Basic Income, Financial Literacy and Financial Capability:
How Do We Get Better Alignment?

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Abstract

In this paper, we describe the levels of financial literacy and financial capability of adults receiving Income Assistance (IA) benefits in British Columbia. We find that, even after controlling for the usual demographic characteristics, IA recipients have significantly lower levels of knowledge (on mainstream financial topics commonly used in tests of financial literacy) and lower levels of capability in some key areas of financial management. This is not evidence that IA clients need to be instructed on budgeting; in fact we find there is no significant difference between IA clients and other adults along this dimension. Instead, we find that IA programs likely inhibit the ability of clients to gain positive experiences in making their own financial decisions. We also draw on results of a survey of voluntary sector organizations that deliver a range of services to low-income clients, including tax-filing clinics, help accessing government benefits, financial coaching or problem-solving, and consumer rights education and advocacy. We find that organizations seem to be playing an important role in helping low-income adults navigate and access public benefits, but that this work is not properly considered in the total cost of current IA programs or other income supports. We also find that the non-profit supply of financial information and advice to low-income clients is likely precarious due to uncertain funding and competing organizational priorities.

Introduction

In our paper, “How and when to pay?: Income Assistance (or basic income) as a system of financial transactions and services” (Robson & Shaban, 2021), we argued that income support programs like British Columbia’s Income Assistance (IA) must also be thought of as financial systems that serve individual clients. The problems or successes of a financial system will depend on the interactions of both the institutional design, such as how and when transactions take place (which are the focus of our first paper), as well as individual differences. Those individual differences will include the knowledge or understanding needed to be an effective participant in financial transactions, and the habitual behaviours that users bring to their interactions with money.

In this current paper, we present new evidence regarding the financial knowledge and financial capability of social assistance recipients, including provincial-level differences where possible. Institutional factors—including policy choices about conditions and timing of benefit payments in income support systems—can have important effects on the observed behaviour of program users. Furthermore, the behavioural responses may not always conform to expected models of rational economic behaviour. Those models assume that participants in a financial system will generally have imperfect but adequate knowledge to make informed choices in their own best interests (Allingham & Sandmo, 1972; Sandmo, 2005). We explore that assumption for IA recipients. We also present evidence regarding the self-reported financial attitudes and behaviours of social assistance recipients and contrast these with the general adult population. Our approach does not try to determine a causal relationship between individual behaviour and the institutional features of social assistance systems. Instead, our analysis is descriptive and intended to inform policy-makers about the financial management practices of clients and how these might differ from the assumptions implied by the rules and complexity of program design.

Complexity in Income Support Programs May Exceed Individual Capabilities

For families and individuals in poverty, the experience of persistent scarcity seems to impose extra demands on cognition, a so-called mental tax (Mullainathan & Shafir, 2013), making some forms of financial choices, such as longer-term planning, more challenging. At the same time, the income support programs that people in poverty rely on can be very complex. In most cases, this complexity does not appear to be by deliberate design (though we note the possibility of exceptions as documented by Moynihan et al. (2015). Rather, the observed complexity seems to be the result of repeated and incremental design decisions, layered one over another.

These incremental decisions reflect several, sometimes competing, policy aims. One common policy aim is to ensure vertical efficiency—that is ensuring ineligible persons do not receive program benefits. Another common aim is to make a program as effective as possible by requiring beneficiaries to use it only as intended (Currie & Gahvari, 2008). So long as assistance remains conditional and targeted in some way, it will have an irreducible complexity that users must navigate. In practice, if not by design, social programs have implicit assumptions about the abilities of users to navigate program rules, complete program application forms, and make decisions about the use of the benefits they receive (cash or in-kind). That complexity in the Income Assistance rules and the kind of financial choices they present to users is evident in Robson and Shaban (2020) and Petit and Tedds (2020). But to what degree do those implicit assumptions match the actual financial knowledge, attitudes, and behaviours of program users, let alone members of the general population?

We are not suggesting that lower-income adults need to be educated about money matters, but rather that social assistance systems impose a degree of complexity in household financial decision-making that is challenging, even for experts. In fact, reviews of the literature suggest only weak evidence for the effectiveness of passive financial information alone in changing the financial well-being of low-income persons (Buckland, 2011; Robson, 2012). There is stronger evidence that positive opportunities to practise new financial skills and make real decisions, with support, about money is more likely to result in positive behavioural change on personal finances (Calderone et al., 2018; Grinstein-Weiss et al., 2011). There is also more specific evidence that clients of programs often need help to understand and complete complex application processes and may otherwise forgo public programs that would measurably increase their income. For example, using a random assignment design, Finkelstein and Notowidigo (2018) find that eligible low-income Americans are significantly more likely to apply for the Supplemental Nutritional Assistance Program when they receive simplified information about it, and especially when they also receive personalized assistance in completing the program application form. Other research finds personalized help in completing a tax return and applying for income-tested benefits can lead to a substantial increase in household income and even household emergency savings (Consumer Financial Protection Bureau, 2015; Key et al., 2015; Lim et al., 2011; Porto & Collins, 2017; Ramnath & Tong, 2017). The only study of Canadian non-filers to date estimates that household income for a couple with children would have increased by a mean of just over $1,500 in 2015 if they had completed a return to access refundable credits (Robson & Schwartz, 2020).

Echoing findings from Hertz et al. (2020)in their paper “User Experiences of the System” and our own paper “How and when to pay?: Income Assistance (or basic income) as a system of financial transactions and services” in this same collection, access to personalized and accurate guidance may be an important ancillary service that helps to bridge the gap between institutional assumptions in social assistance and actual user knowledge and behaviour. Financial markets generally assume that consumers who do not have adequate information or confidence to take a financial decision can seek information and advice from financial advisors or planners. However, for-profit services are not well suited, either in accessibility or expertise, to meeting the needs of lower-income clients. In this paper, we expand on previous analysis of the financial guidance roles played by provincial case workers (Robson & Shaban, 2020) to describe the availability of financial education and guidance services in community-based non-profit organizations across British Columbia. We argue that these are an essential ancillary service to the broader income support system, including but not limited to Income Assistance.

