

# Fourth Family Research Network (FRN) Forum: *“Effective Social Programme Evaluation”*

Friday, 26 March 2010  
Auditorium, Level 1, Civil Service College

**Family**  
RESEARCH NETWORK



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## **[Effective] Program Evaluation Under Less-Than-Ideal Conditions**

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## **Impact/outcome evaluation**

Has the program made any real differences?

3

## **Ideal Conditions for Impact Evaluation**

Randomly assign X

Conditions for impact/outcome evaluation  
(Bamberger, et al, 2004)

- Comparable pretest-posttest design
- Control group
- Instrument development and testing
- Thorough documentation

4

## **Less-Than-Ideal conditions (LTIC)**

- Post-hoc initiation
- Hard-to-reach populations
- No planned variation in treatment conditions (i.e., random assignment)
- Others

**How to conduct meaningful evaluations under LTIC?**

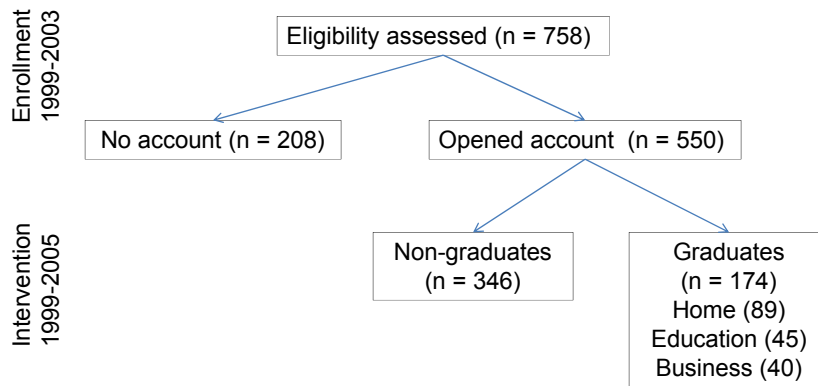
5

## **Case study: Kahikū program evaluation**

- Individual Development Account (IDA) program
- Program basics
- Kahikū objectives
  - 1. Save earned income
  - 2. Acquire lasting assets:  
(a) first home; (b) capitalization small business; (c) post-secondary education/training

6

## Case study: Kahikū program



7

## LTIC # 1: Post-hoc initiation

- 1. Examine administrative records
  - Major omission
- Establish a baseline. Why?

How/Strategy:

- Chart reviews and clinical data-mining (Epstein, 2009)
  - [Epidata](#)

8



9

## Epidata screenshot

EpiData 3.1 - [Primeiro.rec]  
File Goto Filter Window Help

Meu primeiro formulario de dados

ID	(número de id automatico)	2
V1	sexo	
V2	Altura (metro)	
V3	Peso (quilo)	
IMC	Indice de Massa corporal	
V4	Data de nascimento	
IDADE	Idade hoje	
S1	Pais de residencia	
S2	Cidade (endereco atual)	
T1	Data de hoje	01/08/2002

New/1 id= 2  
V1 Integer. Press + or F9 to see legal values

10

## Resources

- 4 practicum students
- Very unique data gathered: gender, age, household size, income, education, marital status, assets, liabilities, medical insurance, residence, etc.
- Labor intensive: 263 hours ~ 2 records / hour

11

## How to use admin records?

Evaluation questions addressed from the admin data. E.g.,

1. Who does not enroll (“second thoughts”)?
  - Children in household (OR = 2.11)
  - Net worth (OR = .51)
2. Who succeeds?
  - Maui participants (OR = 3.41)
  - Home (OR = 1.83); Savings > \$400 (OR = 1.75)
  - Children in household (OR = 1.62)

12

## LTIC # 2: Hard-to-reach population

Kahikū sample hard to reach:

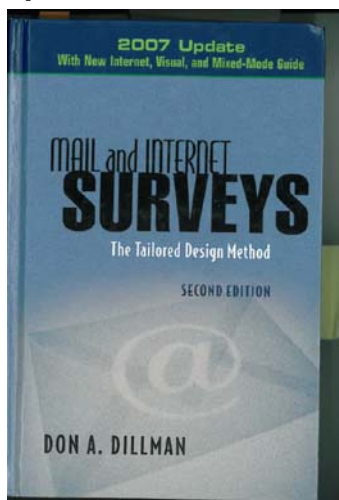
1. Low-income
  - Highly mobile
  - Lower education
2. Culture. Native Hawaiian, colonization, and distrust
3. Time. 7 year time lag

