# Citi-Tsao Foundation Financial Education Programme for Mature Women Final Evaluation Report

December 18, 2020



### **PUBLISHER**

### **International Longevity Centre Singapore**

The International Longevity Centre Singapore (ILC Singapore) aims to promote the well-being of older people and contribute to national development through supporting policy, practice and capacity building. It facilitates a "connecting of the dots" between community, practitioners, academia, policymakers and the private sector through the creation of relevant stakeholder platforms, as well as high impact research that strives to inform policy, facilitate cogent policy-action translation, and promote quality, effective practice in Singapore and internationally.

ILC Singapore is a member of the ILC Global Alliance, a multinational research and education consortium which aims to address longevity and population ageing in positive and productive ways, typically using a life course approach, highlighting older people's productivity and contributions to family and society as a whole.

As an initiative of the Tsao Foundation, ILC Singapore's mission is to strive for constructive change in how society approaches and responds to ageing.

### Acknowledgement

We would like to acknowledge the funding support from Citi Foundation. We would also like to acknowledge Dr Joanne Yoong and Ms Lila Rabinovich of the University of Southern California – Center for Economic and Social Research (East) for conducting the impact study and writing of this report.



### Introduction

In 2007 with support from the Citi Foundation, the Tsao Foundation developed and launched a financial education programme (originally called the Citi-Tsao Foundation Financial Education Programme for Mature Women or Citi-Tsao programme). The programme seeks to address the financial vulnerability of low-income, mature women and highlight to key policy makers the critical need for a public policy to ensure the financial and social security of older women. While younger cohorts of women and men are considerably more equal in economic standing, past disparities have led to relative vulnerability among the existing cohort of older women in Singapore who are likely to live longer than men, but have higher morbidity and disability in old age as well as lower education levels, lower levels of formal employment and lower levels of asset accumulation.

The programme was targeted at low-income women age 40 and over who needed to develop the necessary knowledge, skills, and attitudes to support financial wellbeing, self-reliance, and self-efficacy so they can better care for their health and wellbeing into their later years. The programme provided a necessary psychological safe space for learning and discussion, and included features such as planning prompts and goal-setting activities that drew on behavioral science to build confidence and motivation. The programme relied on trainers who were volunteers recruited from the community (NGOs, financial services sector, retirees or women community leaders), which built trust with participants and reduced programme costs with an eye towards the initiative's sustainability. In Singapore, the programme has since been adopted by the Women Integration Network of the People's Association and can be offered island-wide through its over 100 community clubs.

This evaluation builds on an initial 2013 evaluation study, using data gathered immediately before and after the programme, which found an immediate positive impact on some self-reported outcomes related to older women's financial independence, specifically with respect to understanding financial products and services, consumption smoothing within the household, and planning for the silver years, although debt management remained an issue for participants at the time of the evaluation. This final report extends (but does not reproduce) an earlier midterm evaluation which report the qualitative findings in detail (see Annex). In this report, we provide the complete overall findings of the mixed-methods longer-term assessment of the programme and its impact on participants.



# Background

### **Target Population and Needs**

In 2005, Tsao Foundation and AWARE found that 44.5% of women in the 40 to 60 age group are economically inactive or outside the labour force (relative to only 18.9% of men). Being unemployed limits the women's contribution to the Central Provident Fund which ensures, among others, the establishment of their old age fund. Also in a vulnerable situation are single mothers, the widowed and divorced who will most likely have to depend on their children's support in their old age. Given the lack of a social pension system, a declining old age support ratio and eroding social structures of dependence on children and families, these circumstances compromise older women's abilities to take care of their own needs in their old age.

### Strategic Vision and Objectives

These identified issues suggested a twofold strategy for targeting old age financial security: firstly, to help the older cohort of women who have already exited or have never been in the labor force to better plan and manage the resources they have or to consider opportunities for economic activity, and secondly, to ensure working women in middle-age build an economic foundation based on increased savings and investments, and longer-term plans for future retirement.