We also argue that these groups will continue to be essential service providers whether or not a basic income program is implemented or Income Assistance reformed.

Overall, our review of the literature suggests a misalignment between the observed financial knowledge, habits, and confidence of program users and the complexity of design of the social welfare programs implemented by policy-makers. Given a tension between designing social programs that are very simple and those that are targeted, effective, and efficient, there is likely some irreducible level of complexity in welfare systems. When there is opportunity for policy change, it ought to be informed by an understanding of the real levels of financial knowledge and capabilities of the intended program beneficiaries and an understanding of the ancillary services available, inside and outside of government, to supplement that knowledge and capability.

The Current Study

In this paper, we ask:

- What are the levels of financial literacy and financial capability of adult persons in B.C. receiving Income Assistance and how do these differ from the general adult population?
- Are there other noteworthy differences in the financial management practices of adults in B.C. receiving Income Assistance that will be relevant to policy changes?
- What is the capacity in the province to provide community-based and non-profit financial empowerment services to low-income persons who may rely on Income Assistance or and other social welfare programs?

Financial Literacy and Financial Capability

We define financial literacy as an individual's objective knowledge about financial matters (Lusardi & Mitchell, 2011, 2014; OECD, 2017; Robson & Peetz, 2020). We build on the extant literature and measure financial literacy using responses to a set of knowledge questions in a national survey. While the Organisation for Economic Co-operation and Development has argued that efforts to increase financial literacy will ensure that "consumers can act autonomously to manage their financial matters" (Organisation for Economic Co-operation and Deveopment, 2016, p. 19), we caution that the literature on the relationship between financial knowledge and behaviour is decidedly mixed (Hilgert et al., 2003; Lusardi & Mitchell, 2014; Robson & Peetz, 2020).

We use data from the Canadian Financial Capability Survey (CFCS). This survey was conducted by Statistics Canada as a nationally representative survey of adults in Canada aged 18 years of age and older. It is cross-sectional in design and had 15,519 respondents in 2008 and 6,685 in 2014.[1] Analysis of the CFCS was completed on a pooled dataset of the 2008 and

[1] Data for the 2008 cycle of the CFCS was collected during the period February to May 2008. Data for the 2014 cycle was collected during the period May to June 2014. An analysis of the broader economic conditions at the time confirms that both surveys took place outside of recessionary periods in Canada and both took place during periods of similar macroeconomic conditions (measured in terms of GDP growth).

2014 cycles. The (weighted) subsample of Income Assistance recipients was 189,000 in 2009 (or 5.27% of the provincial population) and 203,931 in 2014 (or 5.46% of the provincial population). Testing suggested no significant differences in the composition (by gender, age, or education) of the subpopulation reporting Income Assistance over the two survey years.

Our measure of financial literacy is the number of correct responses to 14 questions from the CFCS that assess financial knowledge (Keown, 2011). The same questions were used in both cycles of the survey. The questions are all in multiple-choice format and assess knowledge of topics such as interest rates, financial regulation in Canada, inflation, and insurance. The Appendix provides the text of the questions as well as the answer key.

We also use a measure of financial capability, which the World Bank defines as

> the internal capacity to act in one's best financial interest given socioeconomic environmental conditions. It therefore encompasses the knowledge, attitudes, skills and behaviors of consumers with regard to managing their resources and understanding, selecting and making use of financial services that fit their needs. (Bolaji-Adio et al., 2013, p. 7)

Whereas financial literacy prioritizes knowledge about financial matters, a focus on financial capability is informed by the broader capabilities framework advanced by Amartya Sen (1999), who emphasized attention to the question of whether a person, given their resources, social status, and other conditions is truly free to perform a given behaviour. Like previous studies (Atkinson, 2007; Atkinson et al., 2006; Kempson et al., 2005; McKay, 2011; Robson & Peetz, 2020; Robson & Splinter, 2015; Russia Financial Literacy and Education Trust Fund, 2013), we operationalize the construct of financial capability in terms of five distinct dimensions:

1. **Making ends meet:** capability in using financial resources to cover ongoing expenses
2. **Keeping track of money:** capability in budgeting and monitoring personal finances
3. **Planning ahead financially:** capability in making financial plans for known life events (retirement) and unexpected future expenses
4. **Choosing financial products:** capability in exercising choice in financial products and services
5. **Staying informed on financial matters:** capability in ongoing learning about personal finances

We measure financial capability as a construct having these five underlying dimensions, and using self-reported attitudinal and behavioural items. The five scales are numerical values derived from analysis the CFCS again. Scales were constructed by modelling the distribution of sub-scale values across the adult population of Canada in 2008 and using structural equation modelling to derive factor loadings. Individual numerical scores on each scale are calculated as the sum of weighted sub-items, where weights are factor loadings taken from structural equation modelling on population-level data. The Appendix summarizes the survey items used for each of the five financial capability scales as well as the methodology used to select and weight the items.

Financial Empowerment

To describe the non-profit services available to support low-income British Columbians to make financial decisions, we rely on a survey of voluntary sector practitioners. We use the term "financial empowerment" to describe a set of interventions aimed at lower-income persons that provide financial advice and guidance; assistance in accessing public benefits (including tax filing), exercising consumer rights, and accessing safe and affordable financial products (including affordable credit); and incentives to build productive assets (including emergency and short-term savings).

