



A digital training course for individuals aged 55 and over: Impact results of an RCT

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About this presentation

- Digital training course
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Ivàlua: The Catalan Institute of Public Policy Evaluation

- **Ivàlua** is a Public Consortium formed by the Regional Government of Catalonia, Provincial Government of Barcelona and Pompeu Fabra University.
- **Mission:** promote the evaluation of public policies, and programmes of the third social sector in Catalonia, improve their effectiveness, efficiency and transparency.
- **How?**
 - Evaluations: design, implementation, impact and economic
 - Training: methodological, sectorial, advanced
 - Evidence Diffusion: events, webpage, publications....



Digital training course

- Addressed to individuals aged 55 and over
- Course: six 2-hour sessions on the access to the internet using smartphones and tablets, with an special focus on social and communications apps
- They take place in public (city councils) libraries in Barcelona province, organised by a non-profit org and sponsored by a phone company
- In 2014 and 2015, more than 800 participants
- Evaluation of the 2016 (3rd) courses



Background

- Digital divide among older adults
- In this population, higher Internet use linked to
 - higher frequency of contact with friends and family and attendance at organizational meetings, USA (Hogeboom et al, 2010)
 - Reduced probability of depression (Cotton et al, 2014)
- Specific digital training for this population linked to
 - positive effect on social connectedness, access to information, and social and civic participation (Gardner et al, 2012)
 - Feeling less depressed and more satisfied with life (Shapira et al 2007)



Objectives

- Evaluate the impact of a short course on digital training for individuals aged 55 and over on
 - The use of internet for different reasons (communication, leisure, “operational)
 - Use of library services (off and online)
 - Contacts with family and friends
- Method: Experimental design
- Sources of information: ad-hoc questionnaires (before the course and 3/5-months after the finalisation of it) and public libraries’ administrative data



Methods: outcomes (1)

- Increment in the **frequency of Internet use** (*Based on questionnaire data- self-reported*)
 - Any reason/access
 - email / Instant messaging / Video calls / Social networks: Social or Communication
 - Online newspapers/ Online Radio /Online access to TV, Series, music, games: Leisure
 - Medical appointment/Traveling/Buying goods/Selling goods/Online banking: Operational reasons
 - Consult library catalogue/Renewal and consult loans/Consult activities: Access to library webpage

[individually each reason/app and grouped in these 4 categories]