### Beneficiaries and Activities

Based on this, the Citi-Tsao programme was designed to support women in the target group i.e. above 40 years of age or older, whose family income ranges from \$1,500 to \$3,500 monthly. The programme consists of 12 weekly interactive workshops (initially 20 weeks) filled with activities and discussions led by two programme trainers for 20-25 participants, focused on (1) knowledge and skills related to personal finance and (2) social empowerment, including building the ability to understand and negotiate both social and institutional relationships relevant to financial capability. The workshops provide practical suggestions for understanding how money works and how women can take charge of their finances to become more financially independent and secure as they grow older, and culminates in the design of a financial plan.



### Initial Programme Experience

The early experience of the programme is summarized here based on the 2013 evaluation. At baseline, Wu (2013) reported findings from 1,360 participants, albeit with nonresponses and missing data for the various survey questions. On average, participants were aged 53 years, and about half (54%) were married. Only 1% were retired. 21% were homemakers, while 10% were actively looking for work, 18% were working full-time and 17% were working part-time. However, a significant minority - 45% of participants - did not provide any information on how their households generated income or their labor market status.

Upon enrolment in the programme, a large majority - 78% of the participants – self reported that their knowledge of family finances ranged from zero knowledge to only some amount of knowledge. The evaluation found that many women reported already having some savings (86%) before the programme and more than half had established an emergency fund already before the programme. About 64% reported having a budget and 62% reported tracking their expenses. In this respect, their financial behaviors improved significantly. The fraction of those with any savings rose to 94% and the percentage of those with an emergency fund for six months rose to 85%. With respect to indebtedness, however, effects were less pronounced: 72% of respondents already knew their debt position prior to the programme, and 74% felt that they could already reduce this debt. This changed only marginally to 88% and 85%. The larger impact appeared to be related to longer-term investments and planning. The percentage who reported knowing financial products that suited their needs rose from 34% to 81%, while those who reported having a clear plan to have enough for the silver years rose from just 47% to 87%. The percentage of women who reported feeling prepared in case of an unexpected crisis (illness, accident, passing on) also rose from 48% to 79% and the percentage who reported feeling empowered in facing their financial futures almost doubled from 46% to 89%.

The evaluation concluded that the core aspects of the programme contributed to increased financial independence and feelings of control, at least for the short term. However, it also recognized that with more complex outcomes such as amassing sufficient emergency funds and reducing debt management, change was likely to be function of many other complex external factors, and implicitly hypothesized that impacts from gains in knowledge alone were less likely to be seen in the short run, given time and liquidity constraints. As such, the likely long-term impacts are ambiguous: as knowledge or habits decline, participants may lose their immediate gains, or alternatively, participants that sustain positive behaviors might eventually find improvements in these outcomes. Individuals who are rationally confident and have high self-efficacy may have had better outcomes, or alternatively, overconfidence may have led to excessive risk-taking and poor decision making.



# Methodology

### **Evaluation Questions**

This evaluation posed a set of long-term evaluation questions that built on these initial findings

1) Skills and knowledge: To what extent have participants retained, lost or expanded upon the financial knowledge and social skills measured at the initial evaluation?

### 2) Behaviors

- a. Objective goals: To what extent has the programme impacted participants' financial behaviors related to savings, borrowing, investments, insurance, financial and estate planning, and managing unexpected crises?
- b. Subjective goals: To what extent have participants been able to comply with their financial plan/financial resolutions?

### 3) Outcomes:

To what extent has the programme led to the following outcomes?

- a. Increases in financial well-being and independence
- b. Increases in perceived self-efficacy and social empowerment
- c. Reductions in financial and social vulnerability
- 4) Are there significant participant characteristics or other contextual factors contributed to differences in (1) (3) above?

### Research Design

To address these, the University of Southern California's Center for Economic and Social Research (CESR) conducted a mixed-methods evaluation of the long-term impacts from this programme in 2019/2020.

We employed a mixed-methods approach that triangulates multiple existing data sources to address the questions above, using quantitative data to assess overall programme outcomes and qualitative data to further provide a deeper look at specific outcomes and circumstances. The primary study population was the 1,360 participants who initially participated in the programme and were evaluated upon completion in 2013.



### Qualitative Study

We conducted a qualitative study of selected beneficiaries via focus group discussions to investigate:

- (a) impacts on empowerment, independence and financial capability
- (b) outcomes of special interest but lower frequency / high sensitivity, particularly resilience to challenging events such as loss of employment, illness and widowhood, via key informant interviews.

