

TIME AND TIMING OF EMPLOYMENT ACTIVITY: EVENT  
HISTORY CALENDARS IN THE PANEL STUDY of INCOME  
DYNAMICS

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# Main Points

PSID and Shift to EHC

EHC as a computerized data collection tool

Graphical User Interface and phone CAI

Extensions to other domains  
(lifecourse, educational history)

Methods studies

# Panel Study of Income Dynamics

- Since 1968
- Unique in Using both Calendar and Diary Methods
- 2-year computerized calendar was introduced in 2003
- Motivated by move to biennial data collection in 1999 (annual until 1997)
- Methodological work with paper & pencil calendar illustrated feasibility and data quality (Belli, Shay, and Stafford, Public Opinion Quarterly, 2001)

# PSID: Prior to Calendar

- To assess the number of weeks in a calendar year
  - Employed, unemployed, out-of-the labor force, missing work due to vacation, illness of oneself, illness of another
  - Separate questions for each status
- We're interested in how you spent your time from January through December 1996.
  - Did you miss any work in 1996 because you were sick?
    - (if yes) How much work did you miss (days, weeks, months)
  - Did you miss any work in 1996 because you were unemployed and looking for work?
    - (if yes) How much work did you miss (days, weeks, months)
- At the end, interviewer would add up the weeks, and negotiate with respondent until 52 weeks was the result

# Calendar and Diary

- Appear very different
- What are the commonalities?
  - Chronological time as the primary retrieval organizer (sequential retrieval)
  - Softening of standardization with flexible interviewing
  - Both amenable to GUI for interviewers and over the phone
  - Support measures of jointly occurring activities such as secondary jobs or secondary time uses

# EHC METHODS

- Provides structure of timelines and domain themes that reflect the structure of autobiographical memory
- Facilitates the use of three memory retrieval mechanisms to more completely and accurately reconstruct the past
  - Top-down associations
  - Sequential associations
  - Parallel associations
- Allows the use of a more naturalistic narrative approach to remembering
- Encourages motivation to remember as the inherent cueing mechanisms lends retrieval to be more productive

# RESIDENTIAL TIMELINE

## PSID EHC (03-07)

**Event History Calendar - [Residence (About) JOHN]**

File Window Help

IN	03	SPR	03	SPR	03	SUM	03	FAL	03	FAL	03	WIN	04	SPR	04	SPR	04	SUM	04	FAL	04	FAL	04
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

**Landmark Events**

**Residence**

**Employment Summary**

**Not Working**

Landmark Events	<b>Residence</b>	Employment	Not Working	TimeAway
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IN	03	SPR	03	SPR	03	SUM	03	FAL	03	FAL	03	WIN	04	SPR	04	SPR	04	SUM	04	FAL	04	FAL	04
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

##

<b>Starting Time</b>				<b>Ending Time</b>					
Year	Season	Month	3rd of Month	Year	Season	Month	3rd of Month	Current	
2004	WIN	JAN	Middle	2004	WIN	DEC	Last		

Address  City/St/Zip  Country

A51. Do you think you might move in the next couple of years?

A52. Would you say you definitely will move, probably will move, or are you more uncertain?

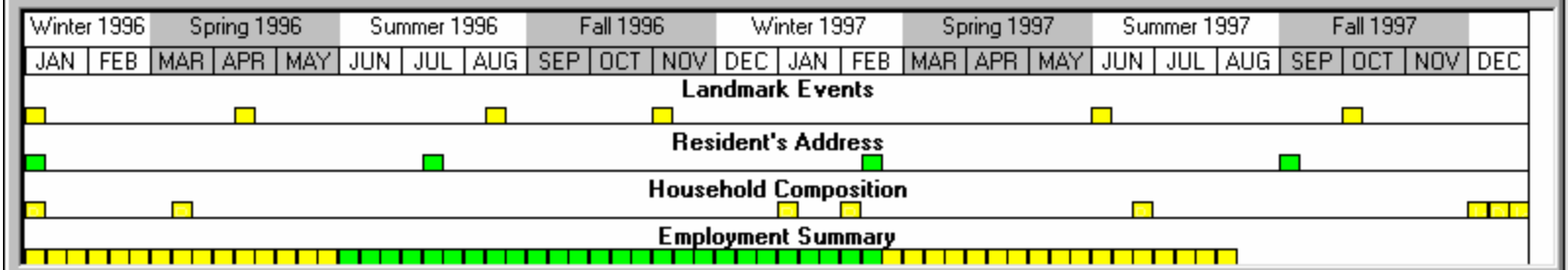
A53. Why (will/might) you move?