Information on the non-profit provision of financial empowerment services in B.C. was collected in a national survey of voluntary sector organizations conducted in a related study by the lead author. The survey was conducted in October and November 2018 and relied on a purposive and snowball sampling strategy. Invitations to participate in the survey were sent to over 200 organizations identified by the Financial Consumer Agency of Canada, the Asset Building Learning Exchange, and national umbrella organizations, with encouragement to forward it to other similar organizations in their own networks. A total of 113 non-profit organizations responded, of which nine were located in British Columbia. Analysis in this report is restricted to the B.C. organizations.

Results

In this section, we present results from the analysis of the CFCS data. We explore a series of indicators about the personal financial management of B.C. adults with Income Assistance (IA) income during the year. Next we present results on measures of financial literacy and five standardized scales of dimensions of financial capability. Finally, we present multivariate analysis of differences in the IA recipient subpopulation, controlling for the usual demographic factors.

Income Assistance and Personal Financial Management

The first set of tables explore whether B.C. IA beneficiaries have comparable access to basic financial services, relative to other residents in the province, or to welfare recipients in other jurisdictions. As illustrated in Table 1, substantially all IA recipients appear to have a bank account, though we note, in Table 2, that IA recipients are more than twice as likely as other B.C. residents to report using a fringe financial service provider, including cheque cashers, payday lenders, and pawn brokers (significant at $p<0.05$). According to prior research, it is not uncommon for lower-income persons to have a bank account but still elect to use higher-cost fringe financial services because they are more convenient, more responsive to their needs, or more respectful and welcoming (Buckland, 2012; Buckland & Dong, 2008; Servon, 2017). Using high-cost fringe providers can, however, lead to a cyclical pattern of high-interest debts and financial difficulties.

Table 1

Residents With Household Income From IA Who Are Unbanked (No Personal or Joint Deposit Account), by region

Region	B.C.	Prairies	Ontario	Quebec	Atlantic
Share who are unbanked	0.82%	3.08%	1.63%	1.01%%	2.69%

Table 2

B.C. Residents Using Fringe Financial Services

B.C. residents	Percentage who report using a payday lender, cheque casher, or pawn broker once or more in the last 12 months
Without IA income	7.9%
With IA income	18.9%

As shown in Table 3, those with IA income are significantly (at $p<0.001$) more likely to report that they are not receiving any advice (in the last year) on any financial topic. This is somewhat surprising since IA beneficiaries are expected to have regular contact with a provincial case worker to discuss their financial situation and, as appropriate, identify benefits and other financial resources available to improve their well-being. On balance, we interpret these three bivariate results to suggest that IA recipients may not be unbanked, but they do not have adequate access to a sufficient range of suitable financial products and services.

Table 3

B.C. Residents Receiving Financial Advice

B.C. residents	Percentage who report not receiving any financial advice in the last 12 months
Without IA income	57.8%
With IA income	77.3%

Because financial literacy and capability appear to be related to experience in making financial choices and decisions, we also examine whether IA recipients are systematically different from other adult B.C. residents in their self-reported household responsibility for financial management. Here, we report on a combined measure of responsibility for both ongoing decisions (such as regular shopping and bill payments) as well as responsibility for larger or longer-term decisions (such as major purchases or long-term savings). Respondents with high responsibility report that they are responsible for both types of decisions, those with low responsibility report that they are not primarily responsible or do not share responsibility for either, and other responses are treated as a moderate level of responsibility.

Although IA benefits for shelter or other in-kind supports are often paid directly to third parties (discussed later in the administrative data), we do not find that IA recipients are more likely to report low levels of financial responsibility relative to other adults in the province. In fact, we find that survey respondents with IA income were more likely to report high levels of responsibility than other B.C. residents, although the difference was not statistically significant. This may be a result of differences in the composition of IA and non-IA populations given that single persons and single parents make up a very large share of the caseloads in provincial welfare systems.

Table 4

Self-reported Intra-Household Responsibility for Financial Decision-Making

B.C. residents	Low responsibility	Moderate responsibility	High responsibility
Without IA income	15.5%	54.6%	29.9%
With IA income	15.2%	37.3%	47.4%

Next, we turn to our results on the measures of financial literacy and financial capability. Table 5 shows that B.C. residents with IA income have significantly lower (at $p<0.001$) financial literacy (measured here as the number of correct answers on a test of objective knowledge).

Table 5

Financial Knowledge of B.C. Residents

B.C. residents	Mean score on financial knowledge
Without IA income	8.59 (.106)
With IA income	7.25 (.256)

While B.C.'s IA clients had significantly lower financial knowledge compared to other adults in the province, we do not find that they are significantly different from welfare recipients in other provinces or regions of the country. In Table 6, we report the mean scores for financial knowledge among B.C. IA recipients and adult welfare recipients in other parts of Canada.

Table 6

Financial Literacy by Region

Region	Mean score on financial knowledge
B.C.	7.25 (.256)
Atlantic Canada	7.77 (.137)
Ontario	6.72 (.312)
Prairies	7.44 (.438)
Alberta	8.55 (.438)

These findings on our measure of financial literacy might be explained by differences in formal education, which tends to be positively associated with financial knowledge. Or they may be related to issues with the measurement itself. While Statistics Canada's financial knowledge questions from the CFCS are similar to those used in the international literature, the questions include many topics that may not be as familiar or relevant when coping with poverty. For example, five of the 14 questions are about savings and investments, but IA clients are heavily restricted in the amount and kind of savings they are permitted to hold. If they have limited experience with certain financial questions, it may not be surprising to see that they have less knowledge about these.

Next we report our findings on the financial capability scores of B.C. IA recipients, relative to other adults in the province. Again, our measure of financial capability covers attitudes and behaviours on a more general range of areas of personal financial management. The scales were also originally designed to be inclusive of adult respondents, regardless of their financial resources or life stage and were tested for comprehension with low-income adults (Robson & Splinter, 2015).