Our target was participants who had taken part in the Citi-Tsao Foundation financial literacy workshops with at least 65% attendance to the classes, with at least half of our focus group participants to be older than 62. The detailed findings from the focus groups have been previously reported in the midterm evaluation, but are reproduced and integrated in this report for completeness.

In this final evaluation, we further supplemented this with open-ended qualitative data extracted from selected respondents in our quantitative survey, described below.

### Quantitative Study

We assessed self-reported outcomes for the initial group of participants using a phone-based survey on self-reported outcomes, with a voucher incentive of \$10 to participate to be mailed upon completion. As a comparison group, we also surveyed a matched group of women from Tsao's companion SCOPE programme, which has similar demographic target groups and engagement levels, but does not include financial literacy training, and compared outcomes between the two groups. These individuals were recruited based on current SCOPE respondent registers. We targeted an initial sample size (reported in the previous study) of 210 adults in each group.

To enable comparisons over time with the originally surveyed results, our survey instrument largely incorporated the questions from the initial follow-up, with some adaptation and refinements to language.

We further addressed the evaluation objectives by adding new questions on knowledge and self-reported well-being. Specifically, we included the Lusardi-Mitchell Big-Three battery of questions on financial literacy:

- Suppose you have some money to invest. Is it safer to put your money into one business or invest in many businesses or investments?
- Suppose over the next 10 years the prices of things you usually buy doubles. If your income also doubles, would you be able to buy less than what you can buy today, the same as what you can buy today, or more than what you can buy today?



 Suppose you have \$100 in the bank and the bank is giving you interest of 5% per annum. After ten years, if you don't take any money out, how much would you have in the account?

We also included two questions on financial stress from the United States National Financial Capability Survey, adapted with responses on the existing binary scale to match the other self-reported outcomes:

- "Thinking about my personal finances can make me feel anxious"
- "Discussing my finances can make my heart race or make me feel stressed"

We selected these questions to also enable further comparison between the evaluation sample and the international samples in which these questions are posed.

Finally, we added a section to enumerate household shocks and responses to various common shocks e.g. loss of a spouse.

### Data Collection

Our fieldwork was successfully completed albeit with an initial minor delay for ethics approval, followed by a significant delay from early 2020 and resulting adaptations to cope with resuming activities during the period of the COVID-19 pandemic.

### Sampling and Recruitment

We recruited both our qualitative and quantitative samples of participants from the same database, and SCOPE participants from the SCOPE group registers. These data were obtained in individual groups format from Tsao and consolidated to form a single sampling frame database. In our final database, removing duplicates and based on the criteria of sufficient attendance as well as relatively complete demographic information, we had a listing of 1052 financial literacy programme participants. We also had 1542 potentially eligible non-participants from SCOPE.

However, we found that in the database, while contact information is collected for all participants, many were not contactable and some numbers were not in service. While we are not able to verify how many are true non-responses, many are simply no longer contactable at their existing information given the length of the time frame, eg. some individuals at the numbers contacted informed recruiters that the respondent had passed on or moved away or moved on. This was a challenge for both our qualitative and quantitative teams.



### Conduct of Focus Groups

We successfully conducted four focus groups as per protocol by the end of 2019. All participants had taken part in the Citi-Tsao Foundation financial literacy workshops and were verified to have at least 65% attendance to the classes. At least half of our focus group participants were older than 62. To maximize validity, respondents were recruited by randomized selection using an Excel randomization from the entire participant database subject to the inclusion criteria rather than convenience sampling. As respondents' willingness to be interviewed was higher than anticipated, we were able to accommodate groups with 8-10 participants each, a larger group size than initially planned.

Mandarin and Malay bi-lingual facilitators and notetakers were recruited. However, despite best efforts over more than 1 month, we were not able to recruit more than 2 participants from the Malay speaking group, due to a high number of out of services as well as individual refusals. As a result, two of the groups were conducted in Chinese with Chinese speaking participants, and two in English, with individuals who spoke Malay and English participating in the English groups. Our final sample size was n=37, 18 in Chinese, 19 in English.