Note

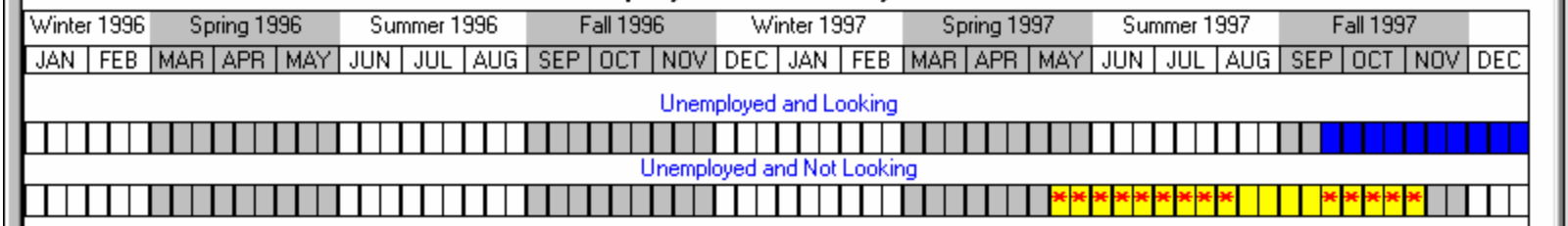
Residence Q-list      Residence

File

Landmark Events   Residence   HH Composition   Employment   **No Employer**   Time Away   Health History



### No Employer Data Entry Window



Starting Time				Ending Time				Duration				OK	
Year	Month	3rd of Month	Day	Year	Month	3rd of Month	Day	Day	Week	Month	Year	Cancel	
1997	MAY	Middle		1997	NOV	First						Delete	
Data Enterer Note													



# PSID 2003 EHC instrument

**EHC Event History Calendar - [Employment (About) Phil]**

File Window Help

SPR 01 SPR 01 SUM 01 FAL 01 FAL 01 WIN 02 SPR 02 SPR 02 SUM 02 FAL 02 FAL 02 WIN 03  
 MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB

**Landmark Events**

**Residence**

**Employment Summary**

**Not Working**

321 Real Nice Place, Ann Arbor, MI [From 09/11/2002 to 02/21/2003]

Landmark Events Residence **Employment** Not Working TimeAway

**Employment Data Entry Window**

SPR 01 SPR 01 SUM 01 FAL 01 FAL 01 WIN 02 SPR 02 SPR 02 SUM 02 FAL 02 FAL 02 WIN 03  
 MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB

**Not Working Summary**

Joe and Sons

Bill's Landscaping

Job# 3

Job# 4

**Starting Time**

Year Season Month 3rd of Month

2002 WIN JAN Last

**Ending Time**

Year Season Month 3rd of Month

2002 FAL SEP Last

Employer: Bill's Landscaping

Note:

OK Cancel Delete

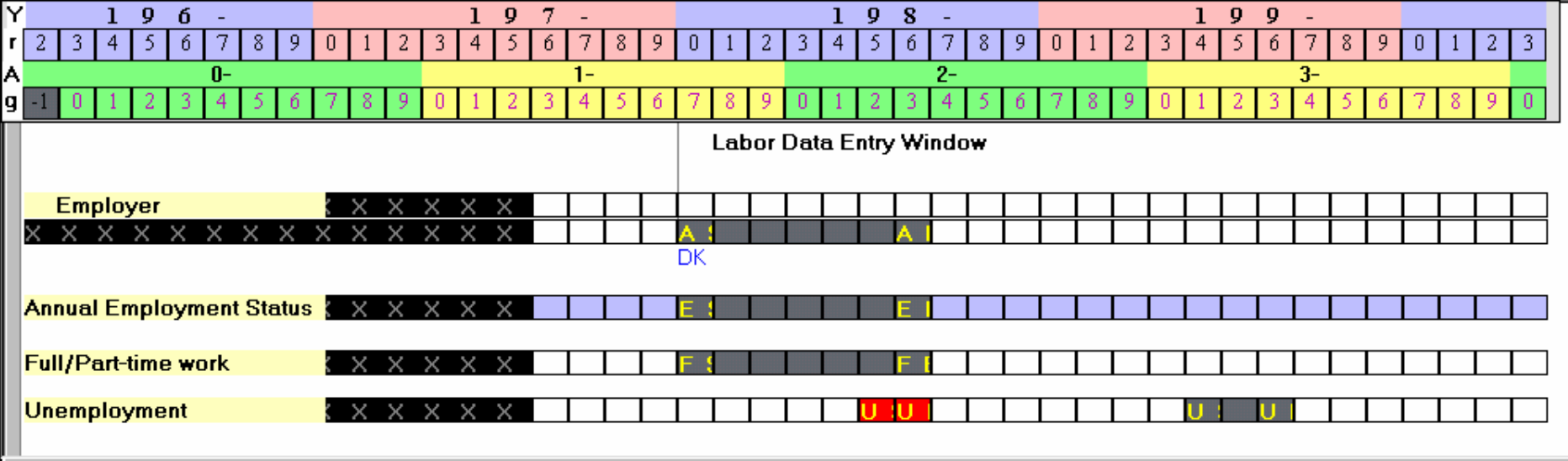