As we report in Table 7, on all but one sub-scale of financial capability ("keeping track of money"), B.C. IA recipients have significantly poorer scores compared to other BC adults. The largest gaps are visible in the measures of capability in "planning ahead" (significant at $p<0.001$) and "staying informed" (significant at $p<0.001$). This is consistent with the literature, described earlier in our paper, on the cognitive tax imposed by poverty that encourages short-term thinking as the priority for people in chronic deprivation, and limits their capacity for attending to longer-term goals or plans. It is also consistent with the findings earlier, in Table 3, that IA recipients are less likely to report getting financial advice, which can be an important way for consumers to stay informed and gain knowledge on personal financial topics.

In Table 7, our results show that scores on "making ends meet" are significantly lower (at $p< 0.001$) among B.C. IA recipients than for other adult B.C. residents. This indicates that B.C. IA recipients are significantly more likely to fall behind on bill payments, to report difficulty in keeping up with ongoing expenses, and to feel less confident about their ability to match ongoing costs with ongoing resources. This finding likely reflects the fact that benefit levels that are below measures of basic needs (Tweddle & Aldridge, 2019).[2]

Finally, our results in Table 7 also show that, relative to other adults in B.C., IA recipients have lower scores on "choosing products," although the difference is not as significant as those reported above ($p<0.05$). The scale for "choosing products" assesses a respondent's comfort in selecting from among different financial products and whether they behave as active consumers in that purchase. In the context of our earlier findings on ownership of bank accounts (which are nearly universal among IA recipients) and use of fringe financial services and financial advice, we interpret this finding to suggest that B.C. IA recipients may not be unbanked but they are also less experienced and less confident in using a wider range of financial products or services.

[2] A recent study by the Maytree Foundation found that mean total income for persons on IA in B.C. were between 44% and 72% of the Market Basket Measure, now used as Canada's official national poverty line.

Table 7

Financial Capability of B.C. IA Recipients

Dimension of financial capability	Mean, residents with no IA income	Mean, residents with IA income
Making ends meet	7.20 (.027)	6.78 (.112)
Keeping track of money	41.83 (.236)	40.72 (.711)
Planning ahead	5.45 (.041)	4.64 (.178)
Choosing products	7.10 (.039)	6.81 (.124)
Staying informed	4.33 (.050)	3.44 (.081)

Next, we turn our attention to our multivariate analysis to better understand whether differences in the financial knowledge and financial capability of IA recipients are due to differences in the demographic characteristics in this subpopulation. We control for age, gender, and level of education, which have all been shown to independently predict individual differences in financial literacy and financial capability. Table 8 reports the results of our analysis to examine whether IA receipt is a significant predictor of financial literacy and financial capability scores.

We confirm that IA receipt is not significantly associated with performance on the dimension of "keeping track of money," consistent with our bivariate results shown in Table 8. These findings suggest that interventions aimed at encouraging household budgeting, tracking expenses, and tracking income are unlikely to have much of a positive effect for the majority of IA recipients because they already demonstrate capability in this area of financial management. When we account for individual differences in age, education, and gender, the weakly significant difference between clients on IA and other B.C. adults disappears in the domain of "choosing products." We think this is consistent with our interpretation of the bivariate results that lower scores in this area likely reflect more limited past opportunities to practise making choices about different financial products.

However, IA receipt is significantly associated with lower scores for objective financial knowledge (our measure of financial literacy), and the domains of "making ends meet," "planning ahead," and "staying informed" for financial capability, even after controlling for other characteristics in the model. While those other characteristics are not our focus in the current study, the results for gender are consistent with previous research, as are the results for age. The results for education generally show a positive relationship between higher levels of education and higher outcomes on financial literacy and financial capability, although the relationship is imperfect.

Overall, our results from the analysis of the CFCS paint a picture of an IA recipient population that has a more limited relationship with formal financial services, more limited mainstream financial knowledge (when measured using questions that include topics that are less unlikely to be relevant to their day-to-day lives), and significant challenges in making ends meet, planning ahead for future needs, and gaining new information about personal financial topics. Policy designs that assume, relative to the general adult population, comparable levels of

Table 8

Multivariate Analysis of Financial Literacy and Financial Capability

Characteristics	Financial literacy	Financial capability				
		Making ends meet	Keeping track of money	Choosing products	Planning ahead	Staying informed
Age	**.125**	-0.19	.019	-.002	**.054**	**.009**
Age^2	(.027)	(.008)	(.072)	(.002)	(.015)	(.003)
	-.001	**.0003**	.0001	-.0001	-.0001	.00004
	(.0003)	(.0008)	(.0008)	(.0002)	(.0001)	(.0001)
Gender (ref =	**-.587**	-.026	-.280	**-.183**	**-**	**-.427**
male)	(.185)	(.045)	(.450)	(.069)	**.211**(.072)	(.076)
Education (ref = college/trade diploma)						
	-**1.690**	-.384	-3.325	**-.662**	-.368	**-.629**
Less than high	(.544)	(.216)	(1.678)	(.211)	(.172)	(.177)
school	**-.846**	.044	-.454	-.151	.072	-.079
High school	(.232)	(.049)	(.608)	(.099)	(.103)	(.148)
only	-.040	.124	1.205	.097	-.010	.095
Some PSE, no	(.337)	(.074)	(.669)	(.130)	(.138)	(.180)
degree	.673	**.291**	**1.558**	.107	.254	**.494**
Undergraduate	(.308)	(.045)	(.502)	(.099)	(.113)	(.170)
degree	**1.049**	**.366**	1.626	.068	**.410**	**.642**
Graduate	(.333)	(.062)	(.911)	(.146)	(.108)	(.199)
degree						
IA income (ref	**-.838**	**-.323**	-.311	-.156	**-.698**	**-.682**
= no IA)	(.315)	(.106)	(.762)	(.133)	(.150)	(.111)
Constant	**6.565**	**7.361**	**40.63**	**7.35**	**3.307**	**4.014**
	(.780)	(.198)	(1.675)	(.160)	(.429)	(.211)
R^2	.102	.078	.031	.033	.294	.075

Coefficients in **bold** are significant at p<0.01.

financial knowledge, comfort with new financial products, and the habit of planning head for future needs will exceed the capabilities of the actual IA population being served. Again, we want to emphasize that we are not arguing that IA recipients need financial instruction. Indeed, our results show they would not meaningfully benefit from typical financial education interventions that emphasize budgeting and tracking spending. Instead, policy-makers and observers of policy-making should be careful not to assume that the IA target population shares their own financial experience, attachment to mainstream banking, and ability to simultaneously handle short- and longer-term financial issues.