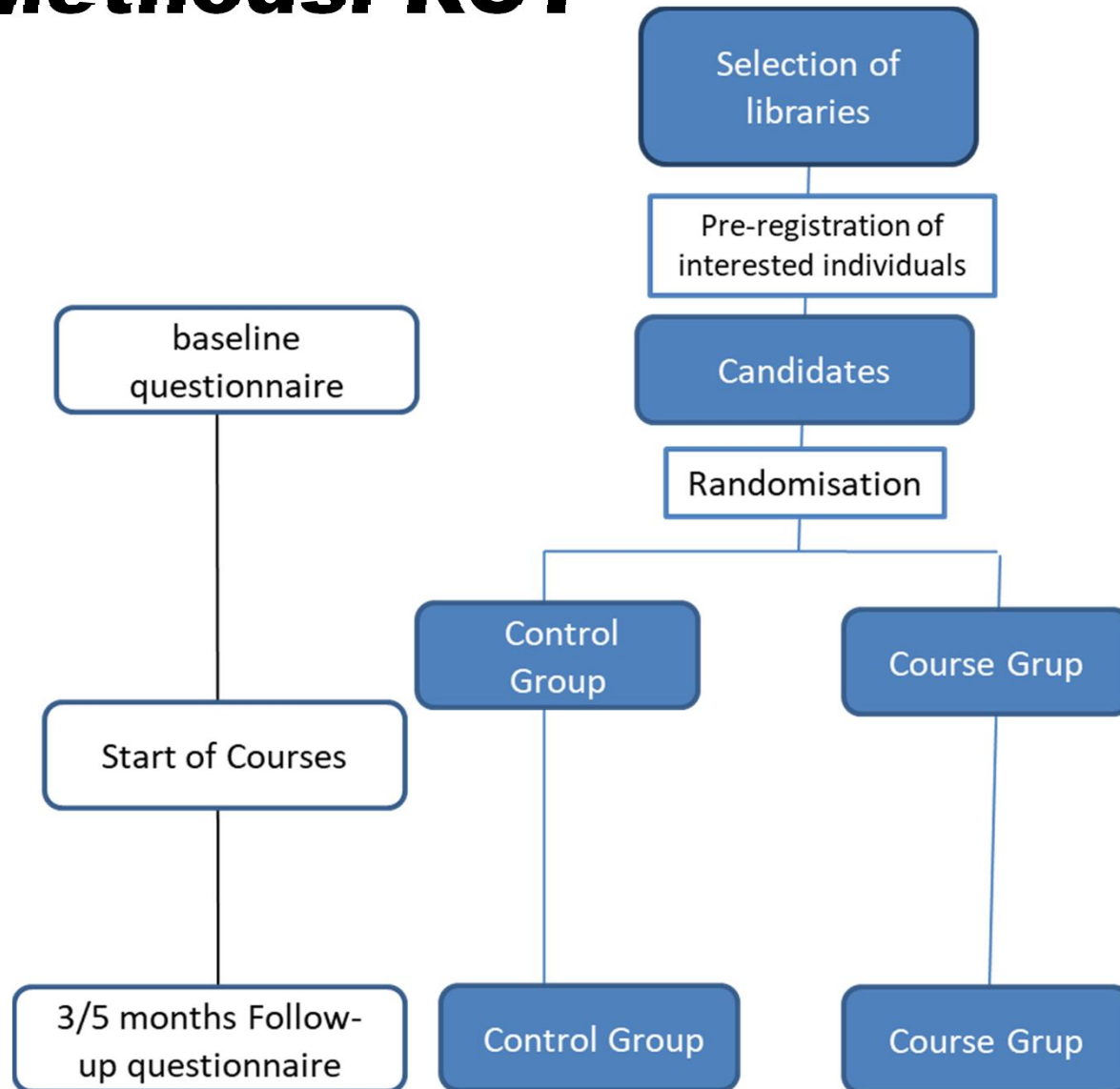


Methods: outcomes (2)

- Variation in **social network**: based on 4 questions from Lubben scale (2004) included in the questionnaire: number of friends and family contacted and frequency of contacts
 - Increment in scores (using Lubben (sub)scoring)
 - Increment in the size of social network
 - Increment in the frequency of contacts with closer friend/family
- Use of library services (based on administrative data)
 - Internet access at public libraries
 - Number of library loans