The discussions were conducted in the evenings at Found8, Amoy Street, a handicapped-accessible ground-floor location, and included refreshments. The English focus groups were moderated by team member Lila Rabinovich and team leader Joanne Yoong, and the Chinese groups were moderated by an external facilitator Linda Tay and team leader Joanne Yoong. We obtained oral consent from each participant both at the time of recruitment and prior to the start of the discussion; all were compensated with \$50 as a thank you for their time. Discussions were recorded, translated into English (for the Chinese ones) and transcribed verbatim for analysis. Transcripts were coded using an inductive approach, with codes generated from a review of the transcripts and the study's research questions and aims. This approach aimed to uncover the key themes and most significant messages inherent in the raw data (Thomas, 2006; Brown and Clarke, 2006). The codebook was developed and modified through subsequent reads of the primary data. All four transcripts were coded by the authors using the final version of the codebook. Qualitative data analysis software (Atlas.ti) was used to support the organization, review and coding of the raw data. De-identified transcripts are available for download via rev.com.

### Conduct of Survey

Survey operations were initiated in January 2020 with initial pilots and adaptation of the survey instrument in early February 2020. The initial survey instrument was translated into Chinese and tested extensively for language and timing. In addition, given feedback from the focus groups, given the long duration of the period since the programme, we modified the protocol to include more initial introductory material to mitigate recall bias,



taking care however to avoid unnecessarily prompting respondents about programme content. Rollout however was subsequently paused due to COVID-19 and operating shutdowns in Singapore. Operations were resumed when business operations were allowed in mid-2020.

As our questionnaire was telephone-based, no fundamental adaptation was required. However, in addition to questions about common shocks, we appended a short battery of questions related to coping with the COVID pandemic. The questionnaire was then again re-tested for timing and some adjustments were made to ensure overall survey burden would not exceed the target of 15-20 minutes. Due to the survey revisions, length of time and changes in the survey team after the hiatus, all surveyors were also trained prior to the resumption of fieldwork.

Recruitment was challenging due to a large number of missing/invalid numbers and refusals to participate. In November, a review of the data revealed challenges in recruiting similar age brackets given the limited database listing and low response rates. SCOPE participants in particular were unfamiliar with the financial questions and as a result less willing to participate in the evaluation of a different programme.

Multiple strategies were employed by the team to mitigate these issues. 3 call attempts were required for each contact number in the database to achieve as many completes as possible. In total, close to 7,000 calls were made after deploying both database listings. The survey field team doubled the number of interviewers in order to ensure repeated contacts for all the listings in the database. The target age bracket was lowered slightly to 55 and above (from 60 and above). Simultaneously, we conducted analyses on the collected data to assess the likely effects of closing the survey without meeting the full survey targets, and concluded that given the conservatism of the sample size calculation around the initial target recruitment numbers, a considerable shortfall might be accommodated.

Fieldwork closed formally based on the best-efforts criteria of database exhaustion, after verifying that multiple attempts were made to contact all eligible members of both programmes. The final sample size achieved was n=199 participants of the financial literacy programme, and n=119 participants of SCOPE.



## **Findings**

### Focus Group Analysis

Detailed findings for the focus group discussions have been reported previously in the mid-term evaluation and were summarized rather than reproduced here. Our focus group discussions were guided by a number of broad questions or prompts which aimed to provide participants with various avenues for reflection on and narratives about their participation in the workshops and how they contributed to their financial wellbeing.

As noted in the mid-term evaluation, the programme was generally well-received and appears to have had lasting effects in some critical areas of financial management and promotion of well-being as well as general empowerment for older women, although more support is needed to maintain its relevance and impact in the long term. The evaluation is attached as an Annex to this report,

### Survey Data

### **Demographic Characteristics**

As can be seen from Table 1, the survey respondents are broadly similar to our convenience sample, although some of the biases in the recruitment of the focus group participants (e.g. low participation by Malay and Indian participants) remains. 49% are working, while 36% are retired. More than 80% have at least a secondary education, although less than 10% are university graduates. The vast majority live in HDB flats. The 119 SCOPE participants who were recruited, while similar on ethnicity, were older (reflected in higher levels of widowhood and retirement), less educated and less wealthy.



