-only vs. control		*learn* $ave-only vs. *learn* $ave plus		*learn* $ave-plus vs. control	
	learn $ave-only	*learn* $ave-plus	Control	Impact of financial incentive	Standard Error	Added impact of services	Standard Error	Impact of incentive plus services	Standard Error
Personal assets									
Bank accounts[1]	1,631	1,614	953	679 ***	176	-17	169	662 ***	180
Formal retirement savings plan[2]	494	549	406	88	82	56	78	144 *	84
Homeownership saving plan	21	-6	41	-20	30	-26	29	-46	30
GICs, terms, deposits, bonds[3]	200	255	278	-78	86	55	75	-23	87
Stocks, mutual funds	0	-2	10	-10	13	-2	13	-12	13
Savings at home	59	70	122	-62 **	30	11	28	-51 *	30
Value of goods in house	4,903	4,534	5,443	-539	450	-369	388	-908 *	504
Other financial assets	201	215	213	-13	133	14	115	1	126
Personal liabilities									
Credit cards	1,642	1,617	1,718	-76	181	-25	177	-101	180
Student loans	3,472	3,170	2,930	542	402	-302	378	240	399
Installment loans	13	11	13	0	6	-2	5	-2	6
Other bank loans	238	196	246	-8	71	-42	67	-50	71
Pawnbroker, etc. loans	0	1	0	0	0	0	0	0	0
Family loans	77	106	215	-137 **	69	29	65	-109	69
Other debt	115	137	127	-11	28	21	27	10	28
Overdue utility payments[4]	5	3	12	-7	6	-1	5	-8	6
Property	14,202	12,616	13,239	964	2,088	-1,587	1,962	-623	2,135
House	12,646	11,031	11,444	1,203	2,038	-1,615	1,907	-412	2,081
Other property	160	245	543	-382 *	227	85	213	-298	227
Automobile	1,396	1,339	1,252	143	99	-56	94	87	99
Debt on property	9,529	8,509	9,753	-224	1,799	-1,020	1,490	-1,244	1,722
House	8,764	7,871	8,968	-205	1,756	-893	1,454	-1,097	1,685
Other property	-90	41	86	-176	121	131	115	-45	121
Automobile	856	597	699	157	128	-258 **	120	-102	126
Overall									
Personal assets (non-property/business)	7,509	7,231	7,465	44	500	-278	488	-234	593
Liquid assets (financial, non-pension)	1,890	1,938	1,362	528 ***	201	47	195	576 ***	201
Personal liabilities	5,563	5,239	5,259	303	464	-323	435	-20	456
Net property assets (house and car)	4,673	4,107	3,486	1,188	1,449	-567	1,302	621	1,447
Net business assets	-49	114	26	-75	196	163	188	88	252
Net worth	6,570	6,211	5,717	854	1,657	-359	1,461	495	1,636
Sample size	**920**	**915**	**748**						

Source: Calculations from 18-month survey data and Participant Management Information System.

Note: Two-tailed t-tests were applied to differences in characteristics 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.

[1] Comprises balance in savings and chequing accounts in banks or other financial institutions (as reported in the survey), plus, for *learn*$ave-only and *learn*$ave-plus groups, the *learn*$ave account balance (taken from the PMIS). It does not include any matched funds.

[2] Includes Registered Retirement Savings Plans (RRSPs), Registered Retirement Income Funds (RRIFs), and Locked-In Retirement Accounts (LIRAs). Excludes private employer and public pension plans.

[3] GICs= Guaranteed Investment Certificates; items not in mutual funds.

[4] Reported for homeowners only; otherwise, overdue utility payments are included in the other debt category.

Further support for the suggestion that *learn*$ave induced participants to delay consumption to save for education or micro-enterprise development is indicated by the difference in the proportion of respondents who purchased a computer. (Computers can be purchased as learning supports and are therefore covered by *learn*$ave matched savings credits.) Program group participants were much less likely to purchase a computer in this period than control group participants (about 19 versus 27 per cent [Table 5.3]).

Impacts on the Distribution of Assets

Given the wide variation in the values of assets and liabilities as reported in the 18-month survey, it was deemed useful to determine if there are any differences at various points along the distribution of these items. For this analysis the full sample was divided into six quantile categories of the assets measures (bottom decile, 11th–25th percentiles, second quartile, third quartile, 76th–90th percentiles, and top decile), and then participants in each research group were divided up according to the cutoffs of the six quantiles. The analysis revealed that the increase in mean assets observed in the preceding section resulted more from individuals at lower asset levels increasing the value of their assets, rather than from those at the top increasing theirs. The distribution of participants according to the values of their liquid assets is presented in Figure 5.1.

Table 5.3: Impacts on Budgeting and Hardship at 18 Months — Incidence

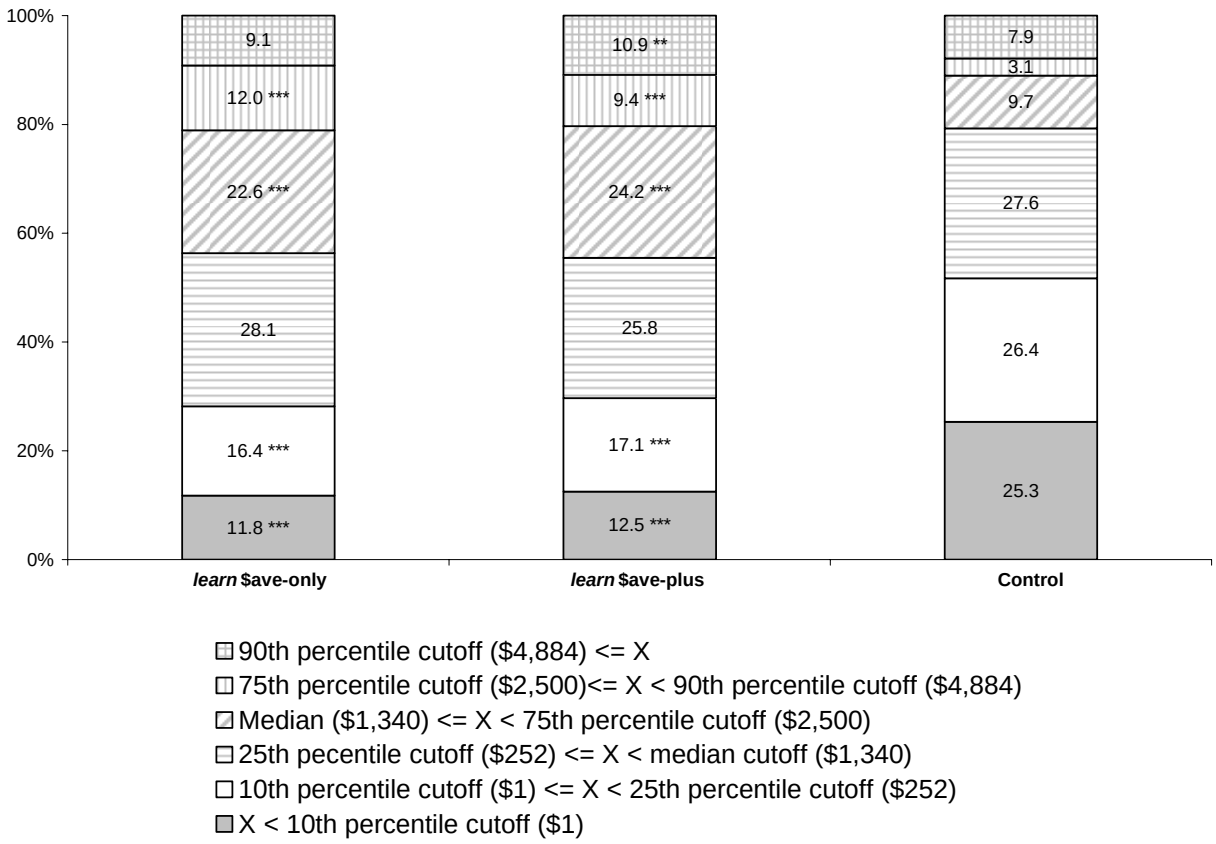
	Outcome Levels			*learn*$ave-only vs. control		*learn*$ave-only vs. *learn*$ave-plus		*learn*$ave-plus vs. control	
	learn$ave-only	*learn*$ave-plus	Control	Impact of financial incentive	Standard Error	Added impact of services	Standard Error	Impact of incentive plus services	Standard Error
Budgeting (at Time of Interview)									
% who budget	44.1	49.2	38.1	6.0 **	2.4	5.1 **	2.2	11.1 ***	2.4
% who set financial goals	56.4	63.8	51.4	5.1 **	2.4	7.4 ***	2.2	12.4 ***	2.4
Hardship (in Previous 12 Months)									
% who had difficulty meeting expenses	41.5	39.9	42.8	-1.3	2.2	-1.6	2.1	-2.9	2.2
% who had to borrow to meet needs	32.7	33.0	34.2	-1.5	2.0	0.3	1.9	-1.2	2.0
% who used a foodbank	12.7	13.5	11.8	0.8	1.2	0.9	1.2	1.7	1.2
% who declared bankruptcy	0.3	0.7	1.1	-0.7 *	0.4	0.3	0.3	-0.4	0.4
Computer Purchase									
% who purchased a computer since last interview	18.5	19.0	26.9	-8.4 ***	2.1	0.5	2.0	-7.9 ***	2.1
Sample size	**920**	**915**	**748**						

Source: Calculations from 18-month survey data.

Note: Sample sizes vary for individual measures because of missing values.
Two-tailed t-tests were applied to differences in characteristics between the treatment 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.

As noted above, program group members have, on average, a significantly greater amount of liquid asset holdings than control group members. This increase is derived mainly from participants at the lower end of the distribution moving up. Participants in the *learn*$ave-only group were much less likely to be in the lowest two quantiles (28.2 per cent) than control group members (51.7 per cent). Conversely, participants in the *learn*$ave-only group were much more likely to be in the fourth quantile (22.6 per cent) than control group members (9.7 per cent). This suggests that *learn*$ave (the matched credit) has acted to move participants into the higher levels of the distribution.

Figure 5.1: Adjusted Distribution of Participants According to their Liquid Assets, by Research Group



Source: Calculations from 18-month survey data and Participant Management Information System.
Note: Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

IMPACTS ON BUDGETING AND HARDSHIP

Budgeting is associated with savings deposits. The expectation is that the financial management training, in addition to the offer of credits for saving, will encourage participants to budget in order to save greater amounts in their *learn*$ave account.

In fact, one positive and significant finding is that participants in the *learn*$ave-only group were significantly more likely to have a budget than control group participants

(44.1 versus 38.1 per cent; see Table 5.3). There was also a statistically significant difference of similar magnitude between the two program groups (*learn*$ave-plus versus *learn*$ave-only: 49.2 versus 44.1 per cent). Thus, of the total impact of 11.1 percentage points for *learn*$ave overall, roughly half can be attributed to the *learn*$ave financial incentive (matched saving credit), and the other to *learn*$ave services. Similar results hold for setting financial goals, the other budgeting outcome indicator.

The savings hypothesis also suggests that increased saving from *learn*$ave will not cause increased hardship for participants. Savers may be worse off if they make short-term sacrifices in terms of foregoing consumption of necessary items for long-term gain (Sherraden, Schreiner, & Beverly, 2003). If the *learn*$ave experience of program participants caused an increase in hardship — in effect becoming worse off than in the absence of the program (at least for a period of time) — the value of IDA programs such as *learn*$ave would be diminished.

The results indicate, though, that there were no significant differences between the program groups and the control group for most measures of hardship. This finding is in line with a central component of the savings hypothesis: that *learn*$ave will not increase hardship.

However, there is one measure of hardship where a small statistically significant difference has been found between the program and control groups: the proportion of participants who declared bankruptcy. A statistically significant smaller proportion of the *learn*$ave-only program group participants declared bankruptcy than members of the control group. Although significant in statistical terms, the difference is not in absolute terms: the difference is less than one percentage point.

SUBGROUP IMPACTS

In this section, results are presented on particular impacts of *learn*$ave on specific subgroups. Studies in the United States have found that asset-building programs such as *learn*$ave have strong positive impacts on certain subgroups of the population, such as persons of colour (Mills, Gale, Patterson, & Apostolov, 2006). Through an examination of impacts by subgroup, it is possible to identify groups in the *learn*$ave sample for which *learn*$ave is having positive or negative effects.

A total of 30 subgroups defined by a total of 9 baseline characteristics of the *learn*$ave sample were created and used to compare differences. The tables for this analysis can be found in Appendix D.[3] The body of this chapter focuses on 14 subgroups defined by five characteristics deemed particularly policy-relevant and germane to this type of program, and where interesting differences were observed. The characteristics for the impacts are shown are as follows:

- Age (at baseline):
    - Less than 30 years old
    - 30 to 39 years old

[3] Note again that unadjusted subgroup impacts are presented in Appendix D but presented little difference from the adjusted results.

    - 40 years old and older
- Annual household income (at baseline):
    - Less than $10,000
    - Between $10,000 and $19,999
    - $20,000 and more
- Immigration status (years since immigrating, at baseline):
    - Immigrated to Canada less than 4 year prior to baseline
    - Immigrated to Canada 4 years or more prior to baseline
    - Born in Canada
- Education attainment level (certification received, at baseline):
    - High school diploma
    - Non-university certificate of some kind
    - University degree
- Saving behaviour (at baseline)
    - Saved regularly
    - Did not save regularly

There are many saving outcomes which can form the subject of a subgroup analysis, but in the interests of space this chapter will focus on three — one for each of the areas considered by the savings hypothesis: setting financial goals (budgeting), liquid assets, and difficulty meeting expenses (hardship).

Setting Financial Goals: Impact of *learn*$ave by Subgroup

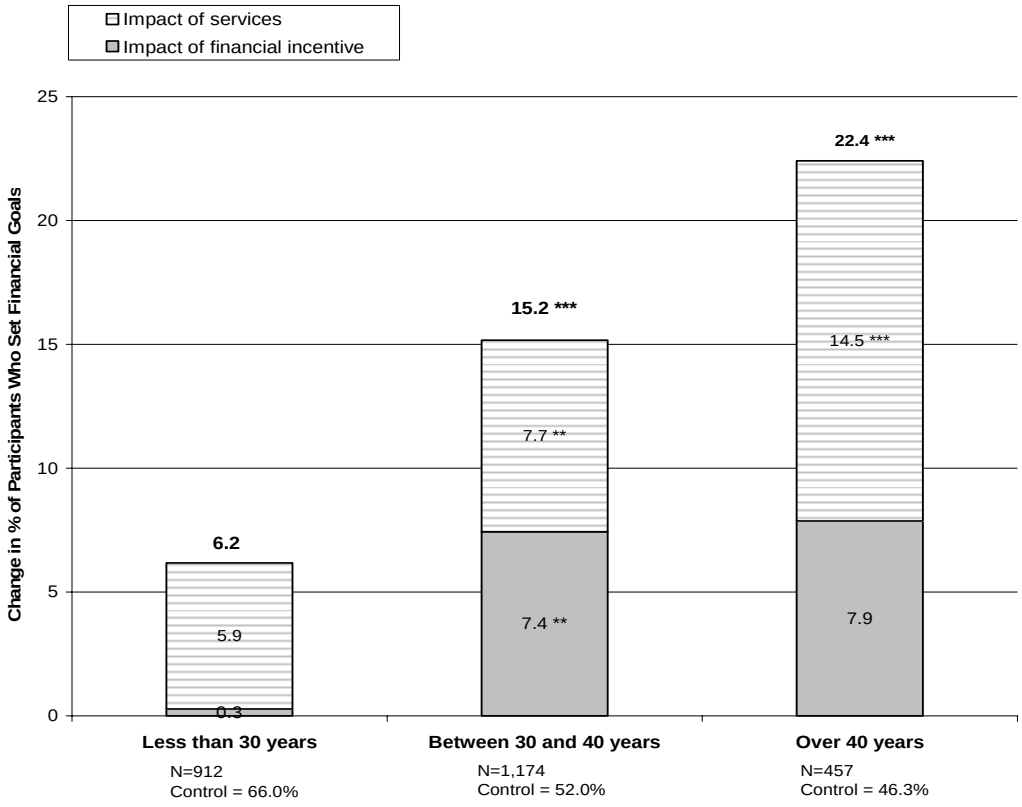
It was expected and has been shown for the entire participant pool that the *learn*$ave incentive alone (matched saving credit) would induce program group members to set financial goals and establish a budget and that the addition of financial management training and case management services would have a further positive effect in this regard. This section examines whether or not the program has been more or less effective in encouraging participants to set financial goals for particular subgroups of the *learn*$ave sample. Note that results for budgeting (not shown) are similar to the results shown for setting financial goals. Detailed results that form the basis for the results given in this section are presented in Table D.2 (Appendix D).

First consider Figure 5.2 and *learn*$ave's impact by *age.* The basic message of the chart in Figure 5.2 is that the impact of *learn*$ave — particularly *learn*$ave services — on setting financial goals increases with age. Overall, *learn*$ave's effect rose from a non-significant 6.2 percentage points for the lowest age group (less than 30 years of age), to 15.2 points for the middle age group (30–40 years old), to 22.4 points in the oldest age group (over 40 years old). For the *learn*$ave incentive (matched credits) alone, the impact in the youngest age cohort was negligible (0.3 percentage points) and dwarfed by the impacts in the two older age groups (7.4 and 7.9 percentage points, respectively). With respect to *learn*$ave case management services and financial management training, the increase by age in the additional impact of these services on setting financial goals was much steeper, as they added 7.7 and 14.5 percentage points in the two older age groups respectively to the impact of *learn*$ave. Note in particular that in the oldest age

group *learn*$ave services almost doubled the impact the matched credits had on setting financial goals (14.5 versus 7.9 per cent).[4]

These results suggest an equalizing influence for *learn*$ave on goal-setting across age groups. It appears as if *learn*$ave contributed to closing the gap that existed originally among the different age groups — with the youngest participants showing more initial propensity to setting financial goals than older participants. Indeed, the base incidence of each age group (indicated by the control group incidence along the horizontal axis of Figure 5.2) declines with age, while the impact (the degree to which *learn*$ave has increased that incidence) rises by age. However, it is likely that financial goal setting means different things for people at different stages of the life cycle and so further analysis and probing will be conducted to explore this issue.

Figure 5.2: Impact of *learn*$ave on Setting Financial Goals, by Age



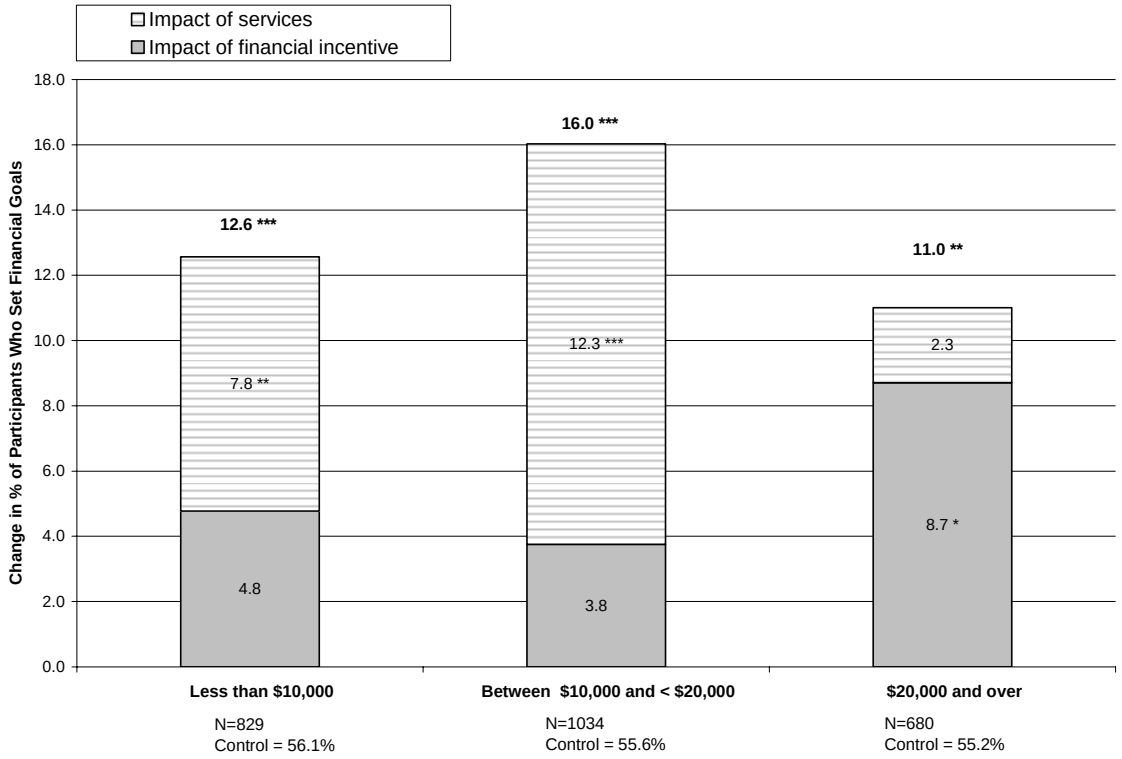
Source: Calculations from 18-month survey data. See Table D.2 in appendix D.

Notes: Sample sizes vary for individual measures because of missing values.
The subgroup is defined according to characteristics at the time of enrolment in the study.
Two-tailed t-tests were applied to differences in characteristics between the treatment 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.

[4] Note also that the differences in impacts between age groups are statistically significant only for the total impact of *learn*$ave (incentive + services) by age, as indicated by the two daggers for age in the last column of Table D.2.

Turning to impacts by household income level, Figure 5.3 demonstrates that *learn*$ave had a significant impact on setting financial goals for participants in all income subgroups, but the relative influence of the matched credits and the services varied according to income level. The impact of *learn*$ave overall peaked in the middle-income group of the target population: it rose from 12.6 percentage points in the lowest income group (<$10,000) to 16.0 percentage point in the $10,000 to $19,999 income group, but fell back to 11.0 percentage points in the highest income group ($20,000 and over). With respect to *learn*$ave services, these had a positive and significant impact on participants in the two lower household income cohorts but more so in the higher of the two groups (7.8 and 12.3 percentage points) but none in the highest income brackets (2.3 percentage points). As for the matched saving credits, these had a significant (and the greatest absolute) impact in only the highest income group (8.7 percentage points).