Methods: RCT





Methods: Analysis

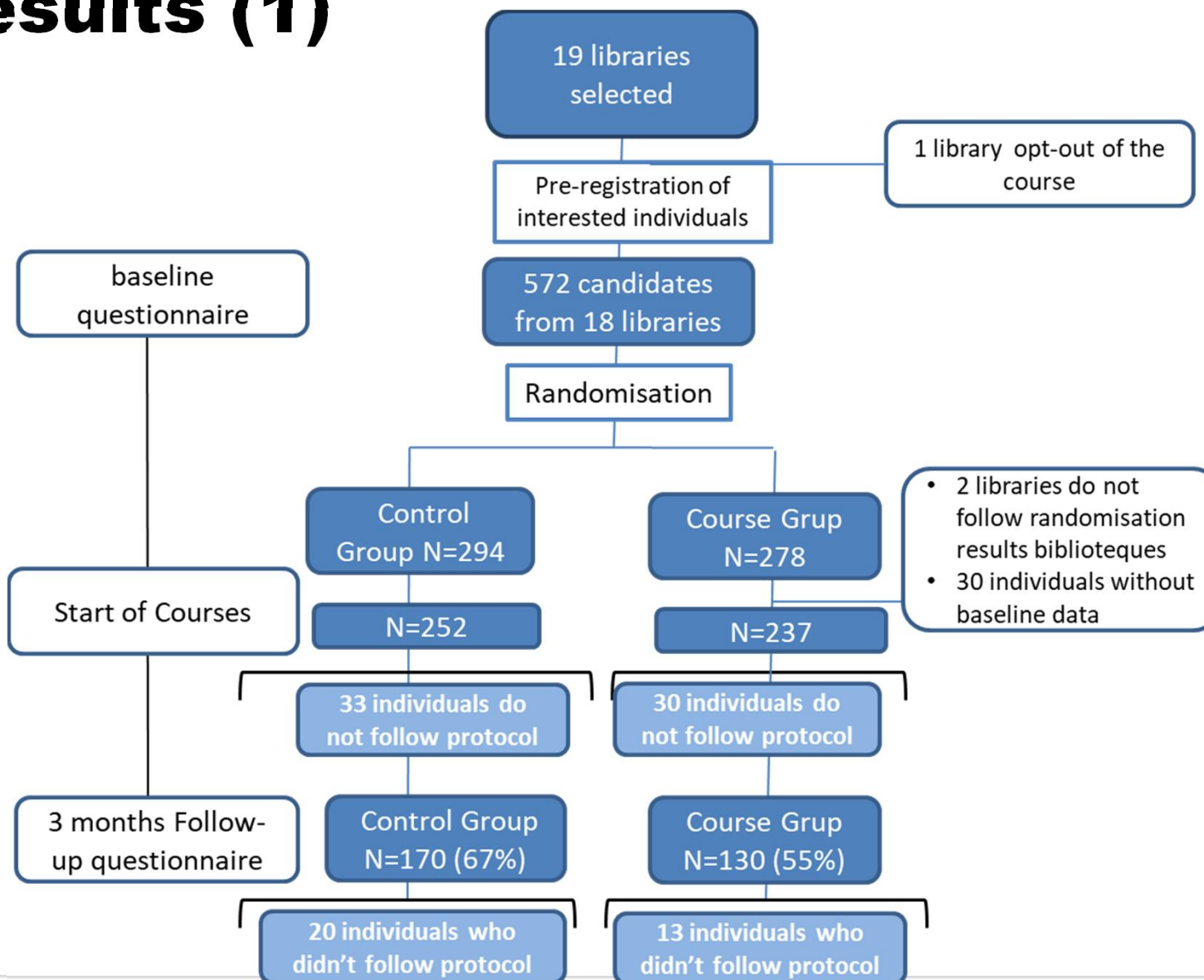
- Intention to treat (ITT)
- Contamination Adjusted Intention to treat (CAITT)
(using instrumental variables)

In both analysis controlling for

- Age
- Sex
- Education
- Living alone
- Internet at home
- Library



Results (1)





Results (2)

Socioeconomic characteristics and internet use at baseline

	Course (n=237)	Control (n=252)	p-value
Age	67.4	67.0	0.471
Secondary education or higher	63.29%	58.33%	0.262
Employed	8.02%	8.73%	0.776
Women	61.60%	60.71%	0.840
Living alone	20.25%	22.62%	0.524
Internet connection at home	85.23%	80.95%	0.208
Internet use			
At least once	89.87%	88.49%	0.623
At least once in the previous 3 months	89.45%	84.92%	0.135
Daily	44.34%	37.85%	0.451
Almost daily	25.00%	27.57%	
Once or twice per week	19.81%	23.36%	
Once or twice per month	5.19%	7.48%	
Less frequently	5.66%	3.74%	



Results (3)

Internet use and social network at baseline: specific purpose (at least once in the previous 3 months)

