



Who, When and Why Dropped Out from the Multi-Year Panel: Analysis of the POLPAN 1988-2018 Survey

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(UMO-2017/25/B/HS6/02697)

Context (1)

Interest in response rate

It has been well documented that response rates to cross-sectional surveys have declined over the past few decades. Do panel studies experience similar changes over time? (Schoeni, Stafford, Mcgonagle, & Andreski 2013)

Interest in panel attrition

Early studies in the 1970s and its continuation on Who drops out from panel studies.

Demographics: “Attritors tend to have lower earnings, lower education levels, lower marriage propensities, and appear to be generally drawn from the lower tail of the socioeconomic distribution.” (Fitzgerald, Gottschalk, Moffitt 1996)

Beyond demographics: “ [S]urvey experience variables are predictive of panel attrition above and beyond the standard demographic predictors.” (Frankel, Hillygus 2014)

Context (2)

Interest in conducting multi-wave panels

Interim unit non-response – individuals dropping out for a single wave before returning again at some subsequent wave – is different from permanent attrition. The varied causes of these types of attrition lead to varied strategies in conducting panel studies. (Uhrig 2008)

Interest in analyses of panel data

What are recommendations for statistical and nonstatistical ways of dealing with sample attrition used by social scientists? (Ahern, Le Brocque 2005).

Statistical and non-statistical approaches.

POPLAN 1987/1988-2018 (1)

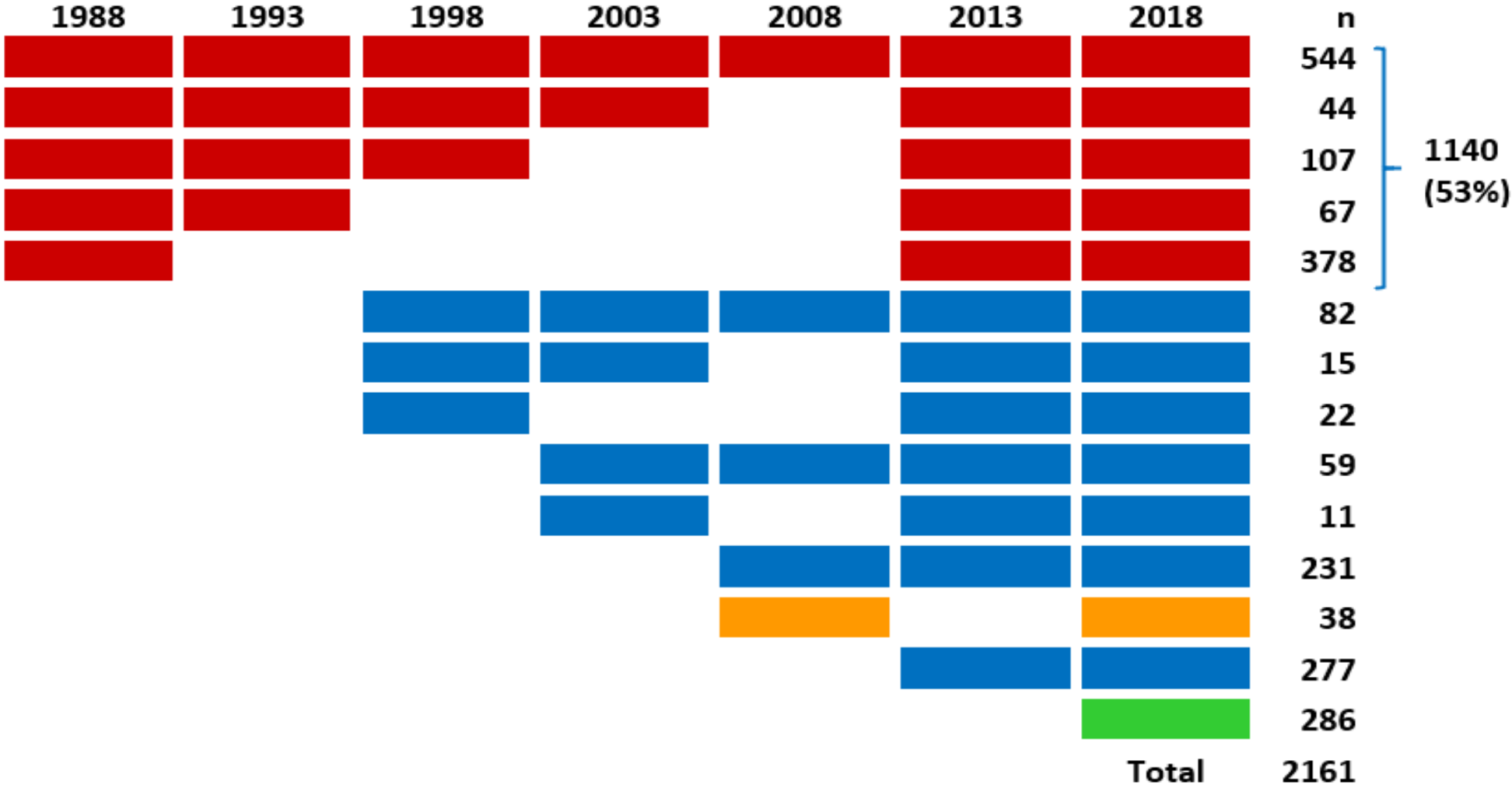
Irina Tomescu-Dubrow, Kazimierz M Slomczynski, Zbigniew Sawiński, Anna Kiersztyn, Krystyna Janicka, Danuta Życzyńska-Ciołek, Ilona Wysmułek, Michał Kotnarowski. **The Polish Panel Survey, POLPAN. *European Sociological Review* 2021**