Figure 5.3: Impact of *learn*$ave on Setting Financial Goals, by Income



Source: Calculations from 18-month survey data.

Notes: Sample sizes vary for individual measures because of missing values.

The subgroup is defined according to characteristics at the time of enrolment in the study.

Two-tailed t-tests were applied to differences in characteristics between the treatment 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.

Baseline annual income is household income in the calendar year prior to application.

For those who immigrated to Canada in the year prior to application, annual income is based on a formula that includes foreign income, Canadian income, and money brought into Canada.

This indicates that *learn*$ave's additional services had the largest absolute impact on participants in the middle-income category and a greater impact than that of the matched credits. Conversely, the credits had a larger impact than services in the highest income group.[5]

With respect to immigration status, recent immigrants (in Canada for less than four years before joining the project) benefited the most from *learn*$ave, in particular from the services, in terms of setting financial goals. The financial incentive alone induced 7.3 per cent more recent immigrants to set financial goals, and the addition of *learn*$ave services induced a further 11.1 per cent of recent immigrants, for a total *learn*$ave impact of 18.4 percentage points. This is twice the *learn*$ave's impact on immigrants who had been in Canada for four years or more at the time of enrolment and on Canadian-born participants (both groups had about a 9 percentage point impact). It is worth noting that the greatest impact of *learn*$ave services was on immigrants who had been in Canada for four or more years upon joining *learn*$ave, whereas matching credits had the greatest impact on Canadian-born participants.

Impacts on goal-setting are also observed for participants from different education levels. Table D.2 indicates that, for all participants at all education levels (high school diploma, non-university diploma, and university degree), the total impact of *learn*$ave was similar (by 12-15 percentage points), as was the added impact of just the services (7-10 percentage points). As well, the matched credits had a significant impact on university degree holders alone (6.2 percentage points).

Finally, *learn*$ave appears to have an impact on participants based on their prior saving behaviour. The *learn*$ave incentive, services, and combination of both had a significant impact on setting financial goals for those who did not save regularly; in contrast, for those who were saving regularly, it was only the incentive in combination with services that had an impact on this outcome.

Liquid Assets: Impact of *learn*$ave by Subgroup

The subgroup analysis reveals that there were few impacts on net worth, but that there were interesting impacts on liquid assets for certain subgroups. It should be remembered that there were no significant *learn*$ave impacts on net worth at 18 months, but there were for liquid assets[6] as well as total bank savings (the balance in savings, chequing, and *learn*$ave accounts). Detailed results that form the basis of the results presented herein are also found in Table D.5 (Appendix D). Note that similar results were found for total savings.

Examining liquid asset impacts first by age group, the results indicate that *learn*$ave had a strong positive impact only on program group participants in the 30–40 age cohort. Control group members in this age cohort had, on average, $1,659 in liquid assets, compared to $2,638 for *learn*$ave-only group members; this represents a 59 per cent increase in liquid assets. This indicates that the financial incentive had a significant

[5] However, it should be noted that the lack of daggers for income level in Table D.2 indicates that the impacts of *learn*$ave on setting financial goals were not statistically different across income groups, indicating that the findings regarding the comparative impacts of *learn*$ave by income level are suggestive rather than definitive.

[6] Liquid assets include all assets except retirement savings, household effects, property, and vehicles.

impact. This was similarly the case for the total impact of *learn*$ave (i.e. including the services), but the services had no positive incremental impact.

With respect to household income, *learn*$ave had an impact on liquid assets in the lowest and highest income groups. For participants in the lowest income cohort (less than $10,000 annually), *learn*$ave-only participants had, on average, 74 per cent more in liquid assets than control group members ($2,902 / $1,667), while *learn*$ave-plus participants had 44 per cent more ($2,404 / $1,667). For the highest income group ($20,000 and greater), similar results hold, but the relative impact of *learn*$ave as a whole was larger than in the lowest income group: the average liquid assets of the *learn*$ave-plus group were 75 per cent higher than in the control group ($2,327 / $1,326) compared to 42 per cent higher for *learn*$ave-only group ($1,893 / $1,326). Note that the impacts of only the financial incentive in each income group were statistically different from each other, indicated by the double daggers for that column.

Significant impacts on liquid assets were also apparent for immigrants. Recent immigrants (immigrated less than four years ago at the time of project enrolment) in the *learn*$ave-plus group had, on average, 46 per cent more liquid assets than recent immigrants belonging to the control group ($3,132 / $2,149). Immigrants who had been in Canada for four or more years at the time of project enrolment in the *learn*$ave-plus group, also had, relative to the control group, greater liquid assets: 59 per cent ($1,787 / $1,127). Similar results for the financial incentive (matched credit) alone were also present. For participants born in Canada, *learn*$ave did not have any significant impact on liquid assets.

Impacts on liquid assets are also observed for participants with educational accreditations beyond high school. Table D.5 indicates that for university degree holders and those with non-university certificates, the impact of the matched incentives on average liquid assets was large and significant ($674 and $1,038, respectively). The results also indicate that *learn*$ave overall increased for university degree holders by $948, an amount that was significantly different from that for participants in other education groups.

Finally, the subgroup analysis by prior saving behaviour reveals that *learn*$ave overall had a significant impact on liquid assets for those who had not saved regularly at enrolment (a $588 difference between the *learn*$ave-plus and control groups), but not for those who did save regularly. However, the *learn*$ave matched savings credits positively affected the liquid assets of both those who saved regularly and those who did not ($655 and $558, respectively). The *learn*$ave services did not play a role for either group.

Hardship: Impact of *learn*$ave by Subgroup

Recalling the savings hypothesis, *learn*$ave is expected to enable participants to save more money and accumulate more assets without experiencing an increase in hardship. At the overall level this hypothesis was shown to hold true. The outcome measure used to capture the concept of hardship is “difficulty meeting expenses” (yes or no). Detailed results that form the basis for the results given herein are presented in Table D.3 (Appendix D).

Subgroup analysis of the hardship indicator shows that no subgroups experienced a statistically significant increase in hardship as a result of participating in *learn*$ave during their first 18 months. Indeed, among the subgroups considered here, two — those aged 30–40 years of age and recent immigrants — actually experienced a *decrease* in hardship because of *learn*$ave. Participants 30–40 years of age in the *learn*$ave-plus group were 5.4 percentage points less likely to have trouble meeting expenses than those in the control group.

Similarly, a significantly smaller proportion of participants in the *learn*$ave-plus group who immigrated less than four years before joining the project reported having difficulty meeting expenses, compared to members of the control group (12.7 versus 18.5 per cent, for a decline of 5.8 percentage points resulting from *learn*$ave credits plus services). Finally, it should be noted that *learn*$ave services reduced hardship for only recent immigrants (by 6.7 percentage points), and the impacts of the services by immigrant status were not significantly different from one another.

SUMMARY

At 18 months following random assignment, the *learn*$ave financial management training and case management services had only a modest impact on account opening, account balance, and net monthly change in account balances. At that stage, the services had no impact on cashing-out of savings credits. However, it is possible that results based on the experiences of participants later in the project cycle may well indicate positive impacts in this area.

It was also found that *learn*$ave had a significant impact on the total balance in savings and chequing accounts and *learn*$ave accounts, as well as the value of total liquid assets. Without *learn*$ave, participants' bank account balances would have been 42 per cent lower. The *learn*$ave program also appears to have had an impact on participants' consumption patterns, as the value of household goods among *learn*$ave-plus group members was significantly lower than for control group participants. This suggests that *learn*$ave encouraged participants to delay or alter consumption in order to be able to set aside money for their *learn*$ave accounts. The fact that hardship differences did not exist between program and control groups suggests that increases in total cash savings and liquid assets and altered consumption patterns did not come at the cost of increased hardship for participants.

Another key finding was that the increase in mean liquid assets resulted more from individuals at lower liquid asset levels increasing the value of their liquid assets, rather than from those at the top increasing theirs.

The analysis of subgroups indicated that *learn*$ave had a significant impact on setting financial goals for participants in all income subgroups. The impact of *learn*$ave on setting financial goals also rose with age, with the services having a particularly strong effect for older participants. Participants who did not save regularly at baseline were significantly more likely to have been encouraged by *learn*$ave to set financial goals at the time of the 18-month survey than those who were saving regularly. Similarly, *learn*$ave overall had a significant impact on liquid assets for those who had not saved regularly at enrolment, but not for those who did save regularly.

It was found that *learn*$ave is particularly beneficial to immigrants. Whereas *learn*$ave had a significant impact on immigrants' average liquid assets level, no such effect was found for Canadian-born participants. Also, in terms of setting financial goals, recent immigrants benefited the most from *learn*$ave.

Finally, *learn*$ave improved financial goal-setting for all participants independently of their level of education. However, participants with higher levels of education have been saving more up to now.

Chapter 6:
Impacts on Education, Employment, and Self-Employment

This chapter looks at early findings related to attitudes towards education, participation in education and employment impacts on participants over the first 18 months following random assignment. The ultimate objective of *learn*$ave is to improve the lot of participants through enhanced education, micro-enterprise, and employment outcomes, as reflected in the education and employment hypotheses tested in this chapter. The expectation is that, at 18 months, few education and employment impacts will be observed. This chapter looks first at attitudes towards education. This is followed by sections on education and training impacts, and comparisons of impacts by particular subgroups.

Results are presented here by savings stream. When participants applied and before random assignment, they were asked whether they wanted to be placed in the education or micro-enterprise streams, with a limit of only 20 per cent of the participants permitted in the latter stream at each site. Those in the education stream can use their *learn*$ave matched savings credits only for education or training, whereas those in the micro-enterprise stream can use them for either education or micro-enterprise.

IMPACTS ON ATTITUDES TO EDUCATION

Some advocates of Individual Development Account (IDA) programs believe that both the act of saving and the possession of assets change the attitudes of the economically disadvantaged by having a positive influence on their attitudes towards personal development. Given *learn*$ave's focus on post-secondary education (PSE), it is hypothesized that the act of saving will encourage participants to think more about their PSE goals, which in turn could alter their attitudes towards PSE. This is hypothesized to be particularly true for the *learn*$ave-plus group since one of the focuses of *learn*$ave training is to help participants identify their goals and the education needed to meet them. To assess participants' attitudes towards education, the 18-month survey respondents were asked on four-point scales whether they strongly disagree, disagree, agree, or strongly agree with four attitudinal statements on educations.

Overall, the results from the 18-month survey shown in Table 6.1 for the education stream indicate that participants, across all three research groups, place a high value on education. The results further show that participants in the program groups were significantly more likely to have favourable attitudes towards education than participants in the control group.[1] This indicates that *learn*$ave is having a positive impact on attitudes towards education, which may lead to educational impacts down the road. There were, however, few significant differences between the *learn*$ave-only and *learn*$ave-

[1] It is assumed that due to random assignment, the attitudes towards education of the *learn*$ave-only, *learn*$ave-plus, and control groups were identical at baseline and therefore differences at 18 months are attributable to the *learn*$ave treatment. However, questions on attitudes towards education were not included on the baseline survey and so this assumption cannot be empirically verified.

plus groups. This indicates that differences in attitudes towards education may be attributed primarily to the *learn*$ave financial incentive (matched saving credit) and not to the *learn*$ave services (training and case management). This further suggests that the financial incentive is a more important factor in attitudinal change than actual instruction.

Table 6.1 shows the results for each attitudinal question. Each panel is discussed in turn. The first panel presents the level of agreement with the statement "getting a good job depends on my education." Participants in the *learn*$ave-only group were 8.6 per cent more likely than the control group to strongly agree, but 3.3 per cent less likely to agree with this statement. The *learn*$ave-only group was also less likely than the control group to disagree or to disagree strongly with this statement. This suggests the strength of agreement with this statement increased as a result of *learn*$ave.

A similar pattern was exhibited for the statement "I need more schooling to find a good job." The *learn*$ave-only group was 4.5 per cent more likely to strongly agree, but 4.7 per cent less likely to disagree with this statement than the control group. There were no significant differences between the *learn*$ave-only and *learn*$ave-plus groups, although the *learn*$ave-only group was more likely to strongly agree and less likely to simply agree with this statement than the *learn*$ave-plus group.

The *learn*$ave-only group was also more likely to see the future value of their education than the control group. There was a 5.9 percentage point difference between the *learn*$ave-only and control groups in the proportion who agreed with the statement "No matter how much education I get, I will most likely end up with a low-paying job" and a 1.9 percentage point difference in the proportion who strongly agreed. In turn, there was an almost identical difference in the level of disagreement to this statement.

Finally, given that program group participants were more likely to see the future value of their education, it is not surprising that they were significantly more likely to disagree with the statement "It is not worth going into debt to go to school." There was a 6.7 percentage point difference between the *learn*$ave-only and control groups — in favour of the *learn*$ave-only group — on the proportion who agreed with this statement. In turn, there was also a 5.6 percentage point difference between these two groups in the level of disagreement. This suggests that *learn*$ave may be increasing debt tolerance levels with respect to financing education. Between the *learn*$ave-only and *learn*$ave-plus groups there was a difference in the level of disagreement. The *learn*$ave-only group was about 4 per cent more likely to strongly disagree and in turn less likely to simply disagree with this statement than the *learn*$ave-plus group.

Table 6.1: Impacts on Attitudes towards Education — Percentage Distribution at 18 Months (Education Stream)

	Outcome Levels			*learn* $ave-only vs. Control		*learn* $ave-only vs. *learn* $ave-plus		*learn* $ave-plus vs. Control	
	learn $ave-only	*learn* $ave-plus	Control	Impact of fincancial incentive	Standard Error	Added impact of services	Standard Error	Impact of incentive plus services	Standard Error
Getting a good job depends on my education									
Strongly disagree	0.4	0.3	13.0	-1.0 *	0.7	-0.1	0.5	-1.1 *	0.0
Disagree	5.2	6.0	9.6	-4.4 ***	1.4	0.7	1.4	-3.6 **	1.4
Agree	52.0	50.7	55.3	-3.3	2.7	-1.3	2.6	-4.6 *	2.7
Strongly agree	42.4	43.0	33.8	8.6 ***	2.7	0.7	2.5	9.3 ***	2.7
I need more schooling to find a good job									
Strongly disagree	0.4	0.4	1.0	-0.6	0.5	0.0	0.5	-0.6	0.5
Disagree	10.5	10.6	15.2	-4.7 ***	1.7	0.1	1.6	-4.6 ***	1.7
Agree	52.3	55.5	51.6	0.7	2.8	3.1	2.6	3.9	2.8
Strongly agree	36.7	33.6	32.2	4.5 *	2.6	-3.1	2.5	1.4	2.6
No matter how much education I get, I will most likely end up with a low-paying job									
Strongly disagree	27.7	28.9	26.0	1.7	2.4	1.2	2.2	2.9	2.4
Disagree	58.8	56.9	52.6	6.2 **	2.8	-1.9	2.6	4.3	2.8
Agree	12.4	12.9	18.3	-5.9 ***	1.9	0.5	1.8	-5.5 ***	1.9
Strongly agree	1.1	1.3	3.1	-1.9 **	0.7	0.2	0.7	-1.7 **	0.8
It is not worth going into debt to go to school									
Strongly disagree	15.1	11.0	13.2	1.9	1.8	-4.1 **	1.7	-2.2	1.8
Disagree	57.4	61.8	51.8	5.6 **	2.8	4.4 *	2.6	10.0 ***	2.8
Agree	23.5	23.4	30.3	-6.7 ***	2.4	-0.1	2.3	-6.8 ***	2.4
Strongly agree	3.9	3.8	4.7	-0.8	1.0	-0.1	1.0	-0.9	1.0
Sample size	**748**	**738**	**605**						

Source: Calculations from 18-month survey data.

Note: Sample sizes vary for individual measures because of missing values.
Two-tailed t-tests were applied to differences in characteristics between the treatment 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.

Turning to participants in the micro-enterprise stream, those in the program groups were also more likely to exhibit positive attitudes to education than in the control group (results not shown). However, the differences between the program and control groups were generally lesser in magnitude than for the education stream. Also, these differences were not statistically significant.

EDUCATION AND TRAINING RESULTS

The main goal of *learn*$ave is to encourage participants to take further post-secondary education. In this section, results are presented on the extent to which this objective was being attained at the 18-month mark following random assignment.

At 18 months, *learn*$ave had few impacts on participation in education and training for the education stream. There were a small number of significant differences between the *learn*$ave-only, *learn*$ave-plus, and control groups. The lack of observed impacts at 18 months was expected, as it was anticipated that it would take some time for participants to accumulate sufficient funds for education. Moreover, it may take some time to make the necessary education arrangements, such as choosing a program and getting accepted. This time period may be further extended if the chosen course of study is not immediately available. Moreover, participants have until month 36 to save and until month 48 to cash out.

Participants in the *learn*$ave-only and *learn*$ave-plus groups can take a wide variety of education and training through *learn*$ave — provided that it is at an accredited institution. The 18-month survey asks about both (1) education taken as part of a degree, diploma, or certificate program and (2) individual courses that were not part of a program. Results based on these questions are presented, first, on any education undertaken, regardless of whether or not it is as part of an educational program; second, for just education that is part of a full program; and, third, for individual educational courses not part of a program.

First, the results indicate that *learn*$ave had little impact on whether or not education stream participants received any education, regardless of whether it was part of a program or not. Approximately 60 per cent of participants undertook some form of education but there were no significant differences between the three research groups (Table 6.2).

Second, no significant impacts were observed with regards to educational programs either. Overall, about 40 per cent of participants took courses towards a degree, diploma, or certificate in the first 18 months. The proportion was slightly larger for the program groups than for the control group; however, this difference is not statistically significant. When one looks at the proportion of participants who completed a program in the first 18 months, the difference between the *learn*$ave-only and control groups was even smaller — less than 1 percentage point.

When one looks at the type (or level) of education of the first educational program,[2] one finds that both the *learn*$ave-only and *learn*$ave-plus groups were about 3 percentage points more likely (2.9 and 3.3 percentage points, respectively) than the control group to enroll in university. The difference between the *learn*$ave-plus and control groups was significant — at the 10 per cent level — while the difference between the *learn*$ave-only and control groups was not. This indicates that separately neither the

[2] Most participants who enrolled in a degree, diploma, or certificate program in the 18-month follow-up period did so in only one program. A limited number of participants undertook a second program (3 per cent of the total education stream).

incentives nor the services had an influence on the type of program entered; however, the incentives plus services combined resulted in a significant impact.

Table 6.2: Impacts on Participation in Education and Training at 18 Months (Education Stream)

	Outcome Levels			*learn* $ave-only vs. Control		*learn* $ave-only vs. learn$ave-plus		*learn* $ave-plus vs. Control	
	learn $ave-only	*learn* $ave-plus	Control	Impact of fincancial incentive	Standard Error	Added impact of services	Standard Error	Impact of incentive plus services	Standard Error
Overall (Program or Individual Course)									
Enrolled in any education in first 18 months (%)	59.4	60.7	60.9	-1.5	2.6	1.3	2.4	-0.2	2.6
Educational Programs									
Enrolled in courses toward a degree, diploma or certificate (%)	39.7	40.7	37.6	2.1	2.7	0.9	2.5	3.0	2.7
Program type (first program) (%)									
English as a second language (ESL)	2.7	4.0	3.6	-0.9	1.0	1.3	1.0	0.4	1.0
High school	4.5	3.4	3.2	1.3	0.8	-1.2	0.8	0.1	0.8
Registered apprenticeship	5.0	3.6	4.9	0.1	1.2	-1.4	1.1	-1.3	1.2
Community college	14.7	16.6	16.1	-1.4	2.1	2.0	2.0	0.5	2.2
University	12.5	12.8	9.6	2.9	1.9	0.3	1.8	3.3 *	1.9
Completed program in 18 months (%)	12.8	12.2	11.9	0.8	1.8	-0.6	1.7	0.3	1.8
Individual Courses, not Part of a Program									
Enrolled in other (non-program) education courses, seminars, etc. (%)	27.1	26.9	30.3	-3.2	2.4	-0.2	2.3	-3.4	2.4
Completed one or more courses (%)	21.9	23.0	27.2	-5.4 **	2.2	1.1	2.1	-4.3 *	2.2
Sample size	**748**	**738**	**605**						

Source: Calculations from 18-month survey data and Participant Management Information System.

Note: Sample sizes vary for individual measures because of missing values.
Two-tailed t-tests were applied to differences in characteristics between the treatment 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.

Third, the results for individual courses reveal a negative impact of *learn*$ave. The results were almost the opposite of those for educational programs, as it was the control group that was 3.2 percentage points more likely to have taken one or more courses in the follow-up period than the *learn*$ave-only group. The difference between the groups was even larger when considering completion of individual courses — the control group was 5.4 percentage points more likely to complete one or more courses in the follow-up period than the *learn*$ave-only group. This difference related to course enrolment was not statistically significant; however, the difference on course completion was significant at the 5 per cent level.

While it is too early to say with confidence, a potential explanation for the previous finding is differences in available funds between the program and control groups. The program groups may be focusing on longer and possibly more expensive educational

programs (such as university) because of the funds available from the matched savings credits. In contrast the control group may be focusing on shorter and possibly less expensive individual courses — possibly because they have fewer resources available to them than the program group (in other words, no access to *learn*$ave match funds). This will be a subject of further study in next *learn*$ave report. In addition, future reports will present additional education outcomes, in particular tuition and course hours taken.

Turning to the micro-enterprise stream, no significant impacts of *learn*$ave on education participation were observed for participants in this stream (results not shown in the table). The PSE participation rate was, as expected, lower for micro-enterprise streams than for the education stream.

EMPLOYMENT RESULTS

The expected employment impacts of *learn*$ave at 18 months are unclear. On the one hand, it could be argued that *learn*$ave participants would be more likely to work or to work longer hours to earn additional money to deposit in their *learn*$ave accounts during the first 18 months. On the other hand, it is also possible that, by 18 months, some participants would have reached their saving goals and already be using them for PSE. At the 18-month mark, these participants, then, would be expected to be enrolled in post-secondary education and potentially working fewer hours to allow them more time for their studies. It is unlikely that, by 18 months, there would be many or any individuals who would have entered and completed their education and be now realizing the hypothesized employment gains from their increased education or training.

