

**“FINANCIAL EDUCATION PROGRAMMES AND
FINANCIAL WELLBEING OF VULNERABLE
UNDERGRADUATE STUDENTS: A COLOMBIAN CASE”**

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Some background

Population

- 1st year outstanding undergraduate students from 2,000 low-income households
- *Ser Pilo Paga* (Being Smart is worth it) Government programme; ICETEX credit agency; private scholarships
- Two-fold vulnerability (financial wellbeing and financial literacy)

Motivation of the study

General

- Financial education as a driver of wellbeing (OECD, 2017)
- National Education Strategy (Ministry of Finance et al., 2010)
- Low financial literacy levels among adolescents (Amar et al., 2001; Amar et al., 2006)

Motivation of the study

Specific

- Formal exclusion of vulnerable undergraduate students
- Financial challenges:
 - Money management
 - Daily/Sporadic vs Quarterly/Frequent
 - Balancing academic and financial challenges
 - Household shared wallet
 - **Financial illiteracy!**

Key concepts

- Ability (Knowledge, skills) & Opportunity (Inclusive services) to act (Sherraden, 2013)
- Financial literacy: Knowing & doing; awareness; behaviours (INFE, 2011)
- Financial wellbeing: Subjective perspective(Brugen et al., 2017; Prawitz et al., 2006)

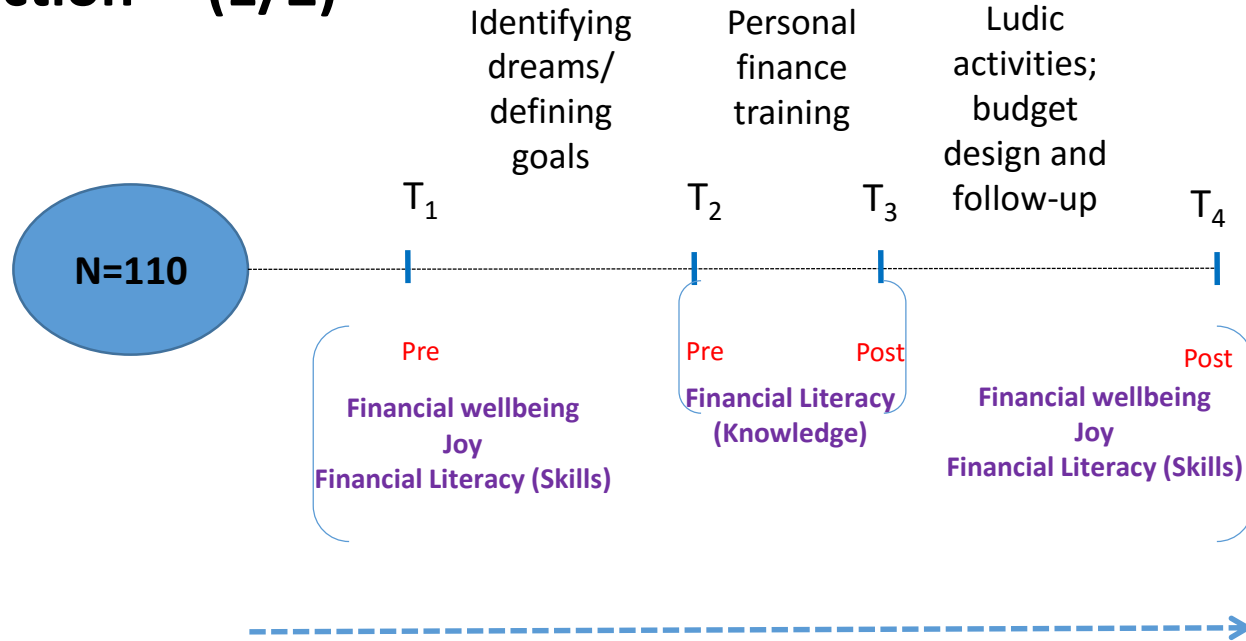
Programme Assessment

1. What is the *effect* of a *financial education programme* on the *financial literacy* of Colombian undergraduate vulnerable students?
2. What is the *effect* of a *financial education programme* on the *financial wellbeing* of Colombian undergraduate vulnerable students?
3. What is the *effect* of a *financial education programme* on *perceived joy* of Colombian undergraduate vulnerable students?