Assumptions about surveying social service clients

Strategy = multi-modal survey

13

## Tailored Design Method (Dillman, 2007)



Elements

- a. Reduce survey error:  
(a) sampling, (b) coverage, (c) measurement, (d) nonresponse
- b. Survey response as a *social exchange*
- c. Increase rewards, reduce costs, and build trust

14

## Survey Implementation

Mode	Components	Dates: 2008
<i>Mail</i>		
Pre-letter	Introduction, description, internet log-in instructions	February 9
Letter	Description, internet log-in instructions, \$1 incentive, questionnaire	February 15
Postcard	Final written request to participate	February 23
<i>Internet</i>		
	World wide web URL address and log-in password	February 9 & 15
<i>Telephone</i>		
	Introduction, description, and interview conducted by research firm	March 11 – May 19

15

## Data collection issues with hard-to-reach population

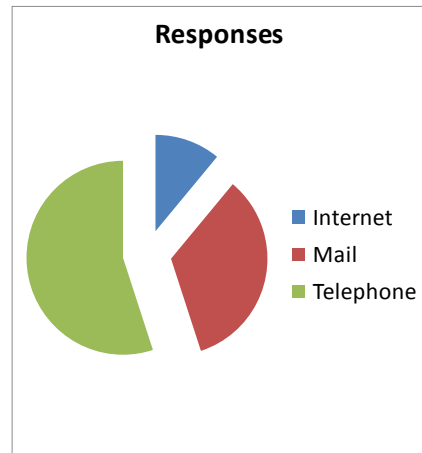
1. Response rate:
  - $326/758 = 43\%$ ; AAPOR (2007)
  - No significant differences between responders and non-responders on gender, age, marital status, employment, hh size, human capital, income
  
2. Differences in response mode?

16



## Response Rates by Mode

Mode	<i>n</i>	%
Internet	37	11
Mail	111	34
Telephone	181	55
TOTAL	329	100



17

## Modal differences

No difference between mail, internet, and phone for

gender

marital status

employment

hhsz

human capital

urban/rural

income

- Average age of internet responders was younger than others

18

## LTIC #3: No systematic treatment variation

Criteria for causal inference (Cohen et al, 2003)

1. X and Y are correlated
  2. There is a plausible mechanism to explain why X causes Y
  3. X precedes Y in time
  4. All other possible causal influences (Z) are eliminated\*
- Comparison is necessary to begin to understand real difference

19

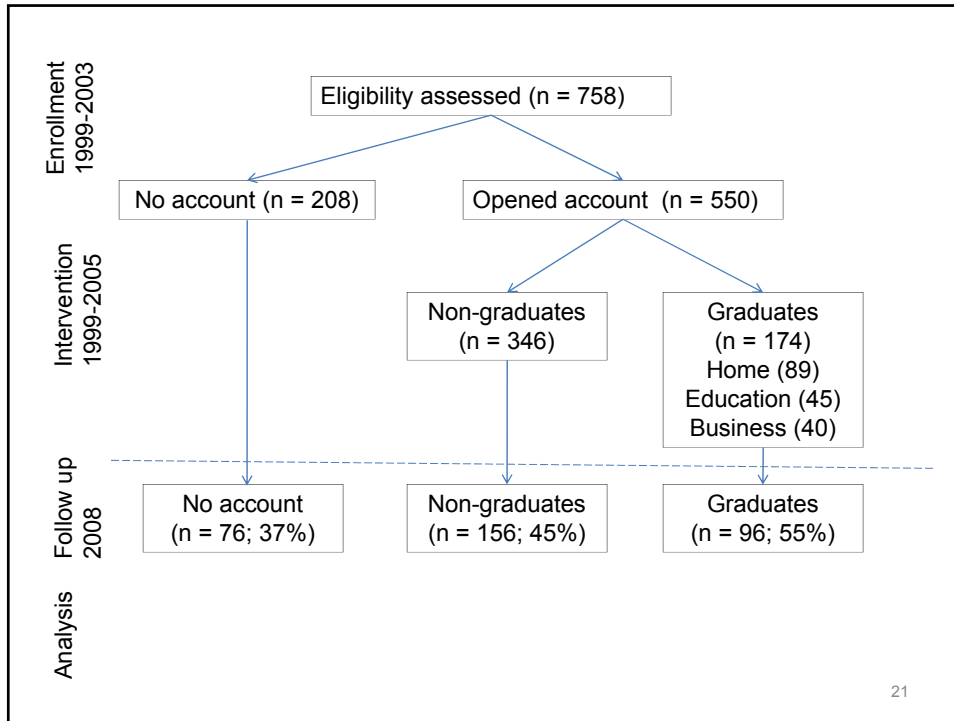
## Counterfactual under LTIC

~~1. Randomly assign groups~~

2. Identifying groups

- Eligible, but non-participatory (wait-list control; new intervention *plus standard*; group and individual matching)
- Non-eligible, but still comparable (regression discontinuity design)
  