The results indicate that, overall, *learn*$ave did not have an impact on overall labour force participation at 18 months among members of the education stream.[3] The labour force participation rate at 18 months was 61.0 per cent among the *learn*$ave-only group compared to 64.3 per cent among the control group, with the remainder of the sample being either unemployed or out of the labour force — but this difference was not statistically significant.

learn$ave did have an influence on self-employment, with program group members more likely to be self-employed and less likely to be in paid employment than the control group. The difference between the control group and the *learn*$ave-plus group was statistically significant; however, the difference between the *learn*$ave-only and control groups was not significant, indicating the financial incentive alone did not have much of an effect on self-employment. The *learn*$ave-plus group was 4.7 percentage points less likely to be working for pay but 2.9 per cent more likely to be self-employed than the control group.

[3] The labour force measures used here are loosely based on official Statistics Canada definitions of these concepts, which are as follows: Employment can either be full-time or part-time and either as an employee or self-employed. Unemployed persons are those who, during reference week: (a) were on temporary layoff during the reference week with an expectation of recall and were available for work; or (b) were without work, had actively looked for work in the past four weeks, and were available for work, or (c) had a new job to start within four weeks from reference week, and were available for work. Persons out of the labour force are those who, during the reference week, were unwilling or unable to offer or supply labour services under conditions existing in their labour markets, that is, they were neither employed nor officially unemployed. See http://www.statcan.ca/english/freepub/71-543-GIE/2007001/part2.htm. Retrieved October 22, 2007.

At 18 months participants were not working more hours to generate funds for saving. There were no significant differences between groups on hours worked per week (in the four weeks prior to the 18-month survey).[4] Among all paid and self-employment jobs combined, the control group worked an average of 20.4 hours, while the *learn*$ave-only group worked an average of 19.2 hours and the *learn*$ave-plus group worked an average of 20.0 hours.

For the micro-enterprise stream, *learn*$ave did not have a significant impact on self-employment or business ownership activities.[5] In the first 18 months, 28.9 per cent of the *learn*$ave-only group was self-employed compared to 30.9 per cent of the control group. Earnings from all self-employment were greater, on average, in the control group compared to the *learn*$ave-only group — $2,343 versus $1,790 over the first 18 months. However, none of the differences between groups was statistically significant. Among those who were self-employed, most participants indicated having only one business: a limited number indicated more than one (3.1 per cent of micro-enterprise stream).

These results are not unexpected, because as was shown in Table 4.2, participants in the micro-enterprise stream were slower to cash out their matched funds than those in the education stream. Furthermore, *learn*$ave staff indicate that it takes time for participants to develop the necessary business plan prior to a *learn*$ave micro-enterprise cash-out.

RESULTS BY SUBGROUP

The impact results were broken down by sample subgroup as defined by the participants' baseline characteristics to determine whether they varied in different policy-relevant subgroups. The results of this analysis are summarized in this section; detailed results are presented in Appendix D.[6] Subgroup results were generated for a select number of outcome indicators: attitudes to education, participation in education overall, participation in programs, and participation in non-program related courses.

To look at subgroup differences for attitudes to education, a composite variable based on the level of agreement with the four questions from the 18-month survey was created to identify participants who exhibited a strongly favourable attitude to education. Participants were considered to have a strongly favourable attitude to education if they answered "strongly agree" to either the statement "Getting a good job depends on my education" or "I need more schooling to find a good job" or answering "strongly disagree" to either the statement "No matter how much education I get, I will most likely end up with a low-paying job" or "It is not worth going into debt to go to school."

For this variable there were significant differences between subgroups. In particular, as shown in Table D.11 (Appendix D), the relative impact of *learn*$ave varied significantly by age, gender, home ownership status, prior savings behaviour, and

[4] The survey was not able to detect any additional hours worked early in the savings period.

[5] Participants were asked about any self-employment or business ownership activities in the first 18 months. Therefore the terms self-employment and business ownership are used interchangeably in this section.

[6] Note that significant differences are observed both for particular categories of a subgroup (e.g. men and women) based on whether or not there is a significant difference between the program and control groups, and between categories (e.g. men versus women) where the impact is significantly different. Also note again that unadjusted subgroup results are presented in Appendix D, but these do not differ greatly from the adjusted subgroup results.

education. Participants in the *learn*$ave-only group who were less than 30 years old were 15.5 per cent more likely than the control group to have a strongly favourable attitude to education — twice the impact for those between the ages of 30 and 40. Female participants in the *learn*$ave-only group were 13.8 per cent more likely to have a strongly positive attitude towards education than their counterparts in the control group, whereas the difference for males was only 2.5 per cent. Also for those renting a home at baseline, the *learn*$ave-only and *learn*$ave-plus groups were more likely to have a positive attitude to education than the control group. It is also of note that those who did *not* save regularly at baseline had a more positive attitude to education than the corresponding control group; conversely there was no significant program-control difference for those who saved regularly at baseline. Finally, participants at all education levels demonstrated improved attitudes towards education.

With regards to the patterns of overall education participation shown in Table D.12 (Appendix D), there are few differences between subgroups.

SUMMARY

A major finding of the research is that *learn*$ave has contributed to enhanced attitudes towards education. *learn*$ave had large and significant impacts with regard to the value participants place on education, which may have implications further down the road. Expectations were low regarding education and employment impacts in the first 18 months, and these were borne out: there were no significant impacts in terms of education participation, business start-ups, or employment outcomes. Education and employment will continue to be monitored and are expected to figure prominently in further reports.

Chapter 7:
Conclusions

The findings presented in this report, based on data collected during the first 18 months following enrolment, point towards the conclusion that *learn*$ave met most of its short-term objectives. The results indicate that *learn*$ave had a significant impact on saving and chequing account balances, which suggests that low-income Canadians can save for their human capital development provided they are offered incentives to do so in the form of matched savings credits. The *learn*$ave program also appears to have encouraged participants to delay purchases of household goods — or to buy cheaper goods — in order to be able to set aside money in their *learn*$ave account. However, there were no major changes in other financial assets, which suggests that *learn*$ave is not "crowding out" other investments. Moreover, all this did not come at the cost of increased hardship for participants, or greater debt or work hours. In addition, budgeting and financial goal-setting benefited from participation in *learn*$ave.

For the most part, it was the *learn*$ave matched savings credits that were the driving force behind these enhanced savings outcomes. Contrary to expectations, the *learn*$ave financial management training and case management services have not yet played a major role in this regard. It appears the financial incentive and act of saving itself affects saving behaviour to a greater degree than instruction in how to do so, although this may change at a later stage of the project. However, the training and services did contribute to improved budgeting and financial goal-setting among participants.

The program helped all participants to save regardless of their level of education. Noteworthy as well were the huge impacts of the program at the very low end of the income scale (under $20,000 a year) and on those participants reporting immigrant status.

An enhanced attitude towards education has been the only major education impact of *learn*$ave to this point. This is interesting in that participants were already motivated prior to enrolment, as indicated by their signing up for a program that aims to increase participation in human capital activities. Once again, it was the matched saving credit rather than the financial management training and case management services that was more influential in achieving this outcome.

It is expected that *learn*$ave's impacts on participation in education will be visible in later rounds of analysis, following completion of the 40- and/or 54-month surveys. The same should be true of business start-ups. At 18 months, it was considered that it would be too early to fully address questions related to these human capital development pursuits as most participants would still be engaged in activities related to saving and withdrawal of matched credits; this was borne out in the analysis. By months 40 and 54, most participants desiring to use the matched credits for education or small business start-up will have done so; moveover, the improved attitudes to education and enhanced budgeting behaviour should have positive implications for these activities at this point. These should figure prominently in the next *learn*$ave impact report, due out in 2008. Employment impacts are an outcome expected in the longer term.

Appendix A:
IDAs in Canada and Abroad

CANADA

The Canadian experience with Individual Development Accounts (IDAs) is limited to a number of small-scale initiatives run by organizations, some of which are involved in *learn*$ave. The following is not meant to be a comprehensive picture of IDAs in Canada, but illustrative of their variety.

In Calgary, Momentum[1] operates two IDA programs, one of which is called Fair Gains and is sponsored mainly by the United Way. Matched savings (at a 3:1 rate) can be used for home ownership, career training or education, education of a child, or operating a business. Participants have one year in which to save. They are also expected to attend a financial literacy course (called Money Management) and peer-group sessions. The Owen Hart Home Owners Program, for participants who have successfully completed the one-year Fair Gains Program, offers the opportunity to save towards home ownership and to gain money management skills with emphasis on home ownership issues. It is a two-year program with the option of cashing-out up to three years after program completion. The same organization also administers Youth Fair Gains, which targets individuals of 16–21 years of age. Momentum also operates the Savings Circles program — a six-month matched savings program (3:1) which provides low-income people with the opportunity to save towards an asset such as training courses or tools for work or household goods. Participants also gain money management skills.

In Kitchener-Waterloo, the not-for-profit, health and social service organization Lutherwood completed two IDA pilot projects. The first project targeted lone mothers in receipt of income assistance, while the second involved low-income families in the Chandler-Mowat area of Kitchener whose savings goal was the purchase of a computer. In 2005, Lutherwood introduced Youth$ave, a four-year matched (3:1 up to a maximum of $4,500 in matches) savings project that supports post-secondary education (tuition and learning supports) of low-income youths. Lutherwood began piloting the project with 15 students, in partnership with two high schools and RBC Royal Bank.

In Winnipeg, an organization called Supporting Employment and Economic Development (SEED) Winnipeg Inc. currently runs two IDA programs. The first is simply called the IDA Program, which provides support for low-income individuals and families (with less than 120 per cent of the Low-Income Cutoff, LICO) to save for two years towards housing, education, or small business. Savings are matched 3:1, and participants have up to two years to save for their asset goal. Savers Circle is a similar program but directed at those with very low income — less than 60 per cent of the LICO; participants received matched savings for six months to meet immediate needs. Participants in these programs have access to Money Management Training, which offers workshops on credit, budgeting, banking, goal setting, and problem solving. The project

[1] Momentum was formerly the Mennonite Central Committee Employment Development Organization, which introduced these programs.

partners comprise Alternative Financial Services Coalition, Assiniboine Credit Union, Province of Manitoba, United Way of Winnipeg, and Investors Group.

In British Columbia, the BC Asset Building Collaborative (BC ABC) supports and encourages low-income people and others in poverty to accumulate, develop, and preserve all types of assets by means of asset-based programs delivered through local community service agencies. In addition to the New Westminister Community Development Society which oversees *learn*$ave in the Vancouver region, five other BC ABC member organizations have implemented IDA-type programs. The five programs share three characteristics: they are small in scale (most have 10–15 participants per intake), the savings match rate is 3:1, and some kind of financial management training is provided. Two of the matched savings programs permit the use of savings for only small business start-up/expansion; one permits small business start-ups or education and training; and the other two permit small business start-ups, education and training, or home purchase.

In addition to designing, implementing, and managing the *learn*$ave IDA, Social and Enterprise Development Innovations (SEDI) has also completed an IDA project called the Independent Living Account (ILA) in Toronto and Fredericton. In 2005, SEDI introduced the ILA project — a one-year matched savings project that helped participants increase both their financial assets and financial literacy to support their move out of transitional housing and into independent living in the rental market. The project matched participants' savings at a 3:1 rate up to a maximum of $1,200 in matches. Of the 129 participants enrolled in the project, 44 per cent successfully cashed out of the project and moved into appropriate and affordable housing. Among the ILA graduates contacted after the project, 95 per cent of them were still housed independently 8 to 15 months after leaving the project and the transitional housing facility.

UNITED STATES

The United States (US) has had much greater experience with IDAs than Canada.[2] In fact, *learn*$ave is modeled on US IDA programs that were encouraged by provisions contained within the 1996 *Personal Responsibility and Work Opportunity Reconciliation Act*, a major reform in welfare legislation. This Act mandated that any funds accumulated in an IDA would not affect a welfare recipient's eligibility for any means-tested federal program. It also allowed states to use federal welfare money to fund IDA programs. Most of the programs are either part of the American Dream Demonstration (ADD) or authorized under the *Assets for Independence Act* (AFIA).[3]

The ADD began in 1997 as the first large-scale test of IDAs. It ran for four years and enrolled 2,364 participants.[4] Run by non-profit community-based organizations, the 14 ADD programs provided matched-savings accounts that could be used for the

[2] The U.S. Center for Social Development has sponsored much research into asset building initiatives while the U.S. Corporation for Enterprise Development (CFED) looks at the issue primarily on the practitioner side.
[3] Smaller initiatives include the Department of Housing and Urban Development's Family Self-Sufficiency (FSS) program for residents of subsidized federal housing units, a program for refugees managed by the United States Office of Refugee Resettlement and the Federal Home Loan Bank's programs in cooperation with state initiatives.
[4] For a detailed evaluation of IDA programs under the ADD initiative, see Schreiner, Clancy, & Sherraden (2002).

purchase of a home, for the establishment of a micro-enterprise, or for post-secondary education. As there were no attempts to create a common national program design (except that all ADD participants had to attend financial education courses) there were many differences among the ADD programs. Some programs included job training or technical education as a permissible use, others included home repair or remodelling, and a few programs included retirement as well. Match rates ranged from 1:1 to 7:1 with an average of 2:1. The ADD was sponsored nationally by a number of private foundations as well as by local funders at each site.

The 1998 AFIA authorizes the Department of Health and Human Services to aid both state and local organizations in setting up and funding IDAs. A demonstration program was established in 1998 through a congressional enactment of AFIA.[5] Under this program, five-year grants are competitively awarded to non-profit organizations, state or local agencies, or tribal organizations working with a qualified non-profit entity. The legislation specifies that grantees be permitted to use a minimum of 2 per cent and a maximum of 9.5 per cent of the federal funds they receive for economic literacy, administration, monitoring, and evaluation. Grantees must therefore raise a substantial amount of funds from non-federal sources. IDAs under the AFIA must follow strict rules. For example, participants must agree to a preset schedule of regular savings patterns and amounts, and only savings from earned income can be deposited into an account. The accumulated assets can be used for a first home purchase, small business capitalization, or post-secondary education. Each year, additional funds amounting to an average of $25 million per year have been granted to maintain AFIA operations beyond the initial five-year period (Cramer, O'Brien, & Boshara, 2007). In 2005, the AFIA funded 60 per cent of the IDA programs in the United States (CFED, 2007).

Despite the relatively large number of IDA programs in the United States, penetration remains low. According to the 2005 IDA Program Survey, there were more than 50,000 IDA account-holders and 540 community-based programs, representing a 30 per cent growth over the previous year (CFED, 2007). However, 50,000 represents only a fraction of low-income Americans.

In response, legislation has been proposed to expand coverage. If passed, the *Savings for Working Families Act* (which has been on the books since at least 2000) would be a ten-year $1.35 billion tax-based initiative that would provide a subsidy to support savings by qualified low-income individuals. Participants would have up to four years to save and cash out their credits and savings for education, home purchase, or small business start-ups. Financial institutions would be provided with an IDA Tax Credit to cover the cost of administering the accounts and providing the savings match of 1:1. Non-profit organizations would play a role through provision of recruitment services and financial management training, but their role would not be as great as in current IDAs ($20 million has been set aside for this purpose). If enacted into legislation, the bill is expected to expand the number of IDA account holders in the United States to about 900,000.

[5] The national evaluation of the demonstration program is composed of two parts: an implementation study and an impact study. The findings of the process study are reported in Ciurea, Blain, DeMarco, Ly & Mills (2001). The impact report is forthcoming.

The US IDA programs under AFIA and the ADD offer a great deal of information regarding program design, management, and feasibility as well as participants' saving behaviour. Results from all ADD initiatives show that IDAs seem to attract certain types of individuals: in particular, 80 per cent of participants were women and 85 per cent had completed high school, although gender and education did not seem to have an impact on participants' savings performance. The results also showed that participants not only generally understood the rules but also responded to the incentives — especially by saving in order to buy a first home.

IDAs have been further shown to induce the economically disadvantaged to save and use those savings for education or other purposes. For example, an assessment of 14 ADD IDA programs found that participants saved in half of the available months and set aside on average $230 a year. One-quarter of participants used the matched withdrawals for post-secondary education or training purposes (among other potential uses such as home purchase and micro-enterprise) (Schreiner, Clancy & Sherraden, 2002). In addition, results based on qualitative evidence gathered in a survey of participants in six US IDA programs indicate that a great majority felt that the IDA increased their confidence in the future, made them more economically secure, and gave them more control of their lives (Moore, Beverly, Schreiner, Sherraden, Lombe, Cho, Johnson, & Vonderlack, 2001). The latter finding is based on qualitative evidence, specifically self-reported results of participants.

Further, experimental research showed that IDAs can have an *incremental* impact on home ownership and on participation in non-credit post-secondary education courses.[6] Results from this evaluation suggest that the program had a significant influence on home ownership among those served by the program, especially among African American participants who also increased their retirement savings. There were also incremental impacts on attendance in non-credit post-secondary education courses. The purchase of a home and home repair or improvement represented two-thirds of the matched withdrawals made by participants.

UNITED KINGDOM

In the United Kingdom, the Saving Gateway (SG) offered pilot IDA programs for lower-income individuals in five regions, with the intention of implementing IDAs on a national basis. In four of these areas, the pilot projects included services related to financial literacy, micro-enterprise, and adult learning offered under the Community Finance and Learning Initiative. Unlike other IDAs, the SG imposes no restrictions on how the matched savings can be used, as the key aim of this program is to encourage low-income individuals to adopt the habit of saving money. It provides a 1:1 match rate when the account matures, which, for the pilot project, occurred after only 18 months. Participants could save a maximum of £25 per month up to an overall account limit of £375, providing a total of up to £750 with matching funds.

[6] These findings are based on analysis of data collected at Tulsa, the only ADD site where experimental research methods were used to measure impacts. See Mills, Patterson, Orr, & DeMarco (2004)

In March 2005, a second, larger £15 million SG pilot was launched. By July of the same year, 22,000 accounts had been opened.[7] Halifax Bank provided banking facilities in six areas of Britain (unlike phase 1). The pilot tested alternative match rates and monthly contribution limits (varied by site), the effect of an initial endowment, and a range of financial education support for savers (a CD-ROM for use at home for all who took up the offer, and other area-specific forms, which were also available to non-participants as well). The second pilot was made available to a wider range of income groups than the first pilot.

Similarly to IDA experiences in the United States, results from phase 1 of the SG project (see Kempson, McKay, & Collard, 2003; 2005) indicate that women are greatly over-represented among IDA participants compared to the eligible population. However, unlike IDAs in the United States, the UK program disproportionately attracted lone parents and those who did not have a bank account. The results further indicate that participants were able to save and that most of the savings were new, in that they were not diverted from other savings vehicles or from loans. Based on comparisons to a reference group less than a year after the conclusion of the program, the results suggest that SG had an incremental impact on participants' continuing propensity to save and ability to manage financial affairs. Three months after account maturity, almost all participants were still saving, with 42 per cent doing so regularly (Sodha, 2006).

Evaluation results from phase 2 indicate that the SG project is positively affecting savings. The results are based on interviews with 8,329 individuals: 2,379 were SG account holders, 3,359 were offered one but refused; and 2,591 were not offered one (the control group). Those offered a chance to open a SG IDA were 5.3 percentage points more likely than those not offered one to have increased their account balances in savings accounts in the previous three months by more than twice the SG limit. This translates to a 34.2 percentage point gain for those who actually took up the offer. The results further suggest that the increased savings are coming from reduced savings in other financial assets among higher-income participants, or from reduced consumption of food outside the home among lower-income participants.

AUSTRALIA

The Australia and New Zealand Banking Group Limited (ANZ Bank) introduced the Saver Plus financial literacy and matched savings program in four Australian communities in 2003.[8] It was designed to help people on low incomes set and achieve a savings goal, and establish a long-term savings habit. This is achieved by providing financial education training, offering personal coaching support and guidance from a community organization, and matching 2:1 for every dollar saved (up to AUS$1,000 in matched savings) towards education costs for participants' children or their own vocational education. Saver Plus was developed and implemented by ANZ in partnership with a number of large non-profit organizations. Negotiations are currently underway to expand the program from 4 to 18 communities, with a goal of involving 5,400 new people by 2009.

[7] For more details about the project and from the evaluation, see http://www.hm-treasury.gov.uk/documents/financial_services/savings/topics_savings_gateway.cfm.
[8] For more details, see http://www.anz.com/aus/aboutanz/Community/Programs/Saver.asp.

Program criteria include being 18 years of age or over, attending vocational school towards a certificate or having children attending school, having regular employment income, and being able to demonstrate a capacity to save after regular expenses are paid for. Between 2003 and 2005, over 670 qualified families participated for the Saver Plus pilot program (268 in phase 1 and 408 in phase 2), receiving a total of $1.1 million in matched savings from ANZ. Site staff indicated that recruitment was much more difficult than expected.

There is strong evidence that Saver Plus is achieving its core objective of helping people develop a "savings habit," based on evaluations conducted by RMIT University. However, this evidence is based on responses from 248 phase 1 participants and 399 phase 2 participants, but with no comparisons to a control group. The results indicate that greater than 90 per cent of participants in both phases met or exceeded their savings goals (a specified dollar amount). The evaluations further showed that 12 months after completing the program, 71 per cent of phase 1 participants continued to save the same amount or more; 86 per cent of phase 2 participants saved the same or a greater amount three months after leaving the program. Qualitative evidence suggests that items purchased through the program benefited the child's academic experience and that the program had beneficial impacts on the attitudes of participants themselves and their families.