	Course (n=237)	Control (n=252)	p-value
Email	76.37%	73.02%	0.394
Instant messaging	79.75%	79.76%	0.997
Online newspapers	56.12%	53.97%	0.633
Online access to TV, Series, music, games	42.19%	36.51%	0.198
Online banking	40.51%	34.52%	0.172
Traveling	42.19%	36.11%	0.168
Buying goods	22.78%	20.24%	0.493
Access to library webpage for consulting activities	21.52%	21.83%	0.935
Score social scale (0-20)	14.28	14.58	0.349
Size social network	6.911	7.103	0.352

*p<0,05



Results (4)

Individuals who increment the frequency of Internet use

		Course (n=130)	Control (n=170)	ITT: Difference	CAITT: Difference
Internet (any reason)		26.2%	23.5%	0.02	0.02
Social or Communication	Email	30.8%	30.0%	0.02	0.03
	Instant messaging	32.3%	23.5%	0.09	0.13
	Video calls	29.2%	22.4%	0.07	0.1
	Social networks	37.7%	28.8%	0.10	0.13
	Frequency of any social reason/app	31.5%	22.4%	0.12*	0.15*
	Number of social reasons/app	48.5%	42.9%	0.07	0.09
Leisure	Online newspapers	45.4%	38.2%	0.07	0.09
	Online radio	29.2%	27.1%	0.01	0.01
	Online access to TV. Series. music. games	32.3%	30.0%	0.02	0.03
	Frequency of any leisure reason/app	44.6%	30.6%	0.14*	0.18*
	Number of leisure reasons/app	55.4%	51.2%	0.04	0.04

*p<0,05



Results (5)

Individuals who increment the frequency of Internet use

		Course (n=130)	Control (n=170)	ITT: Difference	CAIT: Difference
Operational	Medical appointment	13.9%	12.9%	0.01	0.01
	Travelling related	16.2%	10.6%	0.05	0.07
	Buying goods	15.4%	10.6%	0.04	0.05
	Selling goods	4.6%	0.6%	0.05*	0.06*
	Online banking	6.9%	8.2%	-0.02	-0.03
	Number of operational activities	34.6%	28.8%	0.05	0.06
Access to library webpage	Consult library catalogue	48.5%	50.0%	-0.04	-0.04
	Renewal and consult loans	46.9%	47.7%	-0.02	-0.02
	Consult activities	49.2%	49.4%	-0.02	-0.03
	Frequency of any library related reason	49.2%	50.6%	-0.04	-0.06
	Number of library related reasons	58.5%	60.6%	-0.04	-0.05

*p<0,05



Results (6)

Individuals who increment social network variables values

		Course (n=130)	Control (n=170)	ITT: Difference	CAITT: Difference
Social Network	Score Lubben scale	35.4%	41.8%	-0.05	-0.07
	Size social network	33.1%	35.9%	0.01	0
	frequency of contacts with closer friend/family	22.3%	24.7%	-0.03	-0.04

No effect on Use of library services: Internet access at public libraries and Number of library loans



Discussion

- Only impact on the use of internet for the purposes and apps related to the content of the course.
- No effect on individuals' social network
- Possible explanations:
 - short course
 - Selection of participants: they should owned a tablet or smartphone and 80% of them had internet connection at home
 - Preregistration as a trigger to learn, independently of attending the course
- Limitations:
 - 60% follow-up response rate
 - Self-reported data on internet use and social network
 - Short follow-up period (4-5 months)



Recommendations

- If the aim is to increase particular uses of internet (online banking, buying/selling goods, etc):
 - add specific related contents to the course or
 - offer “advanced” courses.
- Including or approaching population with lower (baseline) levels of knowledge and use of internet might increase the impact of the course



Complete report (in Catalan and Spanish) available here

Catalan:

http://www.ivalua.cat/documents/1/04_09_2017_07_03_59_AvaluacioTallers_Ivalua_DIBA_CAT.pdf

Spanish

http://www.ivalua.cat/documents/1/04_09_2017_07_04_40_AvaluacioTallers_Ivalua_DIBA_CAST.pdf

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Thank you for your attention

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