- Internal comparison group; e.g., Kahikū

20

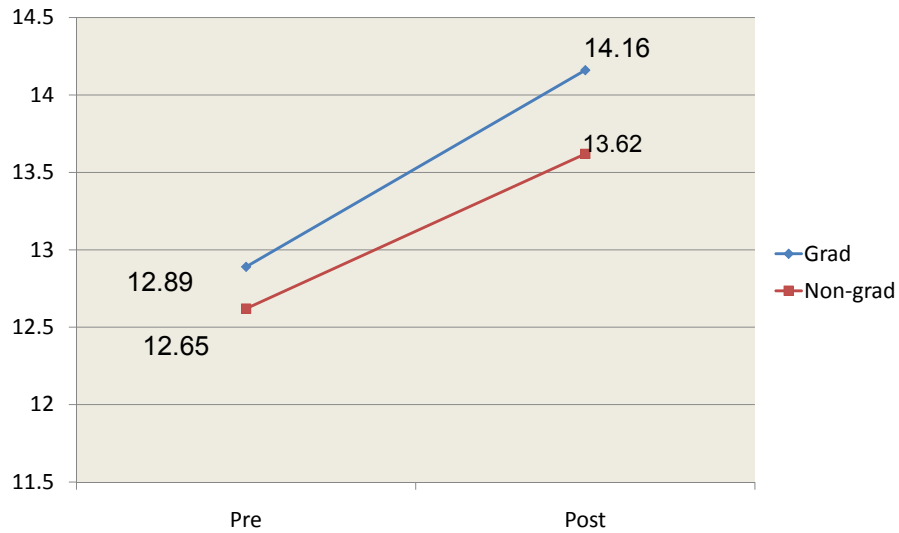


### Equivalency of Groups

	Non-grad (Comparison)	Grad (Intervention)
Female	116(75)	61(64)
Age	34	34
Marital status	72(46)	51(53)
Employment	76(49)	50(52)
HH Size	3.97	3.63
College degree	30(19)	21(22)
Urban	54(35)	26(27)
HH Income	1944	1962

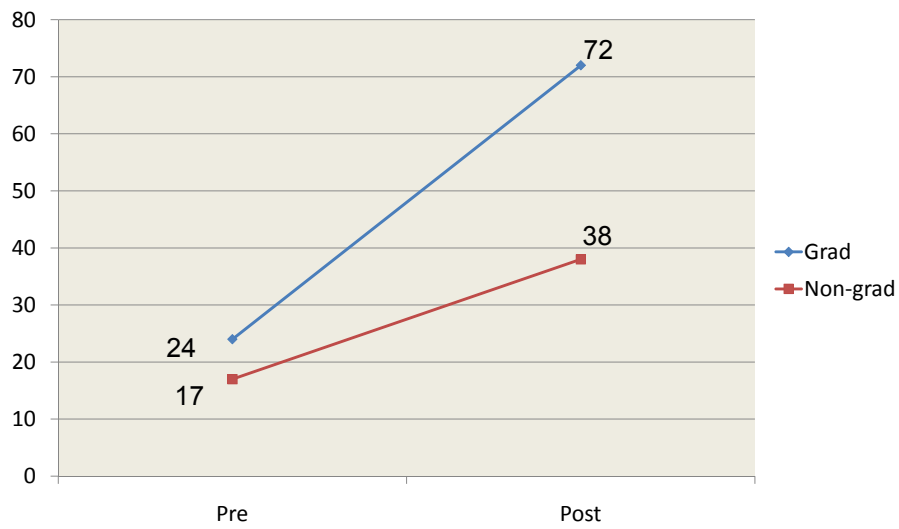
22

### What is impact of X on years of education?



23

### What is impact of X on home ownership?



24

## Limitations

- Caveats with administrative data: (a) missing data, (b) extreme outliers, (c) the absence of key variables
- For multi-modal surveys, must understand population (e.g., reading levels) and examine responses carefully
- Shades of gray. Multiple problems with comparison groups (see Bloom et al., 2005)

25

## Take Aways

Under LTIC...

1. Carefully collect and examine administrative records.
2. Gather data. Response is possible.
3. Compare groups to assess real impact.
4. Don't forget. Questions → methods

26

Thank you!  
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27

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28