TAIWAN

Taipei City launched a three-year pilot program in 2000 called the Taipei Family Development Account (TFDA) offering matched savings accounts to low-income individuals who were working; the implementation of the program was informed by the US IDA experience. Individuals who met eligibility requirements and attended financial education classes had their savings matched on a 1:1 basis and the accumulated assets could be used for home purchase, small business start-ups, or higher education. When an IDA was initially opened, each participant was asked to select one of these three goals and was then assigned to the relevant educational classes.[9]

Although more than half of participants in the TFDA initially chose home purchase as their initial purpose for saving, many participants became concerned about high housing prices and indebtedness and subsequently shifted to one of the other goals. Out of 184 enrollees, 100 had their savings matched (1:1) by the financial partner. By June 2003, 69 had completed the program, and of these, 65 had used their savings for the intended purposes. By February 2006, 12 savers had used their saving plus matches to purchase a home, 12 to become small business owners, and 31 to send their children to college. These investments were considered significant in light of the fact that participants had to this point relied on welfare assistance. In addition, qualitative evidence indicated the beneficial effects of both the program's financial education and the social networking and information opportunities the program afforded. Also noteworthy is the fact that the TFDA has inspired 15 local governments to implement asset-based programs targeting low-income families and youths, such as the Youth Development Account and Hope Project for the Second Generation.

[9] The Taipei initiative operates at a very small scale with about 100 participants. For more details, see Cheng, 2004.

Appendix B:
Methodology

This appendix provides details surrounding methodologies used in this report. Specifically, it discusses the methodology employed: (1) when dealing with missing data in the calculation of net worth and its various components, (2) when dealing with outliers, and (3) in adjusting impact estimates.

DEALING WITH MISSING DATA IN THE ASSETS AND DEBT DATA

While missing data were not a problem for any individual asset or debt question, the fact that a large number of survey questions were used in the calculation of net worth was potentially problematic. Overall, 56 survey questions were used in the calculation of net worth. Respondents were asked not only about the value of specific assets or liabilities but also to state what corresponding share of that value was theirs. For the overwhelming majority of questions, only a small portion of responses was missing. However, technically speaking, an observation could be eliminated if any of the 56 variables is missing. Thus, the odds were high that there would only be a small number of observations available for computing mean net worth.

To further illustrate the potential extent of the problem, even if there were only 10 missing responses for each of the 56 questions (from about 2,600 cases), there would be a loss of 560 observation items when calculating an overall measure of net worth. This was judged unacceptable and it was decided that imputation would be used to minimize the impact of the missing data.

Before describing the approach taken to deal with missing data, it is instructive to consider the types of such data. There are three types: (1) purely missing where no response was given at all; (2) where the respondent indicated “Don’t Know;” and (3) where the respondent indicated “Refused”. The latter two are not technically missing, as the respondents provided a response, but as they are not data per se, they are considered missing.

There are two main types of imputation: hot deck single and multiple. Single imputation involves replacement of the missing value of a respondent with a value based on the responses provided by other respondents with characteristics similar to the respondent. A simple version of the single imputation approach is to assign the mean value of all non-missing responses to the missing value.

Multiple imputation (MI) is similar to hot deck single imputation, but involves several rounds of repeated imputation (Rubin, 1987). One of the strengths of this approach is that it takes into account both model variation and additional variation resulting from the imputation process itself. That is, it incorporates the variation that results from the imputation process into the analytical results. The major weakness of MI is that it is the most complicated and resource-intensive form of imputation methodology.

In the case of *learn*$ave, this multi-stage approach required the creation of three different datasets (called "implicates") while all analyses were performed three times.[1]

For multiple hot deck, the MI procedure used here, a model was developed to assign imputed values to missing responses. For a particular question, respondents with missing data (the missing data respondent pool) were matched to a group of respondents without missing data for that question (the donor pool) but with similar characteristics based on the chosen model. Characteristics used in the matching model were age, gender, and research group (*learn*$ave-plus, *learn*$ave-only, and control). Matched participants were within five years in age of each other, of the same gender, and part of the same research group. For each variable used in the calculation of net worth, responses to the respective question from the donor pool were randomly chosen and imputed to the variable in question for respondents in the missing data pool. This was done three times, once for each of the three implicates.

Estimates of summary statistics were computed by simply averaging the corresponding statistic computed from each of the three individual implicates. Variances were calculated using the following equations, as adopted from Rubin (1987):

MI Estimate:

$$\overline{Q} = \frac{1}{m}\sum_{i=1}^{m} Qi$$

where:

Q_i is the parameter estimate from the i^{th} implicate
m is the number of implicates (rounds of imputation)

Within Round Variance:

$$\overline{U} = \frac{1}{m}\sum_{i=1}^{m} U_i$$

where:

U_i is the variance of the parameter estimate for the i^{th} implicate
m is the number of implicates

Between Round Variance:

$$B = \frac{1}{m-1}\sum_{i=1}^{m} (Q_i - \overline{Q})^2$$

where:

Q_i is the parameter estimate from the i^{th} implicate
$\overline{Q}$ is the MI parameter estimate
m is the number of implicates

[1] The exception to this is the imputation methodology used for subgroup tables D.4 to D.10. In the interest of time, only one round of imputation (one "implicate") was used for these tables.

Total Variation:

$$T = \overline{U} + (1 + \frac{1}{m})B$$

where:

T is total variation
$\overline{U}$ is within-round variance
B is the between-round variance
m is the number of implicates

Degrees of Freedom:

$$df = (m-1)(1 + \frac{m\overline{U}}{(m+1)B})^2$$

where:

$\overline{U}$ is the within-round variance
B is the between-round variance
m is the number of implicates

One reason for choosing MI methodology is the presence of a small non-response bias in the data. Both the hot deck single imputation and the multiple imputation methodologies assume no systemic response bias, i.e. that the data are missing at random (MAR). In other words, missing observations can be explained by other observed variables and not the variable itself. The data seem to support this assumption: e.g. income level is statistically significant when looking at the incidence of missing data for credit card debt. Although, we cannot fully test the MAR assumption, this finding seems to support it.

A recursive methodology was employed to impute missing data for those who answered "don't know" to the question on the actual value of specific assets and liabilities. People who answered "don't know" concerning a value of a particular asset or debt were asked a series of follow-up "bounds" questions to attempt to at least determine the range in which the value fell. Imputation started with the last (narrowest) bounds question where data were missing and worked "backwards" using the bounds questions to select an appropriate donor pool from respondents in increasingly broader bounds. Where the bounds information was specified by the respondent, the donor pool was adjusted to ensure the imputed value fell within the bounds given by the respondent.

An examination of the MI results revealed that there were no real major changes to the net worth and component values computed without the missing data. The mean values of most components of net worth containing multiply imputed missing data were within 1 percentage point of the values computed from the raw data, discounting observations with missing data. The one exception was the amount of money owed to pawn brokers. However, this amount was so small that it was decided that any variation introduced by MI would not lead to noticeable changes in the value of this component of net worth.

DEALING WITH OUTLIERS

Another potential concern regarding net worth data is the presence of outliers. This is a common problem when collecting dollar-value data. Sensitivity testing was carried out with all values above the 99th percentile being dropped. This was to determine whether or not the findings were strongly influenced by particular outlier observations. The results of the analysis indicated that there were no changes to the sign (i.e. the direction — positive or negative — of the impact) and only minor proportional changes in the values of the assets and debts.

REGRESSION ADJUSTMENT OF IMPACT ESTIMATES

The main body of this report presents regression-adjusted results; unadjusted results are presented in Appendix C. Unadjusted impacts were estimated by calculating the difference between the mean outcome levels of the program and control groups. Adjusted results were generated by estimating a regression in which the outcome variable was modeled as a linear function of the respondents' research group and a range of socio-economic and demographic characteristics measured before random assignment. Although random assignment ensures that there are no systematic differences between the program and control groups, small differences can (and did) arise by chance — particularly in smaller samples. Also, as a result of survey attrition in the follow-up survey, small differences between the program and control groups were introduced. The regression adjusted the (unadjusted) impact estimates for differences between the program and control group at baseline and at 18 months (that arose from unbalanced attrition).

There are two main advantages to regression-adjusted impact estimates. First, given that observed baseline differences between the program and control groups can be accounted for, the regression-adjusted impact estimates are potentially more accurate than the unadjusted mean differences in outcomes. Second, even in the absence of differences at baseline, regression adjustment can improve the statistical precision of impact estimates. Standard errors of regression-adjusted estimates of the program's impact may be lower (when correlation between the characteristics and the outcome is accounted for in the regression), which results in improved statistical power.

Regression adjustment has some drawbacks, however. One of the main disadvantages is that adjusted estimates are not as well understood and not as easily interpreted as unadjusted results (the latter being simple differences between the program and control groups). Also, for many outcomes, the improvement in statistical precision achieved through regression adjustment is typically quite small (and was proved in this case). Nevertheless, because regression adjustment capitalizes on the wealth of information generated and brings greater precision to the estimates, the decision was made to present regression-adjusted impact estimates in this report.

In total, each outcome variable observed at 18 months (the "dependent" variable, corresponding to each of the outcomes discussed in chapters 4 and 5 of the report) was regressed on a set of variables that comprised the research group plus 14 co-variates (the "independent" or explanatory variables). Both continuous and binary explanatory

variables were included in the model, all of which were measured using the application form or the baseline survey administered prior to random assignment.

The explanatory variables, measured at baseline, comprise the following:

- Research group (*learn*$ave-plus, *learn*$ave-only, and control)
- *learn*$ave site
- Gender
- Age group
- Highest level of education (attained prior to enrolment)
- Marital status
- Whether or not there were children under 18 years of age
- Immigration status
- Whether or not activity limitations were reported (disability)
- Labour force participation (employed by others; self-employed; unemployed or out of the labour force)
- Household income (during year before enrolment)
- Monthly payments for household expenses
- Difficulty making payments
- Whether or not there was a household budget
- Future time perspective

The regression adjustment procedure used the PROC GLM command in SAS (Statistical Analysis System). The GLM procedure uses the method of ordinary least squares to fit General Linear Models (GLM). This was applicable even in the case of binary outcome variables where bias could arise from using linear regression. The reason linear regression could be used is the large size of the sample and the fact that the co-variates in the adjustment model had very little explanatory power over and above the research group variable. The adjusted estimate of the impact was derived from the coefficient on the research group variable in the estimated model.

Appendix C:
Unadjusted *learn*$ave Impacts

The unadjusted estimates of *learn*$ave impacts are presented in this appendix. As noted in the body of the report, impact estimates were adjusted using regression to control for a few sociodemographic differences among research groups and to bring greater precision to the estimates by taking advantage of the wealth of available information. A comparison to the adjusted estimates, which are presented in the body of the report, indicates only small differences in significance and magnitude of the estimates and no changes in the sign of the impact.

For the purposes of the tables below, the following shortened forms have been used:

- *learn*$ave-only: L$
- *learn*$ave-plus: L$+
- Control: Ctrl.
- Standard error: S.E.

The asterisks indicate the degree of statistical significance of the impact estimates based on a two-tailed t-test (*=10 per cent; ** = 5 per cent, *** = 1 per cent).

Rounding may cause slight discrepancies in sums and differences.

Table C.1 is based on calculations from 18-month survey data and the Participant Management Information System (PMIS). All other tables in this appendix are based on calculations from 18-month survey data only.

Table C.1: Unadjusted Impacts on Net Worth and Components of Net Worth at 18 Months ($)

	Outcome Levels (Average)			L$ vs. Ctrl.		L$ vs. L$+		L$+ vs. Ctrl.	
	L$	L$+	Ctrl.	Impact of financial incentive	S.E.	Added impact of services	S.E.	Impact of incentive plus services	S.E.
Personal Assets									
Bank accounts[1] ($)	2,040	2,017	1,354	686 ***	179	-22	171	664 ***	183
Formal retirement savings plan[2]	472	557	400	72	83	85	79	157 *	85
Homeownership saving plan	63	39	86	-23	30	-24	29	-47	31
GICs, terms deposits, bonds[3]	119	182	188	-69	86	63	75	-6	86
Stocks, mutual funds	7	5	17	-10	13	-1	13	-11	13
Savings at home	86	98	145	-60 **	30	13	28	-47	30
Value of goods in house	3,666	3,323	4,245	-579	467	-343	397	-921 *	515
Other financial assets	320	335	344	-24	133	15	115	-9	125
Personal Liabilities									
Credit cards	1,123	1,118	1,189	-66	184	-5	182	-71	181
Student loans	4,897	4,503	4,026	872 **	421	-395	396	477	418
Installment loans	10	8	10	0	6	-2	5	-2	6
Other bank loans	149	113	180	-31	71	-36	67	-67	71
Pawnbroker, etc. loans	0	0	0	0	0	0	0	0	0
Family loans	71	94	219	-149 **	68	23	65	-125 *	68
Other debt	78	103	92	-14	28	25	26	11	28
Overdue utility payments[4]	2	0	9	-7	6	-2	5	-9	6
Property	13,349	10,998	12,276	1,072	2,180	-2,351	2,054	-1,278	2,224
House	11,975	9,603	10,648	1,328	2,125	-2,372	1,994	-1,044	2,165
Other property	138	208	491	-353	226	70	212	-283	226
Automobile	1,236	1,187	1,138	98	100	-49	96	50	101
Debt on Property	8,751	7,415	8,927	-176	1,826	-1,336	1,534	-1,512	1,762
House	8,086	6,863	8,231	-145	1,784	-1,223	1,497	-1,368	1,723
Other property	0	122	153	-153	120	122	114	-31	121
Automobile	665	430	543	121	127	-235 *	121	-114	127
Overall									
Personal assets (non-property/business)	6,772	6,557	6,778	-6	507	-215	488	-221	595
Liquid assets (financial non-pension)	2,251	2,303	1,704	547 ***	204	52	197	599 ***	203
Personal liabilities	6,329	5,939	5,725	605	485	-391	456	214	476
Net property assets (house and car)	4,598	3,583	3,349	1,249	1,468	-1,015	1,322	234	1,487
Net business assets	31	207	104	-73	194	176	184	103	248
Net worth	5,071	4,408	4,506	564	1,687	-663	1,490	-98	1,683
Sample size	**920**	**915**	**748**						

Note: [1] Comprises balance in savings and chequing accounts in banks or other financial institutions (as reported in the survey), plus, for *learn*$ave-only and *learn*$ave-plus groups, the *learn*$ave account balance (taken from the PMIS). It does not include any matched funds.

[2] Includes Registered Retirement Savings Plans (RRSPs), Registered Retirement Income Funds (RRIFs), and Locked-In Retirement Accounts (LIRAs). Excludes private employer and public pension plans.

[3] GICs= Guaranteed Investment Certificates; items not in mutual funds.

[4] Reported for homeowners only; otherwise, overdue utility payments are included in the other debt category.

Table C.2: Unadjusted Impacts on Budgeting and Hardship at 18 Months

	Outcome Levels			L$ vs. Ctrl.			L$ vs. L$+			L$+ vs. Ctrl.		
	L$	L$+	Ctrl.	Impact of financial incentive		S.E.	Added impact of services		S.E.	Impact of incentive plus services		S.E.
Budgeting												
Proportion who budget (%)	50.2	56.3	44.3	5.8	**	2.5	6.1	***	2.3	11.9	***	2.5
Proportion who set financial goals (%)	61.1	69.3	55.7	5.4	**	2.4	8.2	***	2.3	13.6	***	2.4
Hardship												
Proportion how had difficulty meeting expenses (%)	32.1	31.0	33.1	-1.0		2.3	-1.1		2.2	-2.1		2.3
Proportion who had to borrow to meet needs (%)	24.0	24.3	24.9	-0.8		2.1	0.2		2.0	-0.6		2.1
Proportion who used a foodbank (%)	6.5	7.5	5.9	0.6		1.2	1.0		1.2	1.6		1.2
Proportion who declared bankruptcy (%)	0.2	0.6	0.9	-0.7	**	0.4	0.3		0.3	-0.4		0.4
Computer Purchase												
Proportion who purchased a computer since last interview (%)	22.0	22.3	30.4	-8.4	***	2.1	0.3		2.0	-8.1	***	2.1
Sample size	**920**	**915**	**748**									

Table C.3: Unadjusted Impacts on Attitudes to Education at 18 Months (Education Stream)

	Outcome Levels			L$ vs. Ctrl.			L$ vs. L$+			L$+ vs. Ctrl.		
	L$	L$+	Ctrl.	Impact of financial incentive		S.E.	Added impact of services		S.E.	Impact of incentive plus services		S.E.
Getting a good job depends on my education												
Strongly disagree	0.8	0.8	1.8	-1.0	*	0.6	0.0		0.5	-1.0	*	0.6
Disagree	5.8	6.5	10.2	-4.4	***	1.4	0.7		1.4	-3.7	***	1.4
Agree	51.4	49.7	54.9	-3.5		2.7	-1.8		2.6	-5.3	*	2.8
Strongly agree	42.0	43.1	33.1	8.9	***	2.7	1.1		2.5	10.0	***	2.7
I need more schooling to find a good job												
Strongly disagree	0.7	0.7	1.2	-0.5		0.5	0.0		0.5	-0.5		0.5
Disagree	9.9	10.2	14.4	-4.4	**	1.7	0.2		1.7	-4.2	**	1.8
Agree	52.0	54.7	51.9	0.2		2.8	2.6		2.6	2.8		2.8
Strongly agree	37.3	34.5	32.6	4.7	*	2.6	-2.8		2.5	1.9		2.6
No matter how much education I get, I will most likely end up with a low-paying job												
Strongly disagree	25.3	26.7	22.7	2.6		2.4	1.4		2.3	4.0	*	2.4
Disagree	61.4	58.9	55.3	6.1	**	2.7	-2.5		2.6	3.6		2.8
Agree	12.2	12.9	18.9	-6.7	***	2.0	0.7		1.8	-6.0	***	2.0
Strongly agree	1.1	1.5	3.1	-2.0	***	0.7	0.4		0.7	-1.6	**	0.8
It is not worth going into debt to go to school												
Strongly disagree	14.0	9.9	11.4	2.6		1.8	-4.1	**	1.7	-1.5		1.8
Disagree	61.5	65.8	56.4	5.1	*	2.8	4.3	*	2.6	9.4	***	2.8
Agree	21.5	21.3	28.5	-7.0	***	2.4	-0.2		2.3	-7.2	***	2.4
Strongly agree	3.1	3.0	3.8	-0.7		1.0	0.0		1.0	-0.7		1.0
Sample size	**748**	**738**	**605**									

Table C.4: Unadjusted Impacts on Participation in Education and Training (Education Stream)

	Outcome Levels			L$ vs. Ctrl.		L$ vs. L$+		L$+ vs. Ctrl.	
	L$	L$+	Ctrl.	Impact of financial incentive	S.E.	Added impact of services	S.E.	Impact of incentive plus services	S.E.
Overall									
Enrolled in any education in first 18 months (%)	64.1	65.7	65.0	-0.8	2.6	1.5	2.5	0.7	2.6
Educational Programs									
Enrolled in courses toward a degree, diploma or certificate (%)	45.1	45.7	42.3	2.8	2.7	0.6	2.6	3.4	2.7
Program type (first program) (%)									
English as a second language (ESL)	2.9	4.1	4.1	-1.2	1.0	1.1	1.0	-0.1	1.0
High school	2.9	1.8	1.8	1.1	0.8	-1.2	0.8	-0.1	0.8
Registered apprenticeship	5.3	4.1	5.1	0.2	1.2	-1.3	1.1	-1.1	1.2
Community college	17.8	19.9	19.3	-1.6	2.1	2.1	2.0	0.6	2.2
University	16.0	15.9	11.9	4.1 **	1.9	-0.2	1.8	4.0 **	1.9
Completed program in 18 months (%)	13.0	12.5	12.6	0.4	1.8	-0.5	1.7	-0.1	1.8
Individual Courses, not Part of a Program									
Enrolled in other (non-program) education courses, seminars, etc. (%)	26.1	26.6	29.1	-3.0	2.4	0.5	2.3	-2.5	2.4
Completed one or more courses (%)	18.9	20.6	24.3	-5.4 **	2.2	1.7	2.1	-3.7 *	2.2
Sample size	**748**	**738**	**605**						

Table C.5: Unadjusted Impacts on Attitudes to Education — Percentage Distribution by Level of Agreement with Statements at 18 Months (Micro-Enterprise Stream)

	Outcome Levels			L$ vs. Ctrl.		L$ vs. L$+		L$+ vs. Ctrl.	
	L$	L$+	Ctrl.	Impact of fincancial incentive	S.E.	Added impact of services	S.E.	Impact of incentive plus services	S.E.
Getting a good job depends on my education									
Strongly disagree	1.8	2.3	2.9	-1.1	1.7	0.6	1.6	-0.6	1.7
Disagree	11.7	11.0	12.9	-1.3	3.7	-0.7	3.5	-2.0	3.7
Agree	56.1	53.2	51.1	5.1	5.7	-3.0	5.4	2.1	5.7
Strongly agree	30.4	33.5	33.1	-2.7	5.4	3.1	5.1	0.4	5.3
I need more schooling to find a good job									
Strongly disagree	0.6	2.3	2.9	-2.3	1.6	1.7	1.5	-0.6	1.5
Disagree	24.1	27.3	23.7	0.4	5.0	3.2	4.7	3.6	5.0
Agree	54.7	47.1	46.0	8.7	5.7	-7.6	5.4	1.0	5.7
Strongly agree	20.6	23.3	27.3	-6.7	4.9	2.7	4.6	-4.1	4.8
No matter how much education I get, I will most likely end up with a low-paying job									
Strongly disagree	21.4	29.1	25.4	-3.9	5.0	7.6	4.7	3.7	5.0
Disagree	57.7	56.4	52.2	5.6	5.7	-1.3	5.4	4.2	5.7
Agree	19.0	11.0	21.0	-2.0	4.3	-8.0 **	4.0	-10.0 **	4.3
Strongly agree	1.8	3.5	1.4	0.3	1.7	1.7	1.6	2.0	1.7
It is not worth going into debt to go to school									
Strongly disagree	8.2	8.4	8.0	0.3	3.2	0.2	3.1	0.5	3.2
Disagree	60.8	57.8	52.9	7.9	5.8	-2.9	5.5	4.9	5.7
Agree	27.2	29.5	33.3	-6.1	5.3	2.3	5.1	-3.8	5.3
Strongly agree	3.8	4.2	5.8	-2.0	2.4	0.4	2.3	-1.6	2.4
Sample size	**172**	**176**	**143**						

Table C.6: Unadjusted Impacts on Participation in Education and Training at 18 Months (Micro-Enterprise Stream)

	Outcome Levels			L$ vs. Ctrl.		L$ vs. L$+		L$+ vs. Ctrl.	
	L$	L$+	Ctrl.	Impact of financial incentive	S.E.	Added impact of services	S.E.	Impact of incentive plus services	S.E.
Overall									
Enrolled in any education in first 18 months (%)	43.0	44.9	46.5	-3.5	5.7	1.9	5.3	-1.6	5.6
Educational Programs									
Enrolled in courses toward a degree, diploma or certificate (%)	19.8	19.3	23.2	-3.5	4.6	-0.4	4.3	-3.9	4.6
Program type (first program) (%)									
English as a second language (ESL)	1.2	1.1	0.7	0.5	1.1	0.0	1.1	0.4	1.1
High school	1.7	0.6	0.0	1.7 *	1.0	-1.2	1.0	0.6	1.0
Registered apprenticeship	5.8	5.1	4.9	0.9	2.5	-0.7	2.4	0.2	2.5
Community college	7.6	9.7	11.9	-4.3	3.3	2.1	3.2	-2.2	3.3
University	3.5	2.8	5.6	-2.1	2.2	-0.6	2.1	-2.8	2.2
Completed program in 18 months (%)	7.6	8.5	12.6	-5.0	3.3	1.0	3.1	-4.1	3.3
Individual Courses, not Part of a Program									
Enrolled in other (non-program) education courses, seminars, etc. (%)	24.4	30.7	26.1	-1.6	5.0	6.3	4.8	4.6	5.0
Completed one or more courses (%)	19.2	24.4	25.2	-6.0	4.8	5.2	4.5	-0.7	4.7
Sample size	**172**	**176**	**143**						

Appendix D:
Unadjusted Results of *learn*$ave Subgroup Analysis

Results of the subgroup analysis of savings and education impacts are presented in this section. This is in response to questions regarding whether or not impacts are distributed evenly across each research sample, whether they are concentrated among certain groups, or whether any lack of significant impacts on an outcome is characteristic of all subgroups of a sample. As Orr (1999) pointed out, a treatment may be better suited to some participants, for example, the higher educated, than others. Such knowledge would aid policy makers considering full implementation of the demonstration project to better target those groups where program impact is the greatest, and/or identify weaknesses of the program and groups for whom the program is less effective.