Neither can IA recipients expect to find much help from the mainstream sources of personal financial learning and advice available to policy-makers and observers of policy-making. There are no columns in the financial media on strategies to pay off outstanding crisis supplement or hardship amounts out of already meagre monthly benefits. There are no advisors in bank branches who are certified to provide advice on the break-even point where allowable employment income maximizes the Canada workers benefit without resulting in a reduction to IA that exceeds the total of earned income and the federal benefit.

In the next section, we turn to our results on access to financial information, guidance, and problem-solving that is relevant and accessible to the IA population.

Access to Financial Empowerment

Here, we look at some key sources of personalized services to deliver relevant and accessible information, guidance, and problem-solving on financial management to IA recipients.

That administrative data does not, unfortunately, document when, how, or on what topics IA beneficiaries might receive any financial guidance from their case worker. For example, according to the B.C. IA policy manual (Ministry of Social Development and Poverty Reduction. 2020), case workers are expected to help program applicants understand and complete application forms. They are also expected to review other forms of financial assistance (including tax credits, spousal support, and social insurance programs) that may be available to program applicants and those on benefits. Case workers are permitted to provide additional assistance to clients, both with application forms and processes as well as paying administrative fees, for those who need to obtain identification documents for themselves or a family member. These are just a few examples of the ways in which the individual case support, which is essential but ancillary to the payment of financial assistance in IA, resembles the assistance available through market mechanisms to those consumers who can afford to pay for financial advice and purchase financial products.

The level and quality of the financial guidance provided by the individual case worker may vary. The policy manual for IA leaves a good deal of discretion to individual case workers and has several gaps. For example, while a benefit unit will be required to report receipt of the GST credit, there does not appear to be an obligation for case workers to ensure that eligible units are receiving this or other refundable tax credits to which they might be entitled. But whatever the limitations to the role of case workers as providers of financial guidance, it is at least a source available, at no cost, to IA applicants and beneficiaries. In the following section, we explore whether B.C.'s voluntary sector might also be a provider of ancillary but critical services that increase the financial knowledge and confidence of low-income clients and improve their access to financial benefits that are essential to their welfare.

Community Sector Capacity to Provide Financial Empowerment Services to Low-income Residents

Hertz et al. (2020), in their paper "User Experiences of the System," noted that public libraries and non-governmental service providers have been reporting increased demand for help to complete government applications forms, including those for IA. Our results, below, suggest that non-profit organizations are being relied on to do much, much more than help clients fill out application forms. Instead, they are delivering a wide range of financial information, guidance, and problem-solving to low-income adults in the province.

All of the responding organizations reported offering several different types of financial empowerment services (mean = 8 distinct service types). Consistent with Hertz et al. (2020), the most frequently reported service was "individual help for clients in finding and applying for government benefits." This service may involve screening clients for various income-tested benefits, explaining eligibility criteria, and personalized help in completing application forms. This is also the form of service that organizations reported as the most important among all of their financial empowerment programs. As Hertz et al. (2020) argue, this seems to be a form of outsourcing to third-party service providers that is key to the IA system, but not directly compensated by the IA program or reflected in the total costs.

Other services frequently reported by organizations include offering group workshops on personal finances and providing free income tax filing clinics. These clinics were reported to be both in cooperation with the Canada Revenue Agency's Community Volunteer Income Tax Program and independent of that program. Here we note that approximately 13% of working-age adults in British Columbia did not file a tax return according to the best available estimates (Robson & Schwartz, 2020). The rate of non-filing is even higher among social assistance recipients where one in five do not file and therefore miss out on key transfers that would otherwise increase their total incomes. When IA recipients have no other income outside of public benefits in the tax year, their income tax return could be prepared using information that largely already held by both the provincial and federal governments. As others have noted (Cameron et al., 2020; Schwartz & Robson, 2020), pre-filled and simplified returns or even deemed filing could be introduced for social assistance recipients rather than leaving the burden on some of the most vulnerable Canadians and increasing demand on non-profit services.

Another service that was reported frequently by financial empowerment practitioners in B.C. was assistance to apply for or replace essential identification documents such as a birth certificate and social insurance number.[3] Adequate identification is also mandatory to open a bank account or obtain other mainstream financial services. Within the IA system itself, identification is required before regular benefits can be paid (outside of short-term hardship assistance). In some cases, financial empowerment organizations will not only inform clients about how to obtain different forms of identification, they will also help them complete application forms or even cover associated fees.

As we noted earlier, application assistance and fees are, as stated in the provincial program manual, a form of support that provincial case managers could be providing.[4] We think it is noteworthy that non-governmental organizations report they are providing a service that, according to the program manual, properly should be the responsibility of case workers and the

[3] In the case of social insurance numbers, Service Canada will confirm a SIN if the individual loses their record of their number, but will only issue a new number where there is evidence of identity fraud.

[4] The BC Income Assistance manual permits a supplement to cover fees to apply for a birth certificate, social insurance number, and some forms of photo identification such as a driver's licence or B.C. identification card. The manual also suggests that case workers can complete applications for B.C. birth certificates with clients.