<https://doi.org/10.1093/esr/jcab017>

Description of POPAN

www.polpan.org

Patterns of panel participation (2)



Response rate (WAPOR standard)

$$RR = [INT / (N - NA - RD - NP)] * 100 \text{ [\%]}$$

where

RR Response rate

INT Number of interviews

N Total sample size

NA Address not valid

RD Respondent deceased

NP Excluded from the population (living in the institution, emigrated)

Response rate for different POLPAN samples, 2013

- Panel sample of all 2008 respondents who agreed to be re-contacted, aged 26-91 in 2013 (N = 1244). **RR (panel 2008) = 83%**
- Panel sample of respondents who were interviewed between 1988 and 2003, and who had dropped out either in 1993, 1998 or in 2003), aged 36-93 years in 2013 (N= 455). **RR (dropped out and returned) = 50%.**
- Panel sample of the 1987/1988 respondents who were not interviewed either in 1993, or in any subsequent wave. We reached 584 of these people using at least one survey technique: postal survey or F2F interview (199 respondents took part only in the postal survey, 90 participated only in the F2F interview, and 295 took part in both postal and F2F surveys). **RR (panel 1988) = 42%.**
- The renewal sample of people aged 21 to 25 in 2013, i.e., born between 1988 and 1992. New respondents were selected from the PESEL register (The Universal Electronic System for Registration of the Population), applying a simple random sampling method for selection (N = 497). **RR (new cohort) = 69%.**

Response rate for different POLPAN samples, 2018

- Panel sample contains all 2013 respondents who agreed to be re-contacted, aged 26-95 in 2018 (N =1837. RR (panel 2013) = 74%.
- Panel sample contains respondents first interviewed in 2008, but not re-interviewed in 2013 (N = 38). RR (panel 2008) = 23%.
- Renewal sample covers young people, aged 21-25 in 2018 (N =286). RR (new cohort)= 54%

Units missingness in POLPAN

Reasons	Examples of subcategories
Invalid address	address cannot be located respondent moved out and new address unknown
Refusal	respondent's refusal refusal by a proxy refusal to let interviewer into house refusal of further contacts
Deceased	-
Abroad	emigrated staying abroad currently abroad and no further contacts
No contact	nobody at home counseled appointments
Illness	age related illness permanent health problems
Other	prison military retirement homes