Financial literacy and financial wellbeing/joy

4. Is there a *correlation* between *changes in financial literacy* and *changes in financial wellbeing*?
5. Is there a correlation between *changes in financial literacy* and *changes in joy*?

Data collection (1/2)



Significant learning

Technical+customised jargon

Connecting the dots

Data collection (2/2)

(pre, post)	TYPE OF VARIABLE	QUESTION	CATEGORY	DIFFERENCE
CN1	Ordinal-Likert Scale	How worried do you feel about your current financial situation?	Financial wellbeing-current needs	DIFCN1
CN2	Ordinal-Likert Scale	During last year, how often have you feel worried about being able to pay your monthly expenses?	Financial wellbeing-current needs	DIFCN2
CN3	Ordinal-Likert Scale	How often do you worry about not being able to save?	Financial wellbeing-current needs	DIFCN3
CO1	Ordinal-Likert Scale	How certain do you feel about being able to cover any financial adversity?	Financial wellbeing-contingencies	DIFCO1
CO2	Ordinal-Likert Scale	How certain do you feel about being able to cover at any time expenses related with an illness?	Financial wellbeing-contingencies	DIFCO2
CO3	Ordinal-Likert Scale	How certain do you feel about being able to cover at any time your expenses in the absence of monthly income?	Financial wellbeing-contingencies	DIFCO3
CO4	Ordinal-Likert Scale	How often do you just have enough to make it financially through the day?	Financial wellbeing-contingencies	DIFCO4
HAP	Numerical	Proportion of time I feel happy	Joy-Feeling happy	DIFHAP
UNH	Numerical	Proportion of time I feel unhappy	Joy-Feeling unhappy	DIFUNH
NEU	Numerical	Proportion of time I feel neutral	Joy-Feeling neutral	DIFNEU
SCO	Numerical	Financial knowledge score	Financial literacy-knowledge	DIFSCO
CS1	Ordinal-Likert Scale	Before buying something, you consider carefully if you can afford it.	Financial literacy-skills (cautious spending)	DIFCS1
CS2	Ordinal-Likert Scale	Before going out with your friends, you consider carefully if you can afford it.	Financial literacy-skills (cautious spending)	DIFCS2
CS3	Ordinal-Likert Scale	You supervise closely how much you spend in daily purchases.	Financial literacy-skills (cautious spending)	DIFCS3
CS4	Ordinal-Likert Scale	You supervise closely your financial situation.	Financial literacy-skills (cautious spending)	DIFCS4
TS1	Ordinal-Likert Scale	You live one day at a time and do not worry about tomorrow.	Financial literacy-skills (thoughtless spending)	DIFTS1
TS2	Ordinal-Likert Scale	You feel more satisfied when you spend money instead of keeping it in the long term.	Financial literacy-skills (thoughtless spending)	DIFTS2
TS3	Ordinal-Likert Scale	You get into debt today without worrying about tomorrow.	Financial literacy-skills (thoughtless spending)	DIFTS3
S1	Ordinal-Likert Scale	It is better to save and wait until you can afford to buy something instead of getting into debt and buying it	Financial literacy-skills (saving)	DIFS1
S2	Ordinal-Likert Scale	Saving money is more important than owing money to others.	Financial literacy-skills (saving)	DIFS2
SPE	Numerical	From your monthly income, what proportion do you spend?	Financial literacy-skills (%spending)	DIFSPE
SAV	Numerical	From your monthly income, what proportion do you save?	Financial literacy-skills (%saving)	DIFSAV

Data analysis and results (1/4)

Question 1

Ho: $\mu_1 = \mu_2$

Ha: $\mu_1 > \mu_2$; $\mu_1 < \mu_2$

Measures	Paired difference of means			t	d.f.	Sig. (two-tailed)	Sig. (single-tailed)
	Mean	Standard deviation	Mean standard error				
SAVpos-SAVpre	10,0455	24,2265	2,3099	4,349	109	0,000	0,000
SCOpos-SCOpre	31,13636%	28,16774%	2,68569%	11,593	109	0,000	0,000
SPEpre-SPEpos	10,0455	24,2265	2,3099	4,349	109	0,000	0,000