IA system. The work by Hertz et al. (2020) in this collection suggests that IA clients do not always feel their case worker is working in their best interests. Non-profit organizations may enjoy a more trusting relationship with marginalized groups like IA recipients because they aren't also determining benefit eligibility or enforcing program rules.

Indicators of organizational capacity on this survey included an estimate of the number of clients served annually (as a categorical not continuous variable), the target groups served, and general indicators of organizational strengths and challenges. Below, we summarize results on these measures.

Respondent organizations reported serving a diverse set of target groups, including newcomers, youth, seniors, and persons living with a disability. Most but not all organizations reported that their services were aimed at persons living with low income. Organizations in B.C. most frequently reported serving over 100 but fewer than 250 clients per year through their financial empowerment programs, with the remainder reporting either more than 500 or fewer than 100 clients served annually. It is unclear how this compares to the volume of clients served per case worker in B.C. Income Assistance, but it does suggest some important limits to the current scale of non-government services. With a caseload of some 160,000 clients on IA (Ministry of Social Development and Poverty Reduction, 2020), at current levels it appears that the non-governmental organization sector can only deliver services to a small share of IA recipients.

Organizations in BC generally reported that their financial empowerment services were related but not central to their mission as an organization. On one hand, this suggests that agencies providing financial empowerment services are multi-service and can have contact with low-income clients through a wider range of programs and supports. Low-income clients may not always actively seek assistance for a financial management challenge, but may instead access financial empowerment help indirectly through related services, such as housing or mental health services. Having multiple touch points is likely an asset for community-based voluntary organizations, allowing them to reach a wider range of clients and wrap services in a more personalized way. On the other hand, if financial empowerment is not central to a community organization's mission, that agency may not be consistently committed to offering this set of services. Other mission-related programs might replace financial empowerment programs as or when incentives from funders or other market signals encourage organizations to shift service delivery to new priorities.

Another indication of the potential fragility of the field of financial empowerment practice in BC is that respondent organizations universally reported raising additional funding a priority for this work. A lack of stable funding means that services such as benefits screening, tax-filing clinics, and one-on-one financial coaching are not reliably available by the same organizations in a community. For low-income clients, as well as other service providers referring them for support, this makes locating appropriate help much more difficult. Even when providers find and map locally available financial empowerment services, these wayfinding guides may not be updated.

Our survey is not representative of all organizations offering financial empowerment services in the province. However, these qualitative results suggest some caution with regards to the current capacity of community organizations to take over some of the functions currently performed by case workers in the B.C. IA system. At the same time, our results suggest that organizations are delivering a range of key services to low-income people in the province and are responding to demand that is not being met by the case support services in IA programs. Our results also reinforce results from Hertz et al. (2020) in this collection, who find that IA clients rely on third-party, free, and local services in their communities, even to be able to navigate and access government income support programs. Financial empowerment services may be limited in their reach to the population in need, and they may be fragile in the face of insecure funding, but they are a key component of meeting the needs of low-income people in B.C.

Conclusion

In our paper on IA as a system of financial transactions (Robson & Shaban, 2021), we concluded that the IA system is not paying beneficiaries in a way that helps them to rebuild or retain a sense of control over their financial lives. We also made a series of recommendations regarding the timing and method of payments to IA clients that could be applied to a guaranteed income or to welfare reforms. Here, we build on those recommendations and suggest other directions for policy-makers that we think are relevant to any design of basic income but also to welfare reform more generally.

Our recommendations in this paper are informed by the clear finding that clients of IA have different levels of knowledge, experience, and confidence in handling personal financial matters relative to other adults in the province. Recipients have a more limited relationship with formal financial services, more limited mainstream financial knowledge (when measured using questions that include topics that are less unlikely to be relevant to their day-to-day lives), and significant challenges in making ends meet, planning ahead for future needs, and gaining new information about personal financial topics.

We have argued that financial guidance should be more explicitly part of the suite of tools the IA system, or a replacement basic income, must deliver through case workers (Robson & Shaban, 2021). This should include close partnerships with community-based non-governmental organizations that have appropriate skills and enjoy the trust of low-income clients. That collaboration would enable IA case managers to refer clients to local providers to meet a wider range of needs for financial information and guidance. In this paper, we've noted that those same local organizations report frequently spending their valuable time and energy on helping clients navigate benefit program rules and complete application forms. In our view, this is a misallocation of the relative comparative advantage of provincial case managers and community organizations. Provincial staff are the subject matter experts on benefit applications and rules. But, to make best use of this expertise, there needs to be a shift in away from policing program compliance so that case management staff serve as resources to help beneficiaries improve their household financial stability.

External non-governmental organizations have a clear comparative advantage in providing financial information, guidance, and problem-solving when financial challenges extend beyond specific provincial programs. However, our results suggest that the supply of key financial empowerment services is precarious. Most organizations that do this work in B.C. don't see it as central to their organizational mandate and, furthermore, they report fundraising as a key priority for this area of organizational activity. As we noted earlier, we argue that the services provided by non-governmental organizations act as an outsourced set of key services that have not been properly counted as part of the total delivery cost of the current IA system. To our previous recommendations, we now add a call for far greater recognition of the essential role played by voluntary sector organizations in facilitating lower-touch income support programs, like IA, aimed at low-income adults. This role should be properly recognized as part of the total costs of IA and related programs and it should be adequately funded so that local supply can be sustained from year to year.

Finally, our review of the literature suggests that direct experience with money seems to be associated with greater knowledge and also confidence about managing personal finances. We argue that so long as income benefit amounts create a chronic state of deprivation, people on benefits will continue to have limited opportunities for positive experiences in managing their own financial affairs. The finding that persons on IA face significant deficits on the dimension of "making ends meet" is an indication of the financial strain imposed by IA systems that make it more likely that recipients will fall behind on their regular expenses, but not because they are failing to budget or track the income and expenses.