# Table 1: Citi-Tsao Participant Demographics (N=199)

Age	55 to 59 years old	10%
	60 to 64 years old	37%
	65 to 69 years old	30%
	70 to 74 years old	19%
	75 to 79 years old	3%
	80 years old and above	2%
Ethnicity	Chinese	94%
	Malay	4%
	Indian	1%
	Other	1%
Education	No qualification/lower primary	2%
	Primary/lower secondary	11%
	Secondary	45%
	Post-secondary (non-tertiary)	12%
	Diploma and professional qualification	23%
	University	9%
Income	None	13%
	<\$1000 a month	40%
	\$1-3000	33%
	> \$3000 a month	14%
Employment	Working part time	23%
	Working full time	26%
	Temporarily not working and looking for work	4%
	Not working and not looking for work	12%
	Retired	36%
Marital Status	Married/With partner	65%
	Widowed	13%
	Separated/Divorced	4%
	Never Married	18%
Housing	Rental/Public Flat	1%
5	Own HDB flat (1/2/3/4+room)	83%
	Private Condo/Landed House	16%
	Other	1%



Table 2: SCOPE participant demographics (N=119)

Age	55 to 59 years old	6%
7.90	60 to 64 years old	13%
	65 to 69 years old	23%
	70 to 74 years old	29%
	75 to 79 years old	12%
	80 years old and above	18%
Ethnicity	Chinese	93%
<u> </u>	Malay	3%
	Indian	3%
	Other	0%
Education	No qualification/lower primary	18%
Eddodiior.	Primary/lower secondary	24%
	Secondary	45%
	Post-secondary (non-tertiary)	3%
	Diploma and professional qualification	5%
	University	9%
Income	None	18%
	<\$1000 a month	65%
	\$1-3000	13%
	> \$3000 a month	3%
Employment	Working part time	17%
	Working full time	2%
	Temporarily not working and looking for work	4%
	Not working and not looking for work	12%
	Retired	68%
Marital Status	Married/With partner	53%
	Widowed	24%
	Separated/Divorced	8%
	Never Married	15%
Housing	Rental/Public Flat	12%
_	Own HDB flat (1/2/3/4+room)	77%
	Private Condo/Landed House	9%
	Other	2%



### Matched Comparisons

In this analysis, we present outcome measures for the Citi-Tsao programme participants, and a weighted sample from SCOPE participants matched to the Citi-Tsao group using weights based on age, income, ethnicity and education. The weighted distributions are shown below. While an exact match on all characteristics is not possible, we note that if anything, the SCOPE participant reweighted sample is slightly younger overall and otherwise has no significant demographic differences.

Table 3: Reweighted SCOPE participant demographics (N=119)

Age	55 to 59 years old	1%
	60 to 64 years old	47%
	65 to 69 years old	30%
	70 to 74 years old	18%
	75 to 79 years old	1%
	80 years old and above	3%
Education	No qualification/lower primary	7%
	Primary/lower secondary	14%
	Secondary	35%
	Post-secondary (non-tertiary)	18%
	Diploma and professional qualification	13%
	University	13%
Income	None	12%
	<\$1000 a month	41%
	\$1-3000	32%
	> \$3000 a month	14%

We compared financial outcomes (other than income) across these groups using Z-tests.<sup>1</sup>

In keeping with other literature, we allow for responses in three categories: Yes, No and I don't know. Bolded figures in the results tables below show outcomes for which the distributions are statistically significant (p<0.05).

Table 4A reports on a set of outcomes related to day-to-day financial management. The results show that Citi-Tsao participants are significantly more likely to report keeping track of their expenses, a finding consonant with our previous qualitative data.

<sup>&</sup>lt;sup>1</sup> In light of a smaller than anticipated unbalanced final sample, we are still investigating the appropriate use of more sophisticated regression-based statistical matching methods, but do not anticipate that these techniques would significantly alter the broad findings.



If faced with an emergency, they are more likely to be able to report being able to source emergency funds (while their comparison group is more likely to report not knowing). However, notably there are no significant differences on outcomes such as discussing finances with their family, an important feature of the programme.