The subgroup variables by which the impacts were compared were selected for their potential policy relevance. To maintain the experimental nature of the analysis, the subgroup variables had to be defined based on characteristics measured before random assignment (i.e. at baseline, or in the year prior). They comprise the following: project site, age, gender, marital status, number of children under 18 years of age in the household, labour force status, household income in the year prior to application, whether or not Employment Insurance benefits were received in the year prior to application, highest level of education attained, years since immigrating to Canada, whether the home is owned or rented, and whether or not the participant was saving regularly at baseline.

Two other points should be made regarding the subgroup results. First, because of concerns over sample size, the results of the subgroup impacts analysis were *not* regression adjusted. Second, in the interest of time, missing values of the assets and liabilities data used for the subgroup analysis were subject to just single (hot deck) imputation, not multiple imputation; the latter was used for the data analyzed for the assets and liabilities results presented in Chapter 5 and Appendix C of this report. However, single imputation made very little difference to the direction and magnitude of the impacts.

Two tests were used for the subgroup comparisons. A *t-test* was used to determine if *learn*$ave has had any impact on each category of each subgroup variable. In the case of the gender trait, for example, a two-tailed t-test enabled the evaluators to determine if *learn*$ave has had an impact on account balances of men and/or women (i.e. if the impact on the balances of men and/or women was significantly different from zero). However, this does not enable determination of whether or not *learn*$ave's impact on the account balances of women was different from that of men's account balances. Therefore, a *q-test* was run to determine whether or not the impact varied among categories of subgroup variables, e.g. between men and women, or was due to random chance. Traditionally, an F-statistic would be used for this purpose, but it is not appropriate when subgroups are of unequal size and variance. Since these adjustments are not available in Statistical Analysis System (the software program used in this analysis), it was necessary to develop a routine that would compute the q-statistic.

Tables D.1 to D.14 present the results of the subgroup analysis. The impact on each subgroup is calculated as the difference in mean outcome between each pair of research groups: *learn*$ave-only versus control (impact of the matched saving credit), *learn*$ave-plus versus *learn*$ave-only (impact of the financial management training and case management services), and *learn*$ave-plus versus control (the total impact of the *learn*$ave credits + services). The asterisks indicate the degree of statistical significance of the impacts for categories of subgroup variables, based on a two-tailed t-test (* = 10 per cent; ** = 5 per cent, *** = 1 per cent). The daggers indicate the degree of statistical significance of the differences in impacts *between* categories of subgroup variables, based on a q-test († = 10 per cent, †† = 5 per cent, ††† = 1 per cent).

Finally, note that the subgroup results presented in this appendix are for the unadjusted impact estimates. Subgroup results were also produced for the adjusted impacts but few differences arose. In only 6 per cent of the cases did adjustment change the level of significance of the results by more than one asterisk or dagger, and never was the direction changed by the adjustment.

For the purposes of the tables below, the following shortened forms have been used:

- *learn*$ave-only: L$
- *learn*$ave-plus: L$+
- Control: Ctrl.
- Standard error: S.E.
- Employment Insurance: EI

For all tables, the following footnotes apply:

[a] Includes students, people at home, retired, looking for work, and unemployed.

[b] Baseline annual income is household income in the calendar year prior to application. For those who immigrated to Canada in the year prior to application, annual income is based on a formula that includes foreign income, Canadian income, and money brought into Canada.

[c] May have some post-secondary education, but did not receive a degree, diploma or certificate.

For all tables in this appendix, subgroups are derived from baseline survey data. For tables D.4 through D.7, calculations are from 18-month survey data and the Participant Management Information System (PMIS). For all other tables, calculations are from 18-month survey data only.

Sample sizes vary for individual measures because of missing values.

Rounding may cause slight discrepancies in sums and differences.

The calculated asset and debt values in Tables D.4 to D.10 differ slightly from those in Tables 5.2 and C.1. For the latter tables, three rounds of imputation of missing values were carried out, whereas for Tables D.4 to D.10, only one round was carried out. See Appendix B for further detail on missing values.

Table D.1: Unadjusted Impacts on Household Budget Activity at 18 Months, by Subgroup — Percentage

Subgroup (at enrolment)	Sample size	Outcome Levels L$	L$+	Ctrl.	L$ vs. Ctrl. Impact of financial incentive	S.E.	L$ vs. L$+ Added impact of services	S.E.	L$+ vs. Ctrl. Impact of incentive plus services	S.E.
All	2,561	50.2	56.3	44.3	5.8 **	2.5	6.1 ***	2.3	11.9 ***	2.5
Site Where Enrolled						n.s.		n.s.		n.s.
Halifax	190	50.8	47.6	53.2	-2.5	8.9	-3.2	8.9	-5.6	9.0
Toronto	1,177	48.7	58.8	45.7	3.0	3.7	10.1 ***	3.4	13.0 ***	3.7
Vancouver	1,194	51.6	55.1	41.5	10.1 ***	3.6	3.5	3.4	13.6 ***	3.6
Age and Gender										
Age						n.s.		n.s.		††
Less than 30 years	916	48.4	51.7	48.4	0.0	4.2	3.3	3.9	3.3	4.2
Between 30 and 40 years	1,181	51.3	56.1	41.5	9.8 ***	3.6	4.8	3.5	14.6 ***	3.6
Over 40 years	464	51.0	65.9	44.3	6.7	5.7	14.9 ***	5.5	21.6 ***	5.6
Gender						n.s.		n.s.		n.s.
Female	1,406	51.8	54.7	46.3	5.5 *	3.3	2.9	3.2	8.4 **	3.4
Male	1,155	48.1	58.2	42.1	6.1 *	3.7	10.1 ***	3.5	16.2 ***	3.6
Family Structure										
Marital status at baseline						n.s.		††		†††
Married or common-law	1,132	52.9	65.4	43.9	9.0 **	3.6	12.5 ***	3.5	21.5 ***	3.6
Single, separated, or divorced	1,429	48.1	49.6	44.7	3.3	3.4	1.6	3.1	4.9	3.3
Children under 18 yrs in household						n.s.		n.s.		†
1 or more children	1,025	51.0	60.9	43.9	7.1 *	3.8	9.9 ***	3.7	17.0 ***	3.8
No children	1,536	49.6	53.3	44.7	5.0	3.2	3.6	3.0	8.6 ***	3.2
Employment and Income										
Baseline labour force status						n.s.		††		n.s.
Work for pay	1,430	51.8	55.6	46.3	5.5 *	3.3	3.8	3.1	9.3 ***	3.3
Self-employed	306	51.0	47.1	40.2	10.8	7.3	-3.9	6.8	6.8	7.0
Unemployed or out of labour force[a]	823	47.4	61.7	42.7	4.6	4.2	14.3 ***	4.1	19.0 ***	4.4
Household income in year prior to application[b]						n.s.		n.s.		†††
Less than $10,000	838	45.0	54.7	42.8	2.2	4.3	9.7 **	4.0	11.9 ***	4.4
Between $10,000 and < $20,000	1,039	51.2	51.6	47.0	4.2	3.9	0.4	3.7	4.6	3.9
$20,000 and over	684	55.4	65.5	42.3	13.1 ***	4.6	10.1 **	4.5	23.2 ***	4.6
EI Receipt in Last 12 Months						n.s.		n.s.		n.s.
Received EI	479	51.6	56.5	50.3	1.3	5.8	4.9	5.5	6.2	5.6
Did Not Receive EI	2,082	49.9	56.2	42.9	7.0 **	2.7	6.4 **	2.6	13.4 ***	2.7
Highest Level of Education Attained						n.s.		n.s.		††
High school diploma[c]	681	46.4	50.8	40.3	6.0	4.8	4.4	4.5	10.5 **	4.7
Non-university degree, diploma or certificate	528	51.0	52.9	53.2	-2.1	5.4	1.9	5.2	-0.3	5.5
University degree	1,352	51.7	60.4	42.8	8.9 ***	3.4	8.7 ***	3.2	17.6 ***	3.4
Years Since Immigrating						†		†††		††
Born in Canada	865	52.6	48.4	43.3	9.3 **	4.3	-4.2	4.0	5.1	4.3
Immigrated less than 4 years ago	1,199	51.6	61.9	43.5	8.2 **	3.5	10.3 ***	3.4	18.4 ***	3.6
Immigrated 4 or more years ago	497	42.4	57.0	48.5	-6.1	5.7	14.6 ***	5.2	8.5	5.6
Home ownership						n.s.		†††		n.s.
Own home	145	60.4	39.2	39.0	21.4 **	10.3	-21.2 **	9.7	0.2	10.4
Rent home	2,416	49.5	57.3	44.7	4.9 *	2.5	7.8 ***	2.4	12.6 ***	2.5
Saving at Baseline						n.s.		n.s.		n.s.
Saved regularly at baseline	391	60.6	61.0	54.6	6.0	6.3	0.4	5.9	6.3	6.3
Did not save regularly	2,170	48.3	55.4	42.6	5.7 **	2.7	7.1 ***	2.5	12.8 ***	2.7

Table D.2: Unadjusted Impacts on Financial Goal-Setting at 18 Months, by Subgroup — Percentage

Subgroup (at enrolment)	Sample size	Outcome Levels L$	Outcome Levels L$+	Outcome Levels Ctrl.	L$ vs. Ctrl. Impact of financial incentive	L$ vs. Ctrl. S.E.	L$ vs. L$+ Added impact of services	L$ vs. L$+ S.E.	L$+ vs. Ctrl. Impact of incentive plus services	L$+ vs. Ctrl. S.E.
All	2,543	61.1	69.3	55.7	5.4 **	2.4	8.2 ***	2.3	13.6 ***	2.4
Site Where Enrolled						n.s.		n.s.		n.s.
Halifax	188	67.2	61.9	54.1	13.1	8.7	-5.3	8.7	7.8	8.8
Toronto	1,170	59.7	68.7	51.2	8.4 **	3.6	9.1 ***	3.3	17.5 ***	3.6
Vancouver	1,185	61.5	70.9	60.0	1.5	3.5	9.3 ***	3.3	10.9 ***	3.5
Age and Gender										
Age						n.s.		n.s.		††
Less than 30 years	912	66.3	72.2	66.0	0.3	3.9	5.9	3.6	6.2	3.9
Between 30 and 40 years	1,174	59.4	67.2	52.0	7.4 **	3.5	7.7 **	3.4	15.2 ***	3.5
Over 40 years	457	54.1	68.7	46.3	7.9	5.7	14.5 ***	5.4	22.4 ***	5.7
Gender						n.s.		n.s.		n.s.
Female	1,395	60.8	68.4	55.9	4.9	3.2	7.5 **	3.1	12.4 ***	3.3
Male	1,148	61.3	70.3	55.4	6.0 *	3.6	9.0 ***	3.4	15.0 ***	3.5
Family Structure										
Marital status at baseline						n.s.		n.s.		n.s.
Married or common-law	1,125	58.5	68.1	51.9	6.6 *	3.6	9.7 ***	3.5	16.3 ***	3.6
Single, separated, or divorced	1,418	63.0	70.1	59.1	4.0	3.2	7.0 **	3.0	11.0 ***	3.2
Children under 18 yrs in household						n.s.		n.s.		n.s.
1 or more children	1,017	57.9	67.9	54.1	3.8	3.8	10.0 ***	3.6	13.8 ***	3.8
No children	1,526	63.1	70.2	56.8	6.3 **	3.1	7.1 **	2.9	13.4 ***	3.1
Employment and Income										
Baseline labour force status						n.s.		n.s.		n.s.
Work for pay	1,419	62.3	71.1	57.0	5.3 *	3.2	8.8 ***	3.0	14.1 ***	3.2
Self-employed	303	63.3	64.7	61.6	1.6	7.2	1.4	6.6	3.1	6.9
Unemployed or out of labour force[a]	820	58.2	67.8	51.4	6.8	4.2	9.6 **	4.1	16.4 ***	4.3
Household income in year prior to application[b]						n.s.		n.s.		n.s.
Less than $10,000	829	60.9	68.7	56.1	4.8	4.2	7.8 **	3.9	12.6 ***	4.3
Between $10,000 and < $20,000	1,034	59.3	71.6	55.6	3.8	3.7	12.3 ***	3.5	16.0 ***	3.7
$20,000 and over	680	63.9	66.2	55.2	8.7 *	4.6	2.3	4.5	11.0 **	4.6
EI Receipt in Last 12 Months						†		n.s.		n.s.
Received EI	476	59.6	68.6	62.8	-3.1	5.5	9.0 *	5.3	5.8	5.4
Did Not Receive EI	2,067	61.4	69.4	53.9	7.4 ***	2.7	8.1 ***	2.5	15.5 ***	2.7
Highest Level of Education Attained						n.s.		n.s.		n.s.
High school diploma[c]	674	63.1	71.5	58.9	4.2	4.6	8.4 *	4.3	12.6 ***	4.6
Non-university degree, diploma or certificate	525	58.7	68.4	53.8	4.9	5.2	9.7 *	5.1	14.6 ***	5.4
University degree	1,344	61.0	68.4	54.8	6.2 *	3.3	7.4 **	3.1	13.6 ***	3.3
Years Since Immigrating						††		††		n.s.
Born in Canada	861	68.3	67.8	58.8	9.5 **	4.1	-0.5	3.8	9.0 **	4.1
Immigrated less than 4 years ago	1,192	58.5	69.5	51.1	7.3 **	3.5	11.1 ***	3.4	18.4 ***	3.5
Immigrated 4 or more years ago	490	54.6	71.2	62.1	-7.5	5.5	16.6 ***	5.1	9.1 *	5.5
Home ownership						n.s.		n.s.		n.s.
Own home	143	55.6	52.0	51.3	4.3	10.6	-3.6	9.9	0.7	10.8
Rent home	2,400	61.4	70.3	55.9	5.5 **	2.5	8.9 ***	2.3	14.4 ***	2.5
Saving at Baseline						n.s.		n.s.		n.s.
Saved regularly at baseline	389	71.9	75.7	64.2	7.8	5.8	3.8	5.4	11.5 **	5.8
Did not save regularly	2,154	59.1	68.0	54.2	4.9 *	2.6	8.9 ***	2.5	13.8 ***	2.6

Table D.3: Unadjusted Impacts on Difficulty of Meeting Expenses at 18 Months, by Subgroup — Percentage

Subgroup (at enrolment)	Sample size	Outcome Levels L$	L$+	Ctrl.	L$ vs. Ctrl. Impact of financial incentive	S.E.		L$ vs. L$+ Added impact of services	S.E.		L$+ vs. Ctrl. Impact of incentive plus services	S.E.	
All	2,554	32.1	31.0	33.1	-1.0	2.3		-1.1	2.2		-2.1	2.3	
Site Where Enrolled							n.s.			n.s.			n.s.
Halifax	190	49.2	49.2	58.1	-8.8	8.9		0.0	8.9		-8.9	9.0	
Toronto	1,171	28.0	24.3	25.5	2.4	3.2		-3.7	3.0		-1.2	3.2	
Vancouver	1,193	33.6	34.9	35.8	-2.2	3.4		1.3	3.3		-0.9	3.4	
Age and Gender													
Age							n.s.			n.s.			n.s.
Less than 30 years	913	34.7	36.2	34.4	0.3	4.0		1.5	3.7		1.8	4.0	
Between 30 and 40 years	1,180	27.5	25.2	30.6	-3.1	3.2		-2.3	3.1		-5.4	* 3.2	
Over 40 years	461	38.7	34.9	37.1	1.6	5.6		-3.8	5.4		-2.2	5.6	
Gender							n.s.			n.s.			n.s.
Female	1,408	36.9	37.2	39.4	-2.5	3.2		0.4	3.1		-2.1	3.3	
Male	1,146	25.9	23.4	25.7	0.3	3.2		-2.5	3.1		-2.2	3.2	
Family Structure													
Marital status at baseline							n.s.			n.s.			n.s.
Married or common-law	1,132	21.3	18.8	22.6	-1.3	3.0		-2.5	2.9		-3.8	3.0	
Single, separated, or divorced	1,422	40.4	39.9	42.7	-2.2	3.3		-0.5	3.1		-2.8	3.3	
Children under 18 yrs in household							n.s.			n.s.			†
1 or more children	1,026	30.3	25.2	32.3	-1.9	3.5		-5.1	3.4		-7.1	** 3.5	
No children	1,528	33.2	34.7	33.7	-0.5	3.0		1.5	2.9		1.0	3.1	
Employment and Income													
Baseline labour force status							n.s.			n.s.			n.s.
Work for pay	1,428	32.9	31.5	34.0	-1.1	3.1		-1.5	2.9		-2.5	3.1	
Self-employed	305	41.4	42.9	37.9	3.5	7.3		1.4	6.7		4.9	7.0	
Unemployed or out of labour force[a]	819	27.4	24.7	30.1	-2.7	3.8		-2.7	3.7		-5.4	3.9	
Household income in year prior to application[b]							n.s.			n.s.			n.s.
Less than $10,000	833	33.0	31.0	30.4	2.6	4.1		-2.1	3.8		0.5	4.1	
Between $10,000 and < $20,000	1,038	31.8	33.7	35.1	-3.3	3.7		1.9	3.5		-1.4	3.7	
$20,000 and over	683	31.3	26.8	33.2	-1.9	4.4		-4.5	4.2		-6.4	4.3	
EI Receipt in Last 12 Months							n.s.			n.s.			†
Received EI	478	36.4	33.3	44.2	-7.9	5.6		-3.0	5.3		-10.9	** 5.4	
Did Not Receive EI	2,076	31.2	30.4	30.4	0.8	2.5		-0.8	2.4		0.0	2.6	
Highest Level of Education Attained							n.s.			n.s.			n.s.
High school diploma[c]	678	45.7	44.2	48.7	-3.0	4.8		-1.5	4.5		-4.5	4.8	
Non-university degree, diploma or certificate	524	37.1	45.0	40.3	-3.1	5.3		7.9	5.2		4.8	5.4	
University degree	1,352	23.5	19.1	22.4	1.1	2.8		-4.4	* 2.7		-3.3	2.8	
Years Since Immigrating							n.s.			††			n.s.
Born in Canada	863	46.8	47.9	48.8	-2.0	4.3		1.1	4.0		-0.9	4.3	
Immigrated less than 4 years ago	1,197	19.3	12.7	18.5	0.9	2.7		-6.7	** 2.6		-5.8	** 2.7	
Immigrated 4 or more years ago	494	37.1	43.2	44.0	-6.9	5.7		6.1	5.2		-0.8	5.6	
Home ownership							n.s.			n.s.			n.s.
Own home	143	38	33	35	3.5	10.2		-5.1	9.5		-1.7	10.2	
Rent home	2,411	32	31	33	-1.3	2.4		-0.9	2.3		-2.2	2.4	
Saving at Baseline							n.s.			n.s.			n.s.
Saved regularly at baseline	395	30.2	25.9	29.4	0.9	5.8		-4.4	5.3		-3.5	5.7	
Did not save regularly	2,159	32.4	32.0	33.8	-1.3	2.5		-0.5	2.4		-1.8	2.5	

Table D.4: Unadjusted Impacts on Net Worth at 18 Months, by Subgroup (in $)