- FEP raised the awareness and improved the behaviour of students (*savings/monthly income increased; spending/monthly income decreased*)-Financial literacy skills.
- FEP contributed to improve their *personal finance knowledge*.
- ✓ *Awareness about the value of money, inflation and interest rates should result in more informed decisions when comparing credit/investment alternatives.*

Data analysis and results (2/4)

	CN1pos - CN1pre	CN2pos - CN2pre	CN3pos - CN3pre	CO1pos - CO1pre	CO2pos - CO2pre	CO3pos - CO3pre	CO4pos - CO4pre	HAPPpos - HAPPpre	UNHpos - UNHpre	NEUpos - NEUpre
Z	0,000	0,000	-2,606	0,000	-0,331	0,000	0,000	0,000	-0,234	-0,313
Sig. (two-tailed)	1,000	1,000	0,009	1,000	0,740	1,000	1,000	1,000	0,815	0,754

Question 2

Ho: $\text{median}_{\text{FWB1i}} = \text{median}_{\text{FWB2i}}$

Ha: $\text{median}_{\text{FWB1i}} \neq, < \text{median}_{\text{FWB2i}}$

- After completing the programme, students *worried more often about not being able to save.*
 - ✓ *More awareness about the importance of saving*
 - ✓ *Better foundations to consider investing cash surpluses.*

Question 3

Ho: $\text{median}_{\text{JOY1i}} = \text{median}_{\text{JOY2i}}$

Ha: $\text{median}_{\text{JOY1i}} \neq \text{median}_{\text{JOY2i}}$

- No significant changes in frequency of worrying about covering current needs/joy
 - ✓ *A usual topic to worry about?*
 - ✓ *Timing of measurement? Longer term effects?*
 - ✓ *Other factors?*

Data analysis and results (3/4)

Question 4

Ho: $\Delta_{FINLITi1}$ and Δ_{FWBi1} are independent

Ha: $\Delta_{FINLITi1}$ and Δ_{FWBi1} are not independent

	DIFCS2	DIFCS4	DIFTS1	DIFTS2	DIFTS3	DIFSPE	DIFSAV
DIFCN2				,189			
DIFCN3		-,203	,151				
DIFCO1	-,189	-,197	-,185		-,272	,141	-,141
DIFCO2					,151		
DIFCO3					-,159		

Question 5

Ho: $\Delta_{FINLITi1}$ and Δ_{JOYi1} are independent

Ho: $\Delta_{FINLITi1}$ and Δ_{JOYi2} are not independent

	DIFHAP	DIFNEU	DIFSCO
DIFCS3			-,162
DIFTS1	,173		
DIFSPE	,166	-,163	
DIFSAV	-,166	,163	

Data analysis and results (4/4)

- Low/medium correlations
 - ✓ *Being more careless about saving* ↔ *Not tracking daily purchases*
 - ✓ *Worrying less about not covering monthly expenses* ↔ *Preferring to spend than saving*
 - ✓ *Feeling more certain about covering any financial adversity* ↔ *Being more cautious in terms of leisure expenses/ being less prone to supervise financial situation/ Spending more than saving*
 - ✓ *Feeling more certain towards financial adversity/monthly income* ↔ *Using loans more responsibly/reflecting more about the financial future.*
 - ✓ *Feeling less certain towards covering expenses related with an illness* ↔ *Using loans more responsibly*
 - ✓ *Spending more* ↔ *Feeling happier*
 - ✓ *Saving more* ↔ *Feeling more unhappy*

Data analysis and results (4/4)

- ✓ *Short term orientation (covering daily needs) but some degree of planning (covering contingencies)*
 - Low income households
 - Informality
 - Daily economics

- ✓ *Possible overspending*
 - Tomorrow will be another day
 - Peer pressure
 - Generation characteristics
 - Technology facilitates consumption

Public policy implications

- Usefulness of financial education programmes
- Customised FEP's and financial products
- Applicability to vulnerable communities in other contexts

Future directions

- Longitudinal-cohort studies
- Impact assessment
- Association between financial inclusion/financial wellbeing

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Q's & A's

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