Table 4A: Comparison of Outcomes – Day-To-Day Financial Management

		Citi-Tsao	Matched Comparison
I have enough currently for my everyday	Yes	93%	89%
needs	No	6%	8%
	I don't know	2%	3%
I have a monthly budget	Yes	75%	71%
	No	25%	22%
	I don't know	0%	7%
I keep track of my expenses	Yes	75%	55%
	No	24%	36%
	I don't know	1%	9%
If I have a very sudden emergency, I would	Yes	65%	54%
be able to borrow \$500 in 1-2 days	No	27%	23%
	I don't know	9%	22%
I frequently discuss financial issues with my	Yes	35%	34%
family	No	65%	60%
	I don't know	0%	5%
I regularly check my bank and CPF statements	Yes	74%	70%
	No	26%	27%
	I don't know	0%	3%

Table 4B shows that there are significant reported differences across all outcomes related to savings, borrowing and investing. Citi-Tsao participants are more likely to report having their own savings and to know the value of those savings. They are also more likely to have an emergency fund set aside.

Participants also report being more likely to have debts. However, this may be partly an artifact of higher debt-literacy, as the comparison group is also slightly more likely to report not knowing if they have debts or not, and Citi-Tsao participants are significantly more likely to report knowing the exact value of their debts.

They are more likely to report having a good understanding of investments (although the absolute value of this fraction remains low, at just under half) as well as knowing the exact value of their investments. Finally, programme participants are very significantly more likely to have started their own business.



Table 4B: Comparison of Outcomes – Saving, Borrowing and Investing

		Citi Tana	Matched
	W	Citi-Tsao	Comparison
I have savings of my own	Yes	95%	90%
	No	5%	10%
	I don't know	0%	1%
I know the value of my savings	Yes	91%	78%
	No	6%	15%
	I don't know	3%	7%
I have an emergency fund to cover me for	Yes	89%	77%
six months	No	9%	17%
	I don't know	3%	6%
I currently have some debts outstanding	Yes	16%	4%
	No	83%	91%
	I don't know	2%	6%
I know the exact amount of my debts	Yes	53%	18%
	No	41%	63%
	I don't know	6%	19%
I have a good understanding of investments	Yes	46%	33%
	No	45%	48%
	I don't know	9%	19%
I know the value of my own investments	Yes	70%	48%
	No	22%	30%
	I don't know	8%	22%
I am interested in starting a business or have	Yes	15%	2%
already started one	No	85%	93%
	I don't know	1%	5%

Finally, Table 4C reports on outcomes related to long-term financial well-being. Citi-Tsao participants are more likely to have an up-to-date will and a financial plan for retirement.

Although they do not feel more financially prepared for retirement (differences are positive but not statistically significant), they perform significantly better on both our new measures of preparedness that cover well-being and self-efficacy: they are less likely to report stress from financial matters and more likely to report being in control of their future.



Table 4C: Comparison of Outcomes – Long-Term Financial Well-Being

		Citi-Tsao	Matched Comparison
I have an up-to-date will	Yes	44%	43%
	No	53%	49%
	l don't know	3%	9%
I have a financial plan to prepare me for retirement	Yes	72%	59%
	No	24%	30%
	l don't	5%	11%
I have been able to stick to my financial plan	Yes	73%	72%
	No	20%	18%
	l don't	7%	10%
I feel I am financially prepared for my old age	Yes	78%	74%
	No	13%	14%
	l don't	9%	13%
Thinking about or discussing my personal finances	Yes	20%	29%
can make my heart race or make me feel stressed	No	71%	56%
	l don't	9%	15%
I feel in control of my future when it comes to money	Yes	81%	68%
matters	No	12%	13%
	l don't	7%	19%

Table 5 shows that with respect to the Lusardi-Mitchell questions on financial literacy, the Citi-Tsao group does not outperform significantly except on the three interest questions. We note, with respect to knowledge eon diversification and inflation, moreover, the overall level of literacy is not high. However, on interest calculations (a topic explicitly addressed in the programme) participants were more able to answer and significantly outperformed the comparison group.



Table 5: Comparison of Outcomes – Financial Literacy

		Citi-Tsao	Matched Comparison
Suppose you have some money to	One business	11%	6%
invest. Is it safer to put your money into	Many businesses	43%	43%
one business or invest in many	I don't know	46%	51%
businesses or investments?			
If your income also doubles, would you	Less	47%	50%
be able to buy less than what you can	The same	30%	24%
buy today, the same as what you can	More	3%	6%
buy today, or more than what you can	I don't know	21%	20%
buy today?			
Suppose you have \$100 in the bank and	Less	15%	37%
the bank is giving you interest of 5%.	Exact	15%	7%
After ten years, if you don't take any	More	52%	36%
money out, how much would you have	I don't know	18%	20%
in the account? More than \$150, exactly			
\$150 or less than \$150?			