Subgroup (at enrolment)	Sample size	Outcome Levels L$	L$+	Ctrl.	L$ vs. Ctrl. Impact of financial incentive	S.E.	L$ vs. L$+ Added impact of services	S.E.	L$+ vs. Ctrl. Impact of incentive plus services	S.E.
All	2,583	4,941	4,335	4,978	-37	1,536	-606	1,457	-643	1,538
Site Where Enrolled						n.s.		n.s.		n.s.
Halifax	191	7,698	4,493	5,191	2,507	6,114	-3,205	6,114	-698	6,162
Toronto	1,189	3,347	1,593	3,785	-438	1,993	-1,754	1,863	-2,191	1,999
Vancouver	1,203	6,146	7,054	6,056	90	2,456	908	2,340	998	2,452
Age and Gender										
Age						n.s.		n.s.		n.s.
Less than 30 years	920	-244	205	1,237	-1,480	1,977	448	1,828	-1,032	1,989
Between 30 and 40 years	1,195	6,376	4,782	4,340	2,036	2,168	-1,595	2,088	442	2,176
Over 40 years	468	12,307	11,329	13,183	-876	4,998	-978	4,774	-1,854	4,921
Gender						n.s.		n.s.		n.s.
Female	1,420	6,716	4,878	6,230	486	2,336	-1,838	2,217	-1,352	2,356
Male	1,163	2,674	3,693	3,475	-801	1,865	1,019	1,767	218	1,850
Family Structure										
Marital status at baseline						n.s.		n.s.		n.s.
Married or common-law	1,144	6,639	4,461	6,053	586	2,258	-2,177	2,204	-1,592	2,271
Single, separated, or divorced	1,439	3,641	4,242	4,007	-366	2,098	601	1,942	235	2,094
Children under 18 yrs in household						n.s.		††		n.s.
1 or more children	1,036	10,676	6,030	8,035	2,642	2,974	-4,647	2,868	-2,005	2,965
No children	1,547	1,288	3,221	2,755	-1,467	1,590	1,933	1,490	467	1,596
Employment and Income										
Baseline labour force status						††		n.s.		n.s.
Work for pay	1,441	1,780	2,907	5,380	-3,601 **	1,830	1,127	1,714	-2,473	1,818
Self-employed	309	8,266	8,993	10,455	-2,189	5,235	728	4,847	-1,461	5,038
Unemployed or out of labour force[a]	831	9,106	5,035	2,380	6,726 **	2,963	-4,072	2,902	2,654	3,055
Household income in year prior to application[b]						n.s.		n.s.		n.s.
Less than $10,000	841	4,967	4,389	3,698	1,268	2,803	-578	2,612	690	2,833
Between $10,000 and < $20,000	1,049	3,916	2,581	5,211	-1,296	2,149	-1,335	2,030	-2,630	2,149
$20,000 and over	693	6,553	6,970	6,011	542	3,269	417	3,177	959	3,236
EI Receipt in Last 12 Months						n.s.		n.s.		n.s.
Received EI	485	3,653	3,706	4,565	-912	3,107	52	2,965	-860	3,018
Did Not Receive EI	2,098	5,208	4,489	5,080	128	1,751	-720	1,658	-591	1,764
Highest Level of Education Attained						††		n.s.		n.s.
High school diploma[c]	685	4,255	3,336	5,147	-892	2,637	-918	2,468	-1,811	2,592
Non-university degree, diploma or certificate	534	13,908	9,118	4,021	9,887 **	4,426	-4,790	4,334	5,097	4,566
University degree	1,364	1,602	3,148	5,287	-3,686 *	1,889	1,546	1,783	-2,140	1,888
Years Since Immigrating						n.s.		n.s.		n.s.
Born in Canada	872	4,856	4,847	3,974	881	3,015	-8	2,841	873	3,013
Immigrated less than 4 years ago	1,209	3,294	3,493	5,097	-1,803	1,836	199	1,772	-1,604	1,850
Immigrated 4 or more years ago	502	9,047	5,356	6,497	2,549	3,988	-3,691	3,666	-1,142	3,951
Home ownership						n.s.		n.s.		n.s.
Own home	147	52,787	54,472	45,483	7,304	16,932	1,685	15,952	8,989	17,213
Rent home	2,436	1,899	1,376	2,629	-730	1,127	-523	1,069	-1,253	1,127
Saving at Baseline						n.s.		n.s.		n.s.
Saved regularly at baseline	398	7,178	8,121	5,023	2,155	3,283	943	3,042	3,098	3,254
Did not save regularly	2,185	4,536	3,611	4,970	-434	1,713	-926	1,631	-1,359	1,718

Table D.5: Unadjusted Impacts on Liquid Assets at 18 Months, by Subgroup (in $)

Subgroup (at enrolment)	Sample size	Outcome Levels L$	L$+	Ctrl.	L$ vs. Ctrl. Impact of financial incentive	S.E.	L$ vs. L$+ Added impact of services	S.E.	L$+ vs. Ctrl. Impact of incentive plus services	S.E.
All	2,583	2,249	2,255	1,677	572 ***	198	7	188	578 ***	198
Site Where Enrolled						††		†		n.s.
Halifax	191	484	1,836	312	172	745	1,352 *	745	1,524 **	751
Toronto	1,189	2,904	2,593	1,808	1,096 ***	298	-312	279	785 ***	299
Vancouver	1,203	1,851	1,980	1,798	53	279	129	266	182	279
Age and Gender										
Age						n.s.		n.s.		n.s.
Less than 30 years	920	1,939	1,957	1,693	246	344	18	318	264	346
Between 30 and 40 years	1,195	2,638	2,480	1,659	978 ***	282	-157	271	821 ***	283
Over 40 years	468	1,882	2,288	1,697	186	473	405	451	591	465
Gender						n.s.		n.s.		n.s.
Female	1,420	1,796	2,066	1,396	400 *	218	270	207	670 ***	220
Male	1,163	2,828	2,480	2,015	813 **	349	-348	331	465	347
Family Structure										
Marital status at baseline						n.s.		n.s.		n.s.
Married or common-law	1,144	2,606	2,643	1,784	822 ***	283	37	276	859 ***	285
Single, separated, or divorced	1,439	1,976	1,968	1,581	395	276	-8	255	387	275
Children under 18 yrs in household						n.s.		n.s.		n.s.
1 or more children	1,036	2,209	2,336	1,424	785 **	305	127	294	912 ***	304
No children	1,547	2,274	2,203	1,861	413	261	-72	245	341	262
Employment and Income										
Baseline labour force status						n.s.		n.s.		n.s.
Work for pay	1,441	1,962	2,206	1,727	235	254	244	238	479 *	252
Self-employed	309	2,877	1,693	1,674	1,202	842	-1,184	779	19	810
Unemployed or out of labour force[a]	831	2,524	2,599	1,596	928 ***	302	75	296	1,003 ***	311
Household income in year prior to application[b]						††		n.s.		n.s.
Less than $10,000	841	2,902	2,404	1,667	1,235 ***	418	-498	390	737 *	423
Between $10,000 and < $20,000	1,049	1,924	2,091	1,939	-14	301	167	285	153	301
$20,000 and over	693	1,893	2,327	1,326	566 **	284	434	276	1,000 ***	281
EI Receipt in Last 12 Months						n.s.		n.s.		n.s.
Received EI	485	1,637	1,985	1,285	353	298	348	284	700 **	289
Did Not Receive EI	2,098	2,376	2,321	1,774	602 **	234	-55	221	547 **	236
Highest Level of Education Attained						n.s.		†		†
High school diploma[c]	685	1,265	1,447	1,316	-50	341	182	319	132	335
Non-university degree, diploma or certificate	534	2,134	1,194	1,096	1,038 **	478	-940 **	468	97	493
University degree	1,364	2,772	3,056	2,098	674 **	269	285	254	958 ***	269
Years Since Immigrating						n.s.		n.s.		n.s.
Born in Canada	872	1,552	1,368	1,290	261	422	-184	397	78	421
Immigrated less than 4 years ago	1,209	2,982	3,132	2,149	833 ***	263	150	254	983 ***	265
Immigrated 4 or more years ago	502	1,698	1,787	1,127	572 **	272	88	250	660 **	269
Home ownership						n.s.		††		n.s.
Own home	147	1,267	2,848	1,395	-128	790	1,581 **	745	1,453 *	804
Rent home	2,436	2,311	2,221	1,694	618 ***	205	-91	194	527 **	205
Saving at Baseline						n.s.		n.s.		n.s.
Saved regularly at baseline	398	2,191	2,078	1,536	655 *	385	-113	357	542	381
Did not save regularly	2,185	2,259	2,289	1,702	558 **	223	30	213	588 ***	224

Table D.6: Unadjusted Impacts on Personal Assets at 18 Months, by Subgroup (in $)

Subgroup (at enrolment)	Sample size	Outcome Levels L$	L$+	Ctrl.	L$ vs. Ctrl. Impact of financial incentive	S.E.	L$ vs. L$+ Added impact of services	S.E.	L$+ vs. Ctrl. Impact of incentive plus services	S.E.
All	2,583	6,610	6,363	6,795	-184	449	-247	426	-432	450
Site Where Enrolled						n.s.		n.s.		n.s.
Halifax	191	8,771	8,935	7,505	1,266	2,224	165	2,224	1,431	2,241
Toronto	1,189	6,127	6,007	5,864	264	616	-120	576	143	618
Vancouver	1,203	6,772	6,338	7,539	-767	656	-433	625	-1,200 *	655
Age and Gender										
Age						n.s.		n.s.		n.s.
Less than 30 years	920	6,264	5,855	6,242	22	713	-409	660	-387	718
Between 30 and 40 years	1,195	6,894	6,301	6,339	555	654	-593	629	-38	656
Over 40 years	468	6,602	7,510	8,926	-2,325 **	1,177	908	1,124	-1,417	1,159
Gender						n.s.		n.s.		n.s.
Female	1,420	6,568	5,960	6,971	-403	636	-608	604	-1,011	641
Male	1,163	6,664	6,840	6,583	81	627	175	594	257	622
Family Structure										
Marital status at baseline						n.s.		†		††
Married or common-law	1,144	6,001	6,561	5,837	163	622	561	607	724	625
Single, separated, or divorced	1,439	7,077	6,215	7,660	-582	638	-862	591	-1,444 **	637
Children under 18 yrs in household						n.s.		n.s.		n.s.
1 or more children	1,036	7,360	6,419	7,091	269	786	-941	757	-672	783
No children	1,547	6,133	6,326	6,579	-446	534	193	500	-253	536
Employment and Income										
Baseline labour force status						††		n.s.		n.s.
Work for pay	1,441	6,120	6,502	7,130	-1,009 *	598	382	560	-628	594
Self-employed	309	9,584	7,104	9,752	-167	1,892	-2,480	1,752	-2,648	1,821
Unemployed or out of labour force[a]	831	6,458	5,766	5,173	1,285 **	621	-692	608	593	640
Household income in year prior to application[b]						n.s.		n.s.		n.s.
Less than $10,000	841	6,980	5,849	6,282	698	788	-1,131	734	-434	796
Between $10,000 and < $20,000	1,049	6,219	6,137	7,427	-1,208 *	724	-83	684	-1,290 *	724
$20,000 and over	693	6,741	7,342	6,460	281	833	601	810	881	825
EI Receipt in Last 12 Months						n.s.		n.s.		n.s.
Received EI	485	6,612	6,487	6,568	44	798	-125	762	-81	776
Did Not Receive EI	2,098	6,610	6,333	6,851	-240	522	-277	494	-518	526
Highest Level of Education Attained						n.s.		†††		†††
High school diploma[c]	685	6,579	5,229	6,790	-211	848	-1,350 *	794	-1,561 *	834
Non-university degree, diploma or certificate	534	7,756	5,338	7,908	-152	1,221	-2,418 **	1,195	-2,570 **	1,259
University degree	1,364	6,156	7,320	6,338	-182	554	1,164 **	522	982 *	553
Years Since Immigrating						n.s.		n.s.		†††
Born in Canada	872	7,387	6,641	8,183	-796	978	-746	922	-1,541	978
Immigrated less than 4 years ago	1,209	5,875	6,431	5,530	345	505	555	487	901 *	509
Immigrated 4 or more years ago	502	7,026	5,747	7,629	-602	987	-1,279	907	-1,881 *	978
Home ownership						n.s.		n.s.		n.s.
Own home	147	7,429	9,020	8,316	-887	1,796	1,591	1,692	704	1,826
Rent home	2,436	6,558	6,206	6,706	-148	464	-352	440	-500	464
Saving at Baseline						n.s.		n.s.		n.s.
Saved regularly at baseline	398	7,472	6,937	6,721	752	954	-535	884	217	945
Did not save regularly	2,185	6,454	6,253	6,807	-353	501	-201	478	-554	503

Table D.7: Unadjusted Impacts on Amount in Chequing and Savings Accounts at 18 Months, by Subgroup (in $)

Subgroup (at enrolment)	Sample size	Outcome Levels L$	L$+	Ctrl.	L$ vs. Ctrl. Impact of financial incentive		S.E.		L$ vs. L$+ Added impact of services		S.E.		L$+ vs. Ctrl. Impact of incentive plus services		S.E.	
All	2,583	2,035	1,970	1,357	678	***	171		-65		162		613	***	171	
Site Where Enrolled								††				††				n.s.
Halifax	191	420	953	222	198		225		534	**	225		732	***	227	
Toronto	1,189	2,687	2,345	1,554	1,133	***	284		-342		265		791	***	284	
Vancouver	1,203	1,617	1,746	1,375	242		230		129		219		371		230	
Age and Gender																
Age								n.s.				n.s.				n.s.
Less than 30 years	920	1,706	1,601	1,339	367		282		-105		260		262		283	
Between 30 and 40 years	1,195	2,451	2,275	1,446	1,005	***	267		-176		257		829	***	268	
Over 40 years	468	1,636	1,946	1,164	472		337		310		322		782	**	332	
Gender								n.s.				††				n.s.
Female	1,420	1,556	1,783	1,038	517	***	152		227		144		744	***	153	
Male	1,163	2,647	2,192	1,740	907	***	329		-455		312		452		327	
Family Structure																
Marital status at baseline								n.s.				n.s.				n.s.
Married or common-law	1,144	2,435	2,396	1,561	875	***	269		-39		263		835	***	271	
Single, separated, or divorced	1,439	1,728	1,654	1,173	555	**	218		-74		202		481	**	218	
Children under 18 yrs in household								n.s.				n.s.				n.s.
1 or more children	1,036	2,043	2,121	1,201	842	***	291		78		281		920	***	290	
No children	1,547	2,029	1,871	1,471	559	***	208		-159		195		400	*	209	
Employment and Income																
Baseline labour force status								n.s.				n.s.				n.s.
Work for pay	1,441	1,797	1,995	1,329	468	**	220		197		206		666	***	219	
Self-employed	309	2,582	1,477	1,158	1,424	*	809		-1,105		749		318		779	
Unemployed or out of labour force[a]	831	2,255	2,141	1,470	785	***	224		-113		220		671	***	231	
Household income in year prior to application[b]								††				n.s.				††
Less than $10,000	841	2,638	2,099	1,423	1,215	***	369		-539		344		676	*	373	
Between $10,000 and < $20,000	1,049	1,692	1,782	1,581	111		248		91		234		202		248	
$20,000 and over	693	1,775	2,102	978	798	***	254		326		247		1,124	***	252	
EI Receipt in Last 12 Months								n.s.				n.s.				n.s.
Received EI	485	1,449	1,789	1,057	392		276		340		263		732	***	268	
Did Not Receive EI	2,098	2,156	2,014	1,431	725		200		-142		190		583	***	202	
Highest Level of Education Attained								††				n.s.				†
High school diploma[c]	685	1,083	1,273	1,101	-18		315		190		295		172		310	
Non-university degree, diploma or certificate	534	1,852	1,114	858	995	**	452		-739	*	443		256		466	
University degree	1,364	2,570	2,640	1,691	879	***	212		70		200		949	***	212	
Years Since Immigrating								n.s.				n.s.				†
Born in Canada	872	1,319	1,075	973	347		366		-244		344		102		365	
Immigrated less than 4 years ago	1,209	2,780	2,871	1,809	970	***	227		92		219		1,062	***	229	
Immigrated 4 or more years ago	502	1,489	1,459	854	635	***	199		-30		183		605	***	197	
Home ownership								n.s.				†				n.s.
Own home	147	1,215	2,211	1,110	105		658		997		620		1,102		669	
Rent home	2,436	2,087	1,956	1,371	716	***	177		-131		168		584	***	177	
Saving at Baseline								n.s.				n.s.				n.s.
Saved regularly at baseline	398	2,032	1,869	1,353	678	*	368		-163		341		516		364	
Did not save regularly	2,185	2,035	1,990	1,358	678	***	190		-46		181		632	***	191	

Table D.8: Unadjusted Impacts on Personal Liabilities at 18 Months, by Subgroup (in $)

Subgroup (at enrolment)	Sample size	Outcome Levels L$	L$+	Ctrl.	L$ vs. Ctrl. Impact of financial incentive	S.E.		L$ vs. L$+ Added impact of services	S.E.		L$+ vs. Ctrl. Impact of incentive plus services	S.E.	
All	2,583	6,343	5,982	5,715	628	473		-361	449		266	474	
Site Where Enrolled							n.s.			n.s.			n.s.
Halifax	191	10,703	7,108	8,951	1,751	1,907		-3,595 *	1,907		-1,843	1,922	
Toronto	1,189	5,613	5,559	4,730	883	655		-54	613		829	657	
Vancouver	1,203	6,419	6,238	6,061	358	716		-181	682		177	714	
Age and Gender													
Age							n.s.			n.s.			††
Less than 30 years	920	8,498	7,636	7,142	1,356	890		-862	823		494	896	
Between 30 and 40 years	1,195	5,394	4,803	5,637	-243	655		-591	631		-834	658	
Over 40 years	468	4,222	5,636	3,406	816	923		1,414	882		2,230 **	909	
Gender							n.s.			n.s.			n.s.
Female	1,420	6,813	6,518	6,353	460	676		-295	641		165	682	
Male	1,163	5,743	5,347	4,951	792	649		-396	615		396	644	
Family Structure													
Marital status at baseline							n.s.			n.s.			n.s.
Married or common-law	1,144	5,116	4,883	4,365	751	614		-233	599		519	617	
Single, separated, or divorced	1,439	7,283	6,797	6,935	347	693		-485	642		-138	692	
Children under 18 yrs in household							n.s.			n.s.			n.s.
1 or more children	1,036	5,523	5,799	5,191	332	702		276	677		608	700	
No children	1,547	6,865	6,102	6,097	768	636		-764	596		5	638	
Employment and Income													
Baseline labour force status							n.s.			n.s.			††
Work for pay	1,441	6,383	6,291	4,913	1,471 **	618		-92	579		1,379 **	614	
Self-employed	309	6,774	6,771	7,240	-466	1,589		-2	1,471		-469	1,529	
Unemployed or out of labour force[a]	831	6,105	5,033	6,484	-380	818		-1,072	801		-1,451 *	844	
Household income in year prior to application[b]							n.s.			n.s.			†
Less than $10,000	841	6,218	4,982	6,378	-161	828		-1,236	771		-1,396 *	837	
Between $10,000 and < $20,000	1,049	6,686	7,033	5,957	728	800		347	756		1,075	800	
$20,000 and over	693	5,962	5,590	4,677	1,285	798		-372	776		913	790	
EI Receipt in Last 12 Months							n.s.			n.s.			n.s.
Received EI	485	7,966	6,609	6,511	1,456	1,138		-1,357	1,086		98	1,105	
Did Not Receive EI	2,098	6,006	5,829	5,519	487	520		-177	492		310	524	
Highest Level of Education Attained							n.s.			n.s.			n.s.
High school diploma[c]	685	6,098	5,850	5,352	747	889		-249	832		498	874	
Non-university degree, diploma or certificat	534	6,577	6,703	7,266	-689	1,067		127	1,044		-562	1,100	
University degree	1,364	6,366	5,793	5,259	1,107 *	655		-573	618		533	655	
Years Since Immigrating							n.s.			n.s.			n.s.
Born in Canada	872	9,312	8,068	7,802	1,509	917		-1,244	864		265	917	
Immigrated less than 4 years ago	1,209	4,094	3,959	3,863	231	512		-134	494		97	516	
Immigrated 4 or more years ago	502	6,588	6,999	6,839	-251	1,293		411	1,189		161	1,281	
Home ownership							n.s.			n.s.			n.s.
Own home	147	5,375	5,586	4,988	388	1,830		211	1,724		599	1,861	
Rent home	2,436	6,405	6,005	5,758	647	490		-400	465		247	490	
Saving at Baseline							n.s.			n.s.			n.s.
Saved regularly at baseline	398	5,258	4,592	5,164	94	1,026		-665	950		-571	1,016	
Did not save regularly	2,185	6,540	6,248	5,810	729	527		-292	502		437	528	

Table D.9: Unadjusted Impacts on Net Property Value at 18 Months, by Subgroup (in $)