Other aspects of the IA system also work against positive experiences in planning ahead for future financial needs. As we discussed in our paper on IA as a system of financial transactions (Robson & Shaban, 2021), volatility in benefits from one month to the next will make forward planning more difficult for beneficiaries. Regulations that strongly discourage saving, or worse, demand that liquid assets be used up before income benefits can be paid, will serve as additional obstacles to efforts at forward planning in household finances. Put simply, households on IA, as currently designed, are not encouraged to have positive experiences with money that build their confidence and capabilities. Whether policy-makers are aiming for greater dignity and inclusion, or toward self-sufficiency and exit from benefit programs, Income Assistance, or a basic income, should also ensure that program participants have opportunities to regain and build confidence in their own capability to manage their personal finances by having positive financial experiences while on benefits. This means paying benefits that allow clients to make ends meet, paying benefits in a way that is more predictable, and actively supporting clients to plan ahead financially instead of penalizing them when they do.

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Appendix: Assessing Financial Literacy

Below, we list the 14 questions used to assess financial literacy. Correct answers are scored according to Keown (2011).

Q1 If the inflation rate is 5% and the interest rate you get on your savings is 3%, will your savings have at least as much buying power in a year's time?

1. Yes
2. No

Q2 A credit report is…?

1. A list of your financial assets and liabilities
2. A monthly credit card statement
3. A loan and bill payment history
4. A credit line with a financial institution

Q3 Who insures stocks in the stock market?

1. The National Deposit Insurance Corporation
2. The Securities and Exchange Commission
3. The Bank of Canada
4. No one

Q4 True or false. By using unit pricing at the grocery store, you can easily compare the cost of any brand and any package size.

1. True
2. False.

Q5 If each of the following persons had the same amount of take-home pay, who would need the greatest amount of life insurance?

1. A young single woman with two young children
2. A young single woman without children
3. An elderly retired man, with a wife who is also retired
4. A young married man without children

Q6 If you had a savings account at a bank, which of the following statements would be correct concerning the interest that you would earn on this account?

1. Sales tax may be charged on the interest that you earn
2. You cannot earn interest until you pass your 18th birthday
3. Earnings from savings account interest may not be taxed
4. Income tax may be charged on the interest if your income is high enough

Q7 Inflation can cause difficulty in many ways. Which group would have the greatest problem during periods of high inflation that lasts several years?

1. Young working couples with no children
2. Young working couples with children
3. Older, working couples saving for retirement
4. Older people living on fixed retirement income

Q8 Lindsay has saved $12,000 for her university expenses by working part-time. Her plan is to start university next year and she needs all of the money she saved. Which of the following is the safest place for her university money?

1. Corporate bonds
2. Mutual Funds
3. A bank savings account
4. Locked in a safe at home
5. Stocks

Q9 Which of the following types of investment would best protect the purchasing power of a family's savings in the event of a sudden increase in inflation?

1. A twenty-five year corporate bond
2. A house financed with a fixed-rate mortgage
3. A 10-year bond issued by a corporation
4. A certificate of deposit at a bank

Q10 Under which of the following circumstances would it be financially beneficial to borrow money to buy something now and repay it with future income?

1. When something goes on sale
2. When the interest on the loan is greater than the interest obtained from a savings account
3. When buying something on credit allows someone to get a much better paying job
4. It is always more beneficial to borrow money to buy something now and repay it with future income

Q11 Which of the following statements is not correct about most ATM (automated teller machine) cards?

1. You can get cash anywhere in the world with no fee
2. You must have a bank account to have an ATM card
3. You can generally get cash 24 hours-a-day
4. You can generally obtain information concerning your bank balance at an ATM machine

Q12 Which of the following can hurt your credit rating?

1. Making late payments on loans and debts
2. Staying in one job too long
3. Living in the same location too long
4. Using your credit card frequently for purchases

Q13 What can affect the amount of interest that you would pay on a loan?

1. Your credit rating
2. How much you borrow
3. How long you take to repay the loan
4. All of the above

Q14 Which of the following will help lower the cost of a house?

1. Paying off the mortgage over a long period of time
2. Agreeing to pay the current rate of interest on the mortgage for as many years as possible
3. Making a larger down payment at the time of purchase
4. Making a smaller down payment at the time of purchase

Answer Key

Question	Answer
1	2
2	3
3	4
4	1
5	1
6	3 or 4
7	4
8	3
9	2
10	3
11	1
12	1
13	4
14	3

In the text and table that follow, we provide the questionnaire item numbers from the Canadian Financial Survey Capability (CFCS), the question text and a brief explanation of how these are used to derive the financial capability scores on each of the five scales.

Exploratory factor analysis of the CFCS 2008 results was published by McKay (2011), and identified five clusters of items in the survey, corresponding to the five dimensions of financial capability. Following that analysis, a reduced-form of the full survey questionnaire was developed and tested with a sample of adult Canadians (Robson, 2012b). This shorter instrument has now been adapted and used by non-profit and government organizations in Canada, including the Financial Consumer Agency of Canada. It includes minor plain language changes to the original questions used by Statistics Canada.

Numerical scores for the five scales were constructed by fitting structural equation models on the population-weighted data for Canadian adults, using the CFCS 2008 cycle (Robson and Splinter, 2015). All analysis was conducted using survey-adjusted standard errors and bootstrap weights supplied by Statistics Canada. Analysis was conducted using Stata (version 14). The equations hold constant the first item in the scale and adjust the factor weighting of subsequent items.

In the table below, we provide the wording of each item included in the measures of financial capability, the wording of response options and the range of scores to each item. We also provide the number, in parentheses, of the original questionnaire item number from the Canadian Financial Capability Survey. Equations to compute the final scale scores are available below the table and included the factor weights from the structural equation models.