Table 6A shows that both groups in this sample have gone through challenges. While factors like loss of a spouse have factored equally for both. Significantly, the Citi-Tsao group has experienced more cases of job loss or business failure (which could also be due to increased willingness to open a business) and more incidences of having to take care of an ill family member (which may also be related to being more financially able). Apart from the comparisons, the prevalence of these events is striking, with almost 40% being called on to be a caretaker in the last five years.

Table 6A: Financial Shocks

In the last five years:		Citi-Tsao	Matched Comparison
Went through serious illness or a physical	Yes	12%	7%
disability from an accident or other causes	No	88%	93%
Loss of anguas/partner	Yes	9%	13%
Loss of spouse/partner	No	91%	87%
Last job or business failed	Yes	8%	0%
Lost job or business failed	No	92%	100%
Had to take care of ill or disabled family	Yes	39%	19%
member	No	61%	81%
Being cheated or lost a significant sum of money	Yes	18%	12%
for other reasons	No	82%	88%



We note that the results on coping are ambiguously polarized (as seen in Table 6B): while a larger number of the Citi-Tsao participants feel that they are able to cope very well, at the same time more also seem to be coping not well at all.

Table 6B: Comparison of Outcomes – Coping With Financial Shock

			Matched
		Citi-Tsao	Comparison
Financially, how well do you feel you	Very well	30%	11%
were able to cope with this event	Somewhat well	47%	75%
that you mentioned earlier?	Not very well	15%	10%
	Not well at all	8%	4%

Finally, we asked participants about their experiences with COVID-19. Table 7A shows that about 25% of participants had their incomes affected, although this is not significantly different from the comparison group.

Table 7A: COVID 19

			Matched
		Citi-Tsao	Comparison
Have you, or any of your main sources	Yes	24%	31%
of income been financially impacted by COVID-19?	No	76%	69%
If yes, Whose income was impacted by	My own income	79%	78%
COVID-19?	My spouse's income	30%	13%
	My child's income	30%	23%
	Other, please specify:	6%	0%

When asked to describe their condition (as seen in Table 7B), notably, the Citi-Tsao group was statistically significantly less likely to report not coping well and not knowing what to do. While other outcomes were not statistically different, we note that the programme participants are less likely to report coping well but also more likely to be reporting actively looking for ways to cope better.



Table 7B: Comparison of Outcomes – Coping With COVID 19

Which statement best describes your condition?		Matched
	Tsao	Comparison
Financially, I am not coping well, and I don't know what I need to do to cope well	1%	5%
Financially, I am not coping well, because I don't have the necessary resources / support	3%	3%
Financially, I am somewhat coping, but I don't know what I need to do to cope well	5%	4%
Financially, I am somewhat coping, and I am actively looking for ways to cope well	17%	9%
Financially, I am coping well, because I have found new ways to cope	13%	8%
Financially, I am coping well and I have sufficient resources/support	61%	71%

### Programme Experience

Overall respondents reported being satisfied with the programme quality, with the majority finding the level and content appropriate. Most felt that the instructors were good.

### Delivery of Programme

Level of the	Much too difficult	1%
programme	Sometimes too difficult	8%
	Just nice	84%
	Sometimes too easy	5%
	Much too easy	3%
Content of the	Too much	5%
programme	Just nice	84%
	Too little	11%
Quality of instructors	Good	72%
	OK	25%
	Not very good	3%

In-depth qualitative feedback from survey respondents suggests that most indeed found the programme useful, especially for individuals who had not previously had such experiences. In addition to the features above, participants spontaneously noted that the pedagogical approach of group-based sharing was important. One observed "you get sharing from experiences of others". Another noted "sharing of the experiences were good as we know how the other people cope".