Subgroup (at enrolment)	Sample size	Outcome Levels L$	L$+	Ctrl.	L$ vs. Ctrl. Impact of financial incentive	S.E.	L$ vs. L$+ Added impact of services	S.E.	L$+ vs. Ctrl. Impact of incentive plus services	S.E.
All	2,583	4,632	3,723	3,915	717	1,331	-909	1,262	-192	1,332
Site Where Enrolled						n.s.		n.s.		n.s.
Halifax	191	9,876	2,475	7,169	2,707	4,860	-7,401	4,860	-4,694	4,897
Toronto	1,189	2,763	1,130	2,598	165	1,736	-1,634	1,623	-1,469	1,741
Vancouver	1,203	5,734	6,502	4,567	1,167	2,143	767	2,042	1,935	2,139
Age and Gender										
Age						n.s.		n.s.		n.s.
Less than 30 years	920	2,091	1,822	2,118	-26	1,451	-269	1,342	-295	1,460
Between 30 and 40 years	1,195	4,745	3,038	3,558	1,187	1,925	-1,706	1,853	-520	1,931
Over 40 years	468	9,815	9,129	7,985	1,830	4,610	-686	4,404	1,144	4,539
Gender						n.s.		n.s.		n.s.
Female	1,420	6,792	5,094	5,845	947	2,063	-1,698	1,958	-751	2,081
Male	1,163	1,873	2,101	1,600	274	1,528	228	1,448	501	1,516
Family Structure										
Marital status at baseline						n.s.		n.s.		n.s.
Married or common-law	1,144	5,581	2,603	4,480	1,101	2,022	-2,978	1,973	-1,876	2,033
Single, separated, or divorced	1,439	3,905	4,555	3,405	500	1,770	650	1,638	1,150	1,767
Children under 18 yrs in household						n.s.		n.s.		n.s.
1 or more children	1,036	8,680	5,062	6,170	2,509	2,719	-3,618	2,621	-1,109	2,710
No children	1,547	2,054	2,843	2,274	-221	1,252	790	1,174	569	1,257
Employment and Income										
Baseline labour force status						n.s.		n.s.		n.s.
Work for pay	1,441	2,022	2,586	3,162	-1,140	1,559	564	1,460	-576	1,549
Self-employed	309	5,244	8,155	7,941	-2,697	4,113	2,912	3,809	215	3,959
Unemployed or out of labour force[a]	831	8,731	3,960	3,743	4,988 *	2,701	-4,772 *	2,645	216	2,785
Household income in year prior to application[b]						n.s.		n.s.		n.s.
Less than $10,000	841	4,376	3,113	4,229	147	2,392	-1,263	2,229	-1,116	2,417
Between $10,000 and < $20,000	1,049	4,202	3,275	3,591	611	1,763	-927	1,665	-316	1,763
$20,000 and over	693	5,666	5,161	4,032	1,635	3,019	-505	2,934	1,129	2,988
EI Receipt in Last 12 Months						n.s.		n.s.		n.s.
Received EI	485	4,894	3,491	4,047	847	2,600	-1,403	2,481	-556	2,525
Did Not Receive EI	2,098	4,578	3,780	3,883	695	1,525	-798	1,444	-103	1,537
Highest Level of Education Attained						††		n.s.		†
High school diploma[c]	685	3,753	3,752	3,673	80	2,189	-1	2,048	79	2,151
Non-university degree, diploma or certificate	534	12,609	10,199	3,812	8,797 **	3,927	-2,410	3,845	6,387	4,051
University degree	1,364	1,791	1,395	4,079	-2,288	1,627	-396	1,535	-2,684 *	1,626
Years Since Immigrating						n.s.		n.s.		n.s.
Born in Canada	872	6,934	5,877	3,755	3,179	2,501	-1,057	2,357	2,122	2,499
Immigrated less than 4 years ago	1,209	1,451	951	3,315	-1,864	1,657	-500	1,599	-2,364	1,670
Immigrated 4 or more years ago	502	8,273	6,298	5,809	2,464	3,478	-1,976	3,197	488	3,445
Home ownership						n.s.		n.s.		n.s.
Own home	147	50,138	50,450	41,960	8,178	16,685	313	15,719	8,491	16,962
Rent home	2,436	1,739	965	1,709	30	823	-773	781	-744	824
Saving at Baseline						n.s.		n.s.		n.s.
Saved regularly at baseline	398	4,807	5,810	3,270	1,537	2,643	1,003	2,449	2,539	2,619
Did not save regularly	2,185	4,600	3,324	4,026	574	1,496	-1,276	1,425	-702	1,501

Table D.10: Unadjusted Impacts on Net Business Value at 18 Months, by Subgroup (in $)

Subgroup (at enrolment)	Sample size	Outcome Levels			L$ vs. Ctrl.			L$ vs. L$+			L$+ vs. Ctrl.		
		L$	L$+	Ctrl.	Impact of financial incentive	S.E.		Added impact of services	S.E.		Impact of incentive plus services	S.E.	
All	2,583	42	231	-16	58	133		189	126		247 *	134	
Site Where Enrolled							n.s.			n.s.			n.s.
Halifax	191	-246	190	-532	286	725		437	725		722	730	
Toronto	1,189	69	15	52	17	163		-53	153		-37	164	
Vancouver	1,203	59	452	12	47	206		393 **	196		441 **	205	
Age and Gender													
Age							n.s.			n.s.			n.s.
Less than 30 years	920	-101	164	19	-120	190		265	176		145	192	
Between 30 and 40 years	1,195	132	245	80	52	199		114	191		165	200	
Over 40 years	468	112	327	-322	435	380		214	363		649 *	374	
Gender							†††			n.s.			†††
Female	1,420	169	342	-233	402 **	166		173	158		575 ***	168	
Male	1,163	-121	99	243	-364 *	215		220	204		-144	214	
Family Structure													
Marital status at baseline							n.s.			n.s.			n.s.
Married or common-law	1,144	173	180	101	72	170		7	166		79	171	
Single, separated, or divorced	1,439	-59	268	-122	64	199		327 *	184		391 **	198	
Children under 18 yrs in household							n.s.			n.s.			n.s.
1 or more children	1,036	160	348	-36	195	196		188	189		384 **	195	
No children	1,547	-33	154	-2	-31	180		187	169		156	181	
Employment and Income													
Baseline labour force status							n.s.			n.s.			n.s.
Work for pay	1,441	21	111	2	19	111		90	104		109	110	
Self-employed	309	211	505	2	210	838		293	776		503	806	
Unemployed or out of labour force[a]	831	22	342	-52	74	205		320	201		393 *	211	
Household income in year prior to application[b]							n.s.			n.s.			††
Less than $10,000	841	-172	409	-435	263	274		581 **	256		844 ***	277	
Between $10,000 and < $20,000	1,049	180	202	151	29	166		22	157		51	166	
$20,000 and over	693	107	57	196	-89	270		-51	263		-139	268	
EI Receipt in Last 12 Months							n.s.			n.s.			n.s.
Received EI	485	114	337	461	-347	376		223	359		-124	365	
Did Not Receive EI	2,098	27	205	-134	161	140		178	132		339 **	141	
Highest Level of Education Attained							n.s.			n.s.			n.s.
High school diploma[c]	685	20	205	36	-15	279		185	261		169	275	
Non-university degree, diploma or certificate	534	119	284	-433	552 *	297		165	290		717 **	306	
University degree	1,364	21	225	129	-108	175		204	165		96	175	
Years Since Immigrating							n.s.			n.s.			n.s.
Born in Canada	872	-154	397	-161	7	295		551 **	278		558 *	295	
Immigrated less than 4 years ago	1,209	61	70	115	-53	139		9	134		-44	140	
Immigrated 4 or more years ago	502	335	310	-102	437	313		-25	288		412	310	
Home ownership							n.s.			n.s.			n.s.
Own home	147	595	588	195	400	873		-7	822		393	887	
Rent home	2,436	7	210	-29	35	131		203	125		238 *	131	
Saving at Baseline							n.s.			n.s.			n.s.
Saved regularly at baseline	398	156	-34	195	-39	330		-190	306		-229	327	
Did not save regularly	2,185	21	281	-53	74	146		260 *	139		334 **	146	

Table D.11: Unadjusted Impacts on Attitudes to Education at 18 Months, by Subgroup — Percentage (Education Stream)

Subgroup (at enrolment)	Sample size	Outcome Levels L$	L$+	Ctrl.	L$ vs. Ctrl. Impact of financial incentive	S.E.	L$ vs. L$+ Added impact of services	S.E.	L$+ vs. Ctrl. Impact of incentive plus services	S.E.
All	2,091	63.4	61.5	54.5	8.8 ***	2.7	-1.9	2.5	7.0 ***	2.7
Site Where Enrolled						n.s.		††		n.s.
Halifax	143	67.3	74.0	61.4	6.0	9.7	6.7	9.4	12.6	9.7
Toronto	957	58.1	63.0	50.7	7.4 *	4.0	4.8	3.8	12.2 ***	4.0
Vancouver	991	67.9	58.3	57.0	10.8 ***	3.8	-9.6 ***	3.7	1.2	3.9
Age and Gender										
Age						††		n.s.		n.s.
Less than 30 years	757	72.2	63.9	56.8	15.5 ***	4.4	-8.3 **	4.0	7.1	4.4
Between 30 and 40 years	994	59.2	60.1	51.7	7.5 *	3.9	0.9	3.7	8.4 **	3.9
Over 40 years	340	54.2	60.2	58.2	-4.0	6.7	6.0	6.6	2.0	6.5
Gender						††		n.s.		†
Female	1,178	65.3	62.8	51.5	13.8 ***	3.5	-2.5	3.3	11.3 ***	3.6
Male	913	60.8	59.9	58.2	2.5	4.1	-0.9	3.9	1.6	4.0
Family Structure										
Marital status at baseline						n.s.		n.s.		n.s.
Married or common-law	965	56.8	57.5	50.7	6.1	3.9	0.8	3.9	6.9 *	4.0
Single, separated, or divorced	1,126	68.9	64.6	58.4	10.5 ***	3.6	-4.2	3.3	6.3 *	3.6
Children under 18 yrs in household						n.s.		†		n.s.
1 or more children	842	58.1	61.7	54.7	3.4	4.2	3.6	4.1	7.0 *	4.2
No children	1,249	66.7	61.4	54.4	12.3 ***	3.4	-5.3 *	3.2	7.0 **	3.5
Employment and Income										
Baseline labour force status						n.s.		n.s.		n.s.
Work for pay	1,201	66.2	65.5	56.7	9.5 ***	3.5	-0.7	3.3	8.7 **	3.5
Self-employed	201	60.0	56.4	53.4	6.6	9.0	-3.6	8.4	3.0	8.6
Unemployed or out of labour force[a]	688	59.4	55.5	51.4	8.0 *	4.6	-3.9	4.6	4.0	4.8
Household income in year prior to application[b]						n.s.		n.s.		n.s.
Less than $10,000	658	57.3	55.4	51.1	6.2	4.9	-1.9	4.6	4.3	4.9
Between $10,000 and < $20,000	855	67.3	64.3	53.3	14.0 ***	4.1	-3.1	3.9	11.0 ***	4.1
$20,000 and over	578	64.7	64.4	60.0	4.7	5.0	-0.3	4.8	4.4	5.0
EI Receipt in Last 12 Months						n.s.		n.s.		n.s.
Received EI	369	69.7	63.2	57.0	12.7 **	6.3	-6.5	6.0	6.2	6.1
Did Not Receive EI	1,722	62.2	61.1	54.0	8.2 ***	3.0	-1.0	2.8	7.2 **	3.0
Highest Level of Education Attained						n.s.		n.s.		n.s.
High school diploma[c]	542	68.9	61.9	59.9	9.0 *	5.3	-7.0	4.8	2.0	5.2
Non-university degree, diploma or certificate	408	61.7	66.4	56.3	5.5	5.9	4.7	5.8	10.2 *	6.0
University degree	1,141	61.3	59.8	51.5	9.8 ***	3.7	-1.6	3.5	8.2 **	3.7
Years Since Immigrating						n.s.		n.s.		n.s.
Born in Canada	668	72.4	68.3	64.3	8.1 *	4.5	-4.0	4.2	4.0	4.6
Immigrated less than 4 years ago	1,050	58.7	58.6	49.8	8.9 **	3.8	-0.1	3.7	8.8 **	3.8
Immigrated 4 or more years ago	373	59.6	57.1	51.9	7.6	6.5	-2.4	6.1	5.2	6.5
Home ownership						††		n.s.		††
Own home	114	59.1	51.4	72.7	-13.6	11.2	-7.7	10.9	-21.4 *	11.7
Rent home	1,977	63.6	62.1	53.5	10.1 ***	2.7	-1.6	2.6	8.6 ***	2.8
Saving at Baseline						n.s.		n.s.		††
Saved regularly at baseline	315	65.1	58.6	64.5	0.6	6.9	-6.5	6.5	-5.9	6.8
Did not save regularly	1,776	63.1	62.1	52.7	10.3 ***	2.9	-1.0	2.7	9.3 ***	2.9

Table D.12: Unadjusted Impacts on Participation in Education at 18 Months, by Subgroup — Percentage (Education Stream)

Subgroup (at enrolment)	Sample size	Outcome Levels L$	L$+	Ctrl.	L$ vs. Ctrl. Impact of financial incentive	S.E.	L$ vs. L$+ Added impact of services	S.E.	L$+ vs. Ctrl. Impact of incentive plus services	S.E.
All	2,089	64.1	65.7	65.0	-0.8	2.6	1.5	2.5	0.7	2.6
Site Where Enrolled						n.s.		n.s.		n.s.
Halifax	142	63.3	67.3	50.0	13.3	10.1	4.1	9.9	17.3 *	10.1
Toronto	957	65.1	68.2	67.0	-1.9	3.8	3.1	3.6	1.2	3.8
Vancouver	990	63.3	62.9	65.3	-2.0	3.8	-0.4	3.6	-2.4	3.8
Age and Gender										
Age						n.s.		n.s.		n.s.
Less than 30 years	757	70.5	73.6	70.9	-0.4	4.2	3.2	3.8	2.8	4.2
Between 30 and 40 years	992	62.7	63.2	62.2	0.5	3.8	0.5	3.7	1.0	3.9
Over 40 years	340	52.3	54.5	61.8	-9.5	6.7	2.1	6.6	-7.3	6.5
Gender						n.s.		n.s.		n.s.
Female	1,178	64.1	66.2	67.5	-3.3	3.5	2.1	3.3	-1.3	3.5
Male	911	64.1	65.0	61.9	2.2	4.0	0.9	3.8	3.1	4.0
Family Structure										
Marital status at baseline						n.s.		n.s.		n.s.
Married or common-law	963	64.3	67.0	65.3	-1.0	3.8	2.7	3.7	1.6	3.8
Single, separated, or divorced	1,126	64.0	64.6	64.6	-0.6	3.6	0.7	3.3	0.1	3.6
Children under 18 yrs in household						n.s.		†		n.s.
1 or more children	840	60.3	67.0	63.3	-2.9	4.1	6.7 *	4.0	3.7	4.1
No children	1,249	66.5	64.8	66.2	0.3	3.4	-1.7	3.2	-1.4	3.4
Employment and Income										
Baseline labour force status						n.s.		n.s.		†††
Work for pay	1,201	63.8	68.4	60.6	3.3	3.5	4.6	3.2	7.8 **	3.5
Self-employed	201	67.7	55.1	65.5	2.2	8.8	-12.6	8.1	-10.4	8.4
Unemployed or out of labour force[a]	686	63.9	63.9	71.7	-7.8 *	4.4	0.0	4.4	-7.8 *	4.6
Household income in year prior to application[b]						n.s.		n.s.		n.s.
Less than $10,000	657	64.2	65.4	70.4	-6.3	4.6	1.2	4.4	-5.1	4.7
Between $10,000 and < $20,000	855	62.4	65.9	62.3	0.1	4.1	3.5	3.9	3.6	4.1
$20,000 and over	577	66.7	65.7	62.9	3.8	4.9	-1.0	4.8	2.8	4.9
EI Receipt in Last 12 Months						n.s.		†		††
Received EI	369	59.7	51.5	63.2	-3.5	6.5	-8.2	6.2	-11.7 *	6.3
Did Not Receive EI	1,720	65.0	68.9	65.4	-0.4	2.8	3.9	2.7	3.5	2.9
Highest Level of Education Attained						n.s.		n.s.		n.s.
High school diploma[c]	541	61.7	63.7	61.2	0.4	5.3	2.0	4.9	2.5	5.3
Non-university degree, diploma or certificate	408	53.7	55.0	59.4	-5.7	6.0	1.3	6.0	-4.4	6.2
University degree	1,140	69.1	70.1	68.8	0.3	3.4	1.0	3.2	1.3	3.4
Years Since Immigrating						††		n.s.		n.s.
Born in Canada	667	64.2	61.9	57.7	6.5	4.8	-2.3	4.4	4.2	4.8
Immigrated less than 4 years ago	1,049	68.5	71.8	69.0	-0.5	3.5	3.3	3.4	2.8	3.5
Immigrated 4 or more years ago	373	52.2	55.6	65.4	-13.2 **	6.4	3.4	6.0	-9.7	6.5
Home ownership						n.s.		n.s.		n.s.
Own home	114	56.8	67.6	57.6	-0.8	11.3	10.7	11.0	10.0	11.8
Rent home	1,975	64.6	65.6	65.4	-0.8	2.7	1.0	2.5	0.2	2.7
Saving at Baseline						n.s.		n.s.		n.s.
Saved regularly at baseline	315	66.0	62.9	71.0	-4.9	6.7	-3.1	6.4	-8.0	6.6
Did not save regularly	1,774	63.8	66.2	63.9	-0.1	2.8	2.4	2.7	2.3	2.9

Table D.13: Unadjusted Impacts on Enrolment in Courses Towards a Degree, Diploma or Certificate at 18 Months, by Subgroup — Percentage (Education Stream)

Subgroup (at enrolment)	Sample size	Outcome Levels L$	L$+	Ctrl.	L$ vs. Ctrl. Impact of financial incentive	S.E.	L$ vs. L$+ Added impact of services	S.E.	L$+ vs. Ctrl. Impact of incentive plus services	S.E.
All	2,089	45.1	45.7	42.3	2.8	2.7	0.6	2.6	3.4	2.7
Site Where Enrolled						n.s.		n.s.		n.s.
Halifax	142	46.9	40.8	27.3	19.7 *	10.1	-6.1	9.8	13.5	10.1
Toronto	957	45.9	51.0	44.8	1.1	4.1	5.1	3.8	6.2	4.1
Vancouver	990	44.1	41.2	42.3	1.8	3.9	-2.9	3.7	-1.1	3.9
Age and Gender										
Age						n.s.		n.s.		n.s.
Less than 30 years	757	51.2	52.0	51.3	0.0	4.6	0.7	4.2	0.7	4.7
Between 30 and 40 years	992	44.3	46.0	40.2	4.1	3.9	1.7	3.8	5.8	4.0
Over 40 years	340	31.8	30.9	31.8	0.0	6.3	-0.9	6.2	-0.9	6.1
Gender										
Female	1,178	45.8	46.4	42.5	3.4	3.6	0.5	3.4	3.9	3.7
Male	911	44.1	44.9	42.1	2.0	4.1	0.8	3.9	2.8	4.1
Family Structure										
Marital status at baseline						n.s.		n.s.		n.s.
Married or common-law	963	48.1	46.9	45.0	3.1	4.0	-1.2	3.9	1.9	4.0
Single, separated, or divorced	1,126	42.6	44.8	39.7	3.0	3.7	2.1	3.5	5.1	3.7
Children under 18 yrs in household						n.s.		n.s.		n.s.
1 or more children	840	43.1	47.6	39.1	4.0	4.2	4.5	4.1	8.6 **	4.2
No children	1,249	46.4	44.5	44.7	1.7	3.5	-1.9	3.3	-0.2	3.6
Employment and Income										
Baseline labour force status						n.s.		n.s.		n.s.
Work for pay	1,201	43.4	46.8	38.2	5.2	3.6	3.4	3.4	8.6 **	3.6
Self-employed	201	35.4	32.1	32.8	2.6	8.6	-3.3	8.0	-0.7	8.2
Unemployed or out of labour force[a]	686	50.6	48.4	51.4	-0.8	4.7	-2.2	4.6	-3.0	4.8
Household income in year prior to application[b]						n.s.		n.s.		n.s.
Less than $10,000	657	42.5	45.0	46.2	-3.7	4.9	2.5	4.6	-1.2	4.9
Between $10,000 and < $20,000	855	46.4	49.5	41.8	4.6	4.3	3.1	4.0	7.7 *	4.3
$20,000 and over	577	46.3	40.8	38.9	7.4	5.1	-5.5	4.9	1.9	5.1
EI Receipt in Last 12 Months						n.s.		†		n.s.
Received EI	369	45.4	36.8	35.1	10.3	6.4	-8.6	6.1	1.7	6.2
Did Not Receive EI	1,720	45.1	47.8	44.0	1.1	3.0	2.7	2.8	3.8	3.0
Highest Level of Education Attained						n.s.		n.s.		n.s.
High school diploma[c]	541	42.5	46.8	37.4	5.1	5.4	4.3	5.0	9.4 *	5.4
Non-university degree, diploma or certificate	408	36.9	32.8	39.8	-2.9	5.8	-4.1	5.8	-7.0	6.0
University degree	1,140	49.4	49.4	45.5	3.9	3.7	0.0	3.5	3.9	3.7
Years Since Immigrating						n.s.		n.s.		n.s.
Born in Canada	667	43.1	39.3	33.5	9.6 **	4.8	-3.8	4.4	5.8	4.8
Immigrated less than 4 years ago	1,049	49.3	53.7	49.8	-0.5	3.8	4.4	3.7	3.9	3.8
Immigrated 4 or more years ago	373	37.5	35.3	34.6	2.9	6.3	-2.2	5.9	0.7	6.3
Home ownership						n.s.		n.s.		n.s.
Own home	114	31.8	40.5	30.3	1.5	11.0	8.7	10.7	10.2	11.5
Rent home	1,975	45.9	46.0	43.0	2.9	2.8	0.1	2.7	3.0	2.8
Saving at Baseline						n.s.		n.s.		n.s.
Saved regularly at baseline	315	50.9	44.8	43.0	7.9	7.1	-6.1	6.7	1.8	7.0
Did not save regularly	1,774	44.1	45.9	42.2	2.0	2.9	1.7	2.8	3.7	3.0

Table D.14: Unadjusted Impacts on Enrolment in Other (Non-Program) Education Courses or Seminars at 18 Months, by Subgroup — Percentage (Education Stream)

Subgroup (at enrolment)	Sample size	Outcome Levels L$	L$+	Ctrl.	L$ vs. Ctrl. Impact of financial incentive	S.E.	L$ vs. L$+ Added impact of services	S.E.	L$+ vs. Ctrl. Impact of incentive plus services	S.E.
All	2,089	26.1	26.6	29.1	-3.0	2.4	0.5	2.3	-2.5	2.4
Site Where Enrolled						n.s.		n.s.		n.s.
Halifax	142	26.5	28.6	27.3	-0.7	9.4	2.0	9.1	1.3	9.4
Toronto	956	26.2	24.8	28.5	-2.3	3.6	-1.5	3.4	-3.7	3.6
Vancouver	991	25.9	28.1	29.9	-4.0	3.5	2.2	3.4	-1.8	3.6
Age and Gender										
Age						n.s.		n.s.		n.s.
Less than 30 years	757	29.2	29.2	26.1	3.1	4.2	0.1	3.8	3.1	4.2
Between 30 and 40 years	993	24.4	24.0	29.4	-4.9	3.4	-0.4	3.3	-5.4	3.5
Over 40 years	339	23.6	27.6	33.6	-10.1	6.1	4.1	6.0	-6.0	5.9
Gender						n.s.		n.s.		n.s.
Female	1,178	25.0	26.6	30.4	-5.4 *	3.2	1.6	3.1	-3.9	3.3
Male	911	27.6	26.6	27.5	0.1	3.7	-1.0	3.5	-0.8	3.7
Family Structure										
Marital status at baseline						n.s.		n.s.		n.s.
Married or common-law	963	25.1	26.9	26.7	-1.6	3.5	1.8	3.4	0.2	3.5
Single, separated, or divorced	1,126	27.0	26.4	31.5	-4.5	3.4	-0.6	3.1	-5.1	3.4
Children under 18 yrs in household						n.s.		n.s.		n.s.
1 or more children	840	24.8	27.6	29.3	-4.5	3.8	2.7	3.7	-1.7	3.8
No children	1,249	26.9	26.0	28.9	-2.0	3.2	-1.0	3.0	-3.0	3.2
Employment and Income										
Baseline labour force status						n.s.		n.s.		n.s.
Work for pay	1,200	26.6	28.4	28.4	-1.8	3.3	1.8	3.0	0.1	3.3
Self-employed	201	41.5	30.8	37.9	3.6	8.7	-10.8	8.1	-7.2	8.4
Unemployed or out of labour force[a]	687	21.5	21.5	27.8	-6.3	3.9	0.0	3.9	-6.4	4.1
Household income in year prior to application[b]						n.s.		n.s.		n.s.
Less than $10,000	657	28.8	27.7	32.8	-4.0	4.5	-1.0	4.2	-5.1	4.5
Between $10,000 and < $20,000	855	22.5	22.3	25.8	-3.3	3.6	-0.3	3.4	-3.5	3.6
$20,000 and over	577	28.4	31.8	29.7	-1.4	4.7	3.5	4.6	2.1	4.7
EI Receipt in Last 12 Months						††		n.s.		†††
Received EI	369	21.0	20.6	36.0	-15.0 ***	5.7	-0.4	5.4	-15.4 ***	5.5
Did Not Receive EI	1,720	27.1	28.0	27.5	-0.4	2.7	0.9	2.6	0.5	2.7
Highest Level of Education Attained						n.s.		n.s.		n.s.
High school diploma[c]	541	26.9	24.4	29.9	-3.0	4.9	-2.6	4.5	-5.6	4.8
Non-university degree, diploma or certificate	408	22.1	25.2	24.2	-2.1	5.1	3.0	5.1	1.0	5.3
University degree	1,140	27.2	28.1	30.6	-3.4	3.4	1.0	3.2	-2.5	3.4
Years Since Immigrating						††		n.s.		n.s.
Born in Canada	667	28.9	27.2	30.2	-1.4	4.4	-1.7	4.1	-3.0	4.5
Immigrated less than 4 years ago	1,049	26.8	25.5	26.3	0.5	3.4	-1.4	3.3	-0.9	3.4
Immigrated 4 or more years ago	373	19.1	28.6	35.6	-16.5 ***	5.7	9.5 *	5.4	-7.0	5.8
Home ownership						n.s.		n.s.		n.s.
Own home	113	30.2	29.7	30.3	-0.1	10.8	-0.5	10.4	-0.6	11.1
Rent home	1,976	25.9	26.4	29.0	-3.2	2.5	0.6	2.4	-2.6	2.5
Saving at Baseline						n.s.		n.s.		n.s.
Saved regularly at baseline	315	24.5	25.9	35.5	-11.0 *	6.4	1.3	6.0	-9.6	6.3
Did not save regularly	1,774	26.4	26.7	27.9	-1.6	2.6	0.4	2.5	-1.2	2.7

References

Adams, D. (2005). *ADD Implementation Assessment* (CSD Research Report 05–33 p. 27). St. Louis, MO: Center for Social Development, George Warren Brown School of Social Work, Washington University.