<table>
<tr><th>Item</th><th colspan="3">Question wording</th></tr>
<tr><td>1 (OE_Q17)</td><td colspan="2">Thinking of the last 12 months, how well are you keeping up with your bills and other financial commitments?

Responses: I don’t know, Having real financial problems and falling behind, Keeping up but it is sometimes a struggle, Keeping up without any problems.

Range = 0.75 to 3.0</td><td rowspan="3">Weighted and summed to generate score for “Making ends meet” scale. See equation below.</td></tr>
<tr><td>2a (OE_Q14)</td><td>Thinking of the last 12 months, were you ever behind two or more consecutive months in paying a bill?

Responses: I don’t know, Yes, No.</td><td rowspan="2">Combined to create one composite item with different, ordered combinations of responses to the raw items.

Range = 0.5 to 3.0</td></tr>
<tr><td>2b (OE_Q15)</td><td>Still thinking about the last 12 months, were you ever behind two or more consecutive months in paying your rent or mortgage?

Responses: I don’t know, Yes, No.</td></tr>
</table>

2c (OE_Q16)	In that same time period, were you ever behind two or more consecutive months making a loan payment? Responses: I don't know, Yes, No.		
13 (SA_Q03)	How would you rate yourself on the following area of financial management: … making ends meet? Responses: I don't know, Not very good, Fairly good, Good, Very good. Range = 0.6 to 3.0		
3a (OE_Q11)	Do you have a household budget? Responses: I don't know, Yes, No.	*Combined to create one composite item with different, ordered combinations of responses to the raw items.* Range = 0.5 to 3.0	*Weighted and summed to generate score for "Keeping track of money" scale. See equation below.*
3b (OE_Q12)	How often do you stay within your budget? Responses: I don't have a budget, I don't know, Never, Rarely, Usually, Always		
4 (OE_Q05)	How often do you usually check your account balance(s)? Responses: I don't have any accounts, I don't know, Yearly, Monthly, Every 2 weeks, Weekly, Daily Range = 0.7 to 3.0		
5 (SA_Q11)	Please tell me if you agree or disagree with the following statement: I keep a close personal watch on my financial affairs. Responses: I don't know, Disagree, Agree Range = 1.0 to 3.0		
14 (SA_Q02)	How would you rate yourself on the following area of financial management: … keeping track of money? Responses: I don't know, Not very good, Fairly good, Good, Very good. Range = 0.6 to 3.0		
6a (RP_Q01)	Are you financially preparing for when you get to retirement age? Responses: I'm already retired, I don't know, No, Yes.	*Combined to create one composite item with different, ordered combinations of responses to the raw items.* Range = 0.43 to 3.0	*Weighted and summed to generate score for "Planning ahead" scale. See equation below.*
6b (RP_Q08)	How confident are you that your household income in retirement will be what you hope for?		

	Responses: I don't know, Not at all confident, Not very confident, Fairly confident, Very confident.		
7a (FC_Q09)	Do you have a will? Responses: I don't know, No, Yes.	*Combined to create one composite item with different, ordered combinations of responses to the raw items.* Range = 0.75 to 3.0	
7b (FC_Q07)	Do you currently have any insurance policies such as life insurance, renters' insurance or car insurance? Responses: I don't know, No, Yes.		
8 (FM_Q02 and FM_Q03)	If you had a large unexpected cost, for example equivalent to your take-home pay for at least 2 weeks, how would you mostly likely cover this expense? Note: On the CFCS, this is asked in reference to a dollar value and coded relative to household income. Responses: I don't know, I couldn't cover that expense, Go to a pawnbroker or payday lender, Borrow from a bank or use credit card, Borrow from friends or family, Sell an asset or personal possession, Use savings. Range = 0.5 to 3.0		
9 (SA_Q10)	Please tell me if you agree or disagree with the following statement. I have a clear idea of the financial products I need. Responses: I don't know, Disagree, Agree Range = 1.0 to 3.0		*Weighted and summed to generate score for "Choosing financial products" scale*. *See equation below.*
10 (SA_Q13)	Please tell me if you agree or disagree with the following statement. I always research my choices before I make a decision about money. Responses: Responses: I don't know, Disagree, Agree Range = 1.0 to 3.0		
16 (SA_Q04)	How would you rate yourself on the following area of financial management: … shop around to get the best financial product? Responses: I don't know, Not very good, Fairly good, Good, Very good. Range = 0.6 to 3.0		
11 (FC_Q05)	Are there any things that you personally keep an eye on, such as changes in …? Mark all that apply		*Weighted and summed to generate score*

	Responses: I don’t keep an eye on financial things, None of the above, count of items checked (1 to 5 or more). Range = 0 to 3.0	*for “Staying informed” scale. See equation below.*
12 (DM_Q09)	In the last five years, have you taken a course or program to learn about financial or economic topics? Responses: I don’t know, No, Yes. Range= 1.0 to 3.0	
15 (SA_Q05)	How would you rate yourself on each of the following areas of financial management: … staying informed on financial issues? Responses: I don’t know, Not very good, Fairly good, Good, Very good. Range = 0.6 to 3.0	

Calculation of scales:

Making ends meet = Q1 + Derived Q2(1.149) + Q13(0.46); Range = 1.601 to 7.827
Keeping track = Derived Q3 + Q4(0.64) + Q5(7.79) + Q14(7.352); Range = 13.181 to 50.346
Planning ahead = Derived Q6 + Derived Q7(1.064) + Q8(0.336); Range = 1.396 to 7.200
Choosing products = Q9 + Q10(1.0743) + Q16(0.731); Range = 2.513 to 8.416
Staying informed = Q11 + Q12(0.331) + Q15(1.157); Range = 1.025 to 7.464