### Usefulness and Future Demand

Usefulness	of	Very useful	47%
programme		Sometimes useful	43%
		Not very useful	10%

Most useful learning areas (indicated as one of top three most useful)

Budgeting and tracking expenses	59%
CPF	49%
Financial Planning	44%
Insurance	45%
Savings	43%
Investment	24%

About half the respondents reported that the programme had been useful to them over the last few years, while an equal number felt it was only sometimes useful, and a small minority felt it had not been useful at all.

Respondents were most likely to have found the immediate day-to-day budgeting aspect of the programme helpful. Aspects of the programme focused around long-term planning (including CPF, planning and savings) were also mentioned, but less strongly, while only about a quarter felt that the investment education was useful.

Qualitative follow-up with the respondents revealed that individuals who did not have previous financial or formal employment backgrounds particularly found this useful, not only in terms of gaining skills and knowledge but in creating a fundamental mindset shift towards a beginning awareness of financial planning and independence.

For instance, one respondent said "It's an opener for me to understand financial planning better and its especially beneficial for housewives". Another said "Ok, I think the course itself provide overall awareness ...after that I have [a] general idea and it does raise concern like should I generate income...Last time we do not think about it, like how to create beside CPF. The most important is it gives us the idea about overall financial planning". A third phrased it as "a culture shock from housewife life".

Additional probing among those who found the programme not useful found for the minority who had already had some professional exposure, the course was too basic or preferred more formal means of training. One person noted that there was "too much theory, not enough application". Finally, some did not find it useful although they gained knowledge, because of the lack of opportunity to apply the training, or other circumstantial factors (such as one respondent who ruefully mentioned "now I am much wiser but I applied too late")



Overall, about 65% of the respondents said they would take the programme again (in the words of one respondent "good to refresh"). Even among those who would not take it again satisfaction was high: 89% of the participants reported that they would recommend it to their family and friends. One person observed "this is a very powerful tool [every] woman should know"

### Discussion

While the Citi-Tsao programme is designed to impart financial knowledge, it also explicitly builds culturally and socially appropriate social, communication, and emotional skills to support behavior change and financial independence for women. To build women's confidence and motivation, the programme also includes features like planning prompts and goal-setting activities that draw on behavioral science.

Our evaluation of this programme was subject to some important limitations. Due to COVID-19, we experienced significant disruptions to the fieldwork and were able to complete data collection due to extraordinary support from the field. Recruitment challenges persisted and the final sample sizes are smaller than desired, rendering subgroup analyses challenging. As data collection was delayed, we continue to explore more robust statistical modeling in next steps. We also note that our data remains entirely self-reported, and future analyses may be able to take advantage of administrative data.

In spite of these challenges, our findings are of marked interest. Our focus group and survey data analysis, carried out independently, strongly complement one another, and suggest over the programme has been able to rise to its strategic objectives and address older women's financial education needs, activating behavioral change that has been surprisingly sustained over time.

- Participants by and large understood the purpose of the programme and key themes and retained understanding of broad concepts. This is remarkable given the duration of time since the programme's conclusion.
- The content was seen as well-attuned to the needs of the target group and the group-based pedagogy was both acceptable and appropriate for the majority of participants. Peer-learning and motivational support were important mechanisms for impact that complemented the formal instruction for the majority of participants.



- The strongest programme impacts were reported in the areas of money management and budgeting, both qualitatively and quantitatively. Participants also reported becoming more informed and empowered financial consumers in both our quantitative and qualitative investigations, implementing behaviours such as setting aside precautionary savings in their everyday lives, and asking critical questions when being offered or seeking out financial products. Although these were not potentially as salient to participants as budgeting and money management, these outcomes appear to manifest as changes in behavior.
- Our survey data shows improvements in planning behavior but little follow through with planning. This is corroborated by our qualitative findings, in which participants related challenges in adhering to concrete long-term financial plans even after the course, in part because of the constantly evolving nature of the financial environment, rendering their knowledge outdated or creating new complexities.
- There is potentially strong demand from participants for continued reengagement either through periodic group reunion meetings and/or a more advanced or repeat programme, both of which may help to prevent attenuation of knowledge gains, reinforce peer networks and allow for refreshing and updating of materials.
- Finally, there are likely to be network benefits for the community, as women in our qualitative investigation frequently reported referring their friends to the programme and conveying these lessons learned to their younger family members. In our survey data, the vast majority of participants report that they would recommend the programme itself to others.