Bergeron, L-P., Dunn, K., Lapointe, M., Roth, W., & Tremblay-Cote, N. (2004). Looking ahead: A 10-year outlook for the Canadian labour market 2004-2013, final report. *Policy Research and Coordination Directorate, Human Resources and Skills Development Canada.* Retrieved October 2004, from http://www11.hrsdc.gc.ca/en/cs/sp/hrsdc/arb/publications/research/2004-002750/SP-615-10-04E-v.pdf

Bynner, J., & Paxton, W. (2001). *The Asset Effect*. London: Institute for Policy Research.

Canadian Council on Learning. (2006). *Survey of Canadian attitudes toward learning*. October.

CFED. (2007). Individual Development Accounts: Providing Opportunities to Build Assets. Retrieved January 2007, from http://www.cfed.org/imageManager/IDAnetwork/ida_one_pager_022607.pdf

Cheng, L.C. (2004). *Developing family development accounts in Taipei: Policy innovation from income to assets* (CASE Paper 83). London, UK: Centre for Analysis of Social Exclusion (CASE), London School of Economics.

Ciurea, M., Blain, A., DeMarco, D., Ly, H., & Mills, G. (2001). *Assets for independence act evaluation: Phase 1 implementation, final report.* Cambridge, MA: Abt Associates Inc.

Cramer, R., O'Brien, R., & Boshara, R. (2007). *The Assets Report 2007.* New America Foundation. Retrieved February 2007, from http://www.newamerica.net/files/Assets%20Report%202007%20Elec.pdf

Eckel, C., Johnson, C., & Montmarquette, C. (2002). *Will the working poor invest in human capital: A laboratory experiment* (SRDC Working Paper, 02-01). Social Research and Demonstration Corporation. Retrieved February 2002, from http://www.srdc.org/uploads/workingpoor.pdf

Golosov, M., & Tsyvinski, A. (2004). *Designing optimal disability insurance: A case for asset testing* (NBER Working Paper No. W10792). Cambridge, MA: National Bureau of Economic Research.

Hilgert, M., & Hogarth, J. (2002). Financial Knowledge, Experience and Learning Preferences: Preliminary Results from a New Survey on Financial Literacy. *Consumer Interest Annual 48.*

Human Resources and Social Development Canada. (2007). *Canada Student Loans Program (CSLP) - Designated educational institutions*, Retrieved July 2007, from http://www.hrsdc.gc.ca/en/hip/cslp/ImportantLinks/02_il_MasterListIndex.shtml

Human Resources Development Canada. (2003). Formative evaluation of the Canada Education Savings Grant Program, final report. *Evaluation and Data Development.* Retrieved July 2007, from http://www.hrsdc.gc.ca/en/cs/sp/hrsdc/edd/reports/2003-002509/SP-AH-200-04-03E.pdf

Hurst, E., & Ziliak, J.P. (2001). *Welfare reform and household saving* (Institute for Research on Poverty, Discussion Paper no. 1234-01). Madison, WI: Institute for Research on Poverty, University of Wisconsin–Madison.

Kempson, E., McKay, S., & Collard, S. (2003, October). *Evaluation of the CFLI and Saving Gateway pilot projects: Interim report on the Saving Gateway pilot project.* Bristol, UK: University of Bristol.

Kempson, E., McKay, S., & Collard, S. (2005, March). *Incentives to save: Encouraging saving among low-income households*. Bristol, UK: University of Bristol.

Kim, J. (2001). Financial Knowledge and Subjective and Objective Financial Well-Being. *Consumer Interest Annual 47.*

Kingwell, P., Dowie, M., Holler, B., Vincent, C., Gyarmati, D. and Cao, H. (2005). *Design and Implementation of a Program to Help the Poor Save: The* learn*$ave Project.* Social Research and Demonstration Corporation: Ottawa.

Millennium Scholarship Foundation. (2004). *Price of Knowledge.* Retrieved October 2007, from http://www.millenniumscholarships.ca/uploadfiles/documents/research/Price_of_Knowledge-2004.pdf

Mills, G., Campos, G., Ciurea, M., DeMarco, D., Michlin, N., & Welch, D. (2000). *Evaluation of asset accumulation initiatives, final report.* Cambridge, MA: Abt Associates Inc.

Mills, G., Gale, W.G., Patterson, R. & Apostolov, E. (2006). What do individual development accounts do? Evidence from a controlled experiment. *Mimeo.* Retrieved October 2007, from http://www.brookings.edu/views/papers/gale/20060711.pdf

Mills, G., Patterson, R., Orr, L., & DeMarco, D. (2004). *Evaluation of the American Dream Demonstration, final report.* Cambridge, MA: Abt Associates.

Mohr, L.B. (1995). *Impact analysis for program evaluation (2nd ed.).* Thousand Oaks, CA: Sage Publications.

Moore, A., Beverly, S., Schreiner, M., Sharraden, M., Lombe, M., Cho, E.Y.N., Johnson, E., & Vonderlack, R. (2001). *Saving, IDA programs and effects of IDAs: A survey of participants, research report.* St. Louis, MO: Center for Social Development, George Warren Brown School of Social Work, Washington University. Retrieved July 24, 2007, from http://gwbweb.wustl.edu/csd/Publications/2001/shortsurveyreport.pdf

Orr, L.L. (1999). *Social experiments: Evaluating public programs with experimental methods.* Thousand Oaks, CA: Sage Publications.

Orszag, P. (2001). *Assets tests and low saving rates among low-income families.* Washington, DC: Center on Budget and Policy Priorities.

Ouellette, Sylvie. (2006). *How Students Fund Their Postsecondary Education: Findings from the Postsecondary Education Participation Survey* (Research Paper, Statistics Canada cat. no. 81-595-MIE – No. 042). Culture, Tourism and the Centre for Education Statistics. Retrieved October 2007, from http://www.statcan.ca/english/research/81-595-MIE/81-595-MIE2006042.pdf.

Page-Adams, D., Scanlon, E., Beverly, S., & MacDonald, T. (2001) *Assets, Health, and Well-Being: Neighbourhoods, Families, Children and Youth* (Research and Background Paper 01-19). Center for Social Development, Washington University in St. Louis, 2001. Retrieved December 6, 2007, from http://gwbweb.wustl.edu/csd/publications/2001/ResearchBackground_01-9.pdf

Paxton, W., & Regan, S. (2002). *The future of asset-based policy in the UK*. London, UK: Institute for Public Policy Research.

Rubin, D.B. (1987). Multiple Imputation for Nonresponse in Surveys. New York: Wiley.

Schreiner, M., Clancy, M., & Sherraden, M. (2002). *Saving performance in the American Dream Demonstration: A national demonstration of individual development accounts* (CSD Report). St. Louis: Washington University, Center for Social Development. Retrieved October 2007, from http://gwbweb.wustl.edu/csd/Publications/2002/ADDreport2002.pdf

Service Canada. (2007). *Job futures: World of work.* Based on Labour Force Survey Data from Statistics Canada. Retrieved October 2007, from http://www.jobfutures.ca/en/brochure/JobFuture.pdf.

Sherraden, M. (1991). *Assets and the poor: A new American welfare policy.* Armonk, NY: M. E. Sharpe.

Sherraden, M., Schreiner, M., & Beverly, S. (2003). Income, institutions, and saving performance in Individual Development Accounts. *Economic Development Quarterly*, 17(1), pp. 95–112.

Sodha, S. (2006). *Lessons from across the Atlantic: Asset-building in the UK*. Institute for Public Policy Research, paper presented at the 2006 Assets Learning Conference, Phoenix, AZ, August.

Statistics Canada. (2005). Longitudinal Survey of Immigrants to Canada: a Portrait of Early Settlement Experiences, September. Retrieved October 2007, from http://www.statcan.ca/cgi-bin/downpub/listpub.cgi?catno=89-614-XIE2005001

Williams, T.R. (2004). *The impacts of household wealth on child development* (CSD Working Paper 04-07). Center for Social Development. St. Louis: Washington University. Retrieved December 6, 2007, from http://gwbweb.wustl.edu/csd/Publications/2004/WP04-07.pdf

Zhan, M. & Sherraden, M. (2003). "Assets, Expectations, and Children's Educational Achievement in Single-Parent Households." *Social Service Review*, 77(2), pp. 191–211.

Publications on SRDC Projects

SRDC reports are published in both official languages. SRDC working papers are published in the language of the author(s) only.

learn$ave

Learning to Save, Saving to Learn: Early Impacts of the learn*$ave Individual Development Accounts Project*, by Norm Leckie, Michael Dowie, and Chad Gyorfi-Dyke (January 2008).

Design and Implementation of a Program to Help the Poor Save: The learn*$ave Project*, by Paul Kingwell, Michael Dowie, Barbara Holler, Carole Vincent, David Gyarmati, and Hongmei Cao (August 2005).

Helping People Help Themselves: An Early Look at learn*$ave*, by Paul Kingwell, Michael Dowie, and Barbara Holler, with Liza Jimenez (May 2004).

Self-Sufficiency Project (SSP)

Making Work Pay Symposium (March 2006).

Human Capital and Search Behaviour (working paper 06-10 published in English only), by Audra Bowlus, Lance Lochner, Christopher Robinson, and Yahong Zhang (March 2006).

The Effect of the Self-Sufficiency Project on Children (working paper 06-09 published in English only), by Piotr Wilk, Michael H. Boyle, Martin D. Dooley, and Ellen Lipman (March 2006).

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Equilibrium Policy Experiments and the Evaluation of Social Programs (working paper 03-06 published in English only), by Jeremy Lise, Shannon Seitz, and Jeffrey Smith (October 2003).

Assessing the Impact of Non-response on the Treatment Effect in the Canadian Self-Sufficiency Project (working paper 03-05 published in English only), by Thierry Kamionka and Guy Lacroix (October 2003).

Can Work Incentives Pay for Themselves? Final Report on the Self-Sufficiency Project for Welfare Applicants, by Reuben Ford, David Gyarmati, Kelly Foley, and Doug Tattrie, with Liza Jimenez (October 2003).

Do Earnings Subsidies Affect Job Choice? The Impact of SSP Supplement Payments on Wage Growth (working paper 03-02 published in English only), by Helen Connolly and Peter Gottschalk (January 2003).

Leaving Welfare for a Job: How Did SSP Affect the Kinds of Jobs Welfare Recipients Were Willing to Accept? (working paper 02-03 published in English only), by Kelly Foley and Saul Schwartz (August 2002).

Making Work Pay: Final Report on the Self-Sufficiency Project for Long-Term Welfare Recipients, by Charles Michalopoulos, Doug Tattrie, Cynthia Miller, Philip K. Robins, Pamela Morris, David Gyarmati, Cindy Redcross, Kelly Foley, and Reuben Ford (July 2002).

When Financial Incentives Pay For Themselves: Interim Findings From the Self-Sufficiency Project's Applicant Study, by Charles Michalopoulos and Tracey Hoy (November 2001).

SSP Plus at 36 Months: Effects of Adding Employment Services to Financial Work Incentives, by Ying Lei and Charles Michalopoulos (July 2001).

Measuring Wage Growth Among Former Welfare Recipients (working paper 01-02 published in English only), by David Card, Charles Michalopoulos, and Philip K. Robins (July 2001).

How an Earnings Supplement Can Affect the Marital Behaviour of Welfare Recipients: Evidence from the Self-Sufficiency Project (working paper 01-01 published in English only), by Kristen Harknett and Lisa A. Gennetian (May 2001).

The Self-Sufficiency Project at 36 Months: Effects of a Financial Work Incentive on Employment and Income, by Charles Michalopoulos, David Card, Lisa A. Gennetian, Kristen Harknett, and Philip K. Robins (June 2000).

The Self-Sufficiency Project at 36 Months: Effects on Children of a Program that Increased Parental Employment and Income, by Pamela Morris and Charles Michalopoulos (June 2000).

Does SSP Plus Increase Employment? The Effect of Adding Services to the Self-Sufficiency Project's Financial Incentives, by Gail Quets, Philip K. Robins, Elsie C. Pan, Charles Michalopoulos, and David Card (May 1999).

When Financial Work Incentives Pay for Themselves: Early Findings from the Self-Sufficiency Project's Applicant Study, by Charles Michalopoulos, Philip K. Robins, and David Card (May 1999).

When Financial Incentives Encourage Work: Complete 18-Month Findings from the Self-Sufficiency Project, by Winston Lin, Philip K. Robins, David Card, Kristen Harknett, and Susanna Lui-Gurr, with Elsie C. Pan, Tod Mijanovich, Gail Quets, and Patrick Villeneuve (September 1998).

Do Work Incentives Have Unintended Consequences? Measuring "Entry Effects" in the Self-Sufficiency Project, by Gordon Berlin, Wendy Bancroft, David Card, Winston Lin, and Philip K. Robins (March 1998).

How Important Are "Entry Effects" in Financial Incentive Programs for Welfare Recipients? Experimental Evidence from the Self-Sufficiency Project (working paper 97-01-E; also available in French), by David Card, Philip K. Robins, and Winston Lin (August 1997).

When Work Pays Better Than Welfare: A Summary of the Self-Sufficiency Project's Implementation, Focus Group, and Initial 18-Month Impact Reports (March 1996).

Do Financial Incentives Encourage Welfare Recipients to Work? Initial 18-Month Findings from the Self-Sufficiency Project, by David Card and Philip K. Robins (February 1996).

Creating an Alternative to Welfare: First-Year Findings on the Implementation, Welfare Impacts, and Costs of the Self-Sufficiency Project, by Tod Mijanovich and David Long (December 1995).

The Struggle for Self-Sufficiency: Participants in the Self-Sufficiency Project Talk About Work, Welfare, and Their Futures, by Wendy Bancroft and Sheila Currie Vernon (December 1995).

Making Work Pay Better Than Welfare: An Early Look at the Self-Sufficiency Project, by Susanna Lui-Gurr, Sheila Currie Vernon, and Tod Mijanovich (October 1994).

Earnings Supplement Project (ESP)

Employment Insurance and Family Response to Unemployment: Canadian Evidence from the SLID (working paper 04-04 published in English only), by Rick Audas and Ted McDonald (May 2004).

Understanding Employment Insurance Claim Patterns: Final Report of the Earnings Supplement Project, by Shawn de Raaf, Anne Motte, and Carole Vincent (March 2004).

The Dynamics of Reliance on EI Benefits: Evidence From the SLID (working paper 03-08 published in English only), by Shawn de Raaf, Anne Motte, and Carole Vincent (December 2003).

Who Benefits From Unemployment Insurance in Canada: Regions, Industries, or Individual Firms? (working paper 03-07 published in English only), by Miles Corak and Wen-Hao Chen (November 2003).

Seasonal Employment and Reliance on Employment Insurance: Evidence From the SLID (working paper 03-04 published in English only), by Shawn de Raaf, Costa Kapsalis, and Carole Vincent (June 2003).

Employment Insurance and Geographic Mobility: Evidence From the SLID (working paper 03-03 published in English only), by Rick Audas and James Ted McDonald (April 2003).

The Impact of the Allowable Earnings Provision on EI Dependency: The Earnings Supplement Project (working paper 02-05 published in English only), by David Gray and Shawn de Raaf (November 2002).

The Frequent Use of Unemployment Insurance in Canada: The Earnings Supplement Project, by Saul Schwartz, Wendy Bancroft, David Gyarmati, and Claudia Nicholson (March 2001).

Essays on the Repeat Use of Unemployment Insurance: The Earnings Supplement Project, edited by Saul Schwartz and Abdurrahman Aydemir (March 2001).

Testing a Re-employment Incentive for Displaced Workers: The Earnings Supplement Project, by Howard Bloom, Saul Schwartz, Susanna Gurr, and Suk-Won Lee (May 1999).

A Financial Incentive to Encourage Employment among Repeat Users of Employment Insurance: The Earnings Supplement Project, by Doug Tattrie (May 1999).

Implementing the Earnings Supplement Project: A Test of a Re-employment Incentive, by Howard Bloom, Barbara Fink, Susanna Lui-Gurr, Wendy Bancroft, and Doug Tattrie (October 1997).

Community Employment Innovation Project (CEIP)

Improving Skills, Networks, and Livelihoods through Community-Based Work: Three-Year Impacts of the Community Employment Innovation Project, by David Gyarmati, Shawn de Raaf, Claudia Nicholson, Boris Palameta, Taylor Shek-Wai Hui, and Melanie MacInnis (October 2007).

Testing a Community-Based Jobs Strategy for the Unemployed: Early Impacts of the Community Employment Innovation Project, by David Gyarmati, Shawn de Raaf, Claudia Nicholson, Darrell Kyte, and Melanie MacInnis (November 2006).

The Community Employment Innovation Project: Design and Implementation, by John Greenwood, Claudia Nicholson, David Gyarmati, Darrell Kyte, Melanie MacInnis, and Reuben Ford (December 2003).

A Model of Social Capital Formation (working paper 03-01 published in English only), by Cathleen Johnson (January 2003).

A Review of the Theory and Practice of Social Economy/Économie Sociale in Canada (working paper 02-02 published in English only), by William A. Ninacs with assistance from Michael Toye (August 2002).

Economic experiments

Fostering Adult Education: A Laboratory Experiment on the Efficient Use of Loans, Grants, and Saving Incentives (working paper 03-09 published in English only), by Cathleen Johnson, Claude Montmarquette, and Catherine Eckel (December 2003).

Will the Working Poor Invest in Human Capital? A Laboratory Experiment (working paper 02-01 published in English only), by Catherine Eckel, Cathleen Johnson, and Claude Montmarquette (February 2002).

Other studies

A Literature Review of Experience-Rating Employment Insurance in Canada (working paper 05-03 published in English only), by Shawn de Raaf, Anne Motte, and Carole Vincent (May 2005).

The Disability Supports Feasibility Study: Final Report, by Doug Tattrie, Colin Stuart, Roy Hanes, Reuben Ford, and David Gyarmati (June 2003).

How Random Must Random Assignment Be in Random Assignment Experiments? (technical paper 03-01 published in English only), by Paul Gustafson (February 2003).

Preparing for Tomorrow's Social Policy Agenda: New Priorities for Policy Research and Development That Emerge From an Examination of the Economic Well-Being of the Working-Age Population (working paper 02-04 published in English only), by Peter Hicks (November 2002).

The Jobs Partnership Program Pilot: Pathways, Pitfalls, and Progress in the First Year (process research report published in English only), by Wendy Bancroft, Susanna Gurr, and David Gyarmati (October 2001).

BladeRunners and Picasso Café: A Case Study Evaluation of Two Work-Based Training Programs for Disadvantaged Youth, by Sheila Currie, Kelly Foley, Saul Schwartz, and Musu Taylor-Lewis (March 2001).

Transitions: *Programs to Encourage British Columbia Students to Stay in School* (working paper 99-01 published in English only), by Reuben Ford, Susanna Gurr, Robert J. Ivry, and Musu Taylor-Lewis (June 1999).