Units missingness in POLPAN

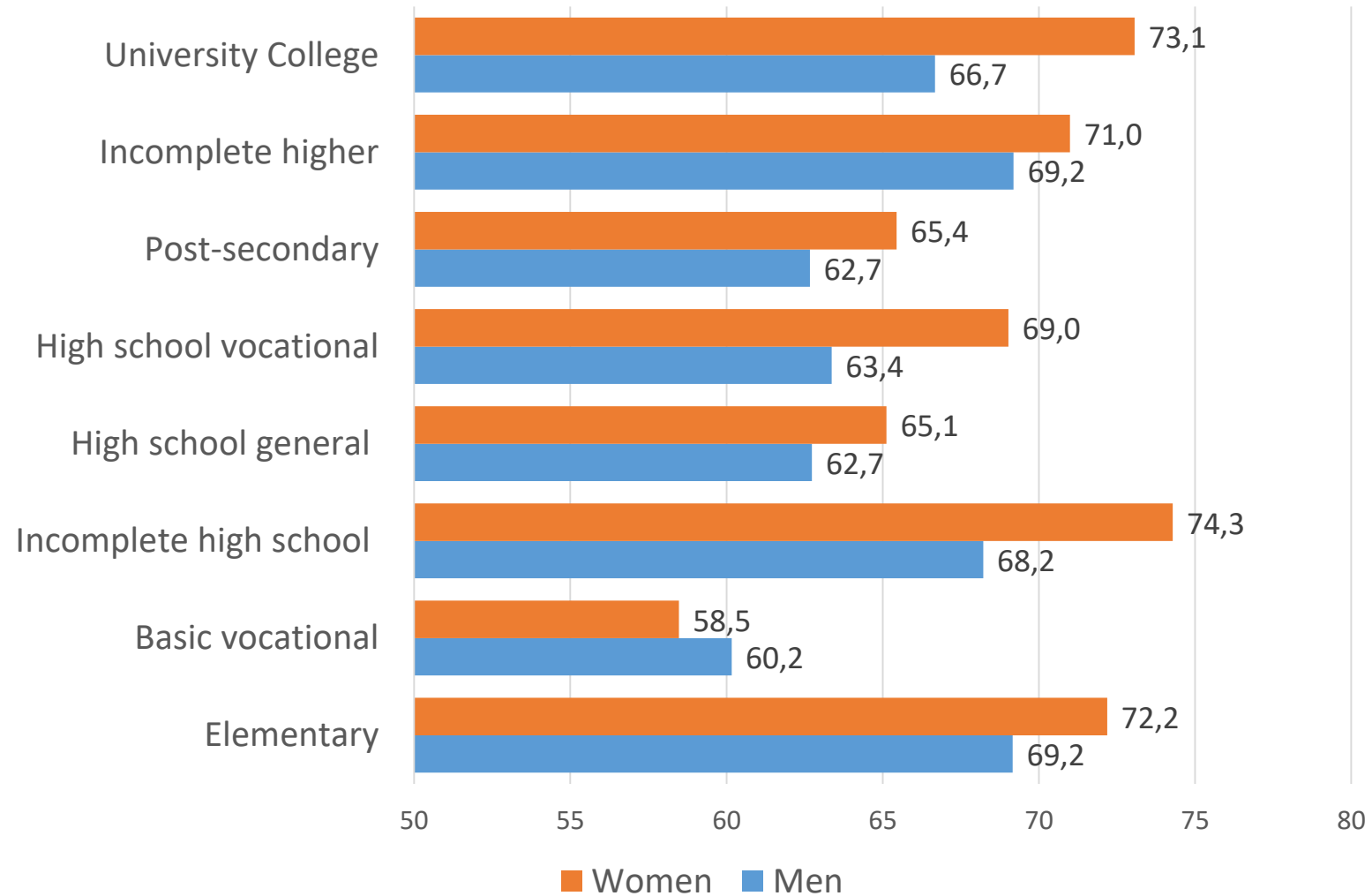
Final record	All file with full information	Subset of drop-outs
Completed interviews	42.1	--
Invalid address	16.4	28.3
Refusal	14.7	25.3
Deceased	13.5	23.4
Abroad	6.2	10.7
No contact	3.1	5.4
Illness	2.9	5.0
Other	1.1	1.9
Ogółem N = 100%	8335	4828

Reasons for POLPAN unit missingness in different cohorts

Cohort	Deceased	Illness	Abroad	Refusal	N
	Percentage for a given cohort				
- 1928	50.4	4.8	0.1	0.9	687
1929-1938	34.4	8.0	0.3	3.7	1049
1939-1948	19.5	5.3	0.8	8.6	1078
1949-1958	10.4	2.0	2.0	12.9	1561
1959-1968	4.5	1.2	4.5	13.1	865
1969-1978	1.2	0.7	11.6	24.8	404
1979-1988	0.3	0.8	14.7	26.5	1465
1989-	0.1	0.8	14.1	23.0	1226

POLPAN respondents who died

Average life duration in years by education



Implication for analyses of panel data

New developments

Statistical: Correcting for survey nonresponse using variable response propensity (Peress 2010). Weighting procedures.

Nonstatistical: unit tracing and comparison of regular and tracked respondents (Calderwood 2013).

Our proposal

To take into account non-demographic characteristics of drop-outs

THAN YOU, WE INVITE YOU FOR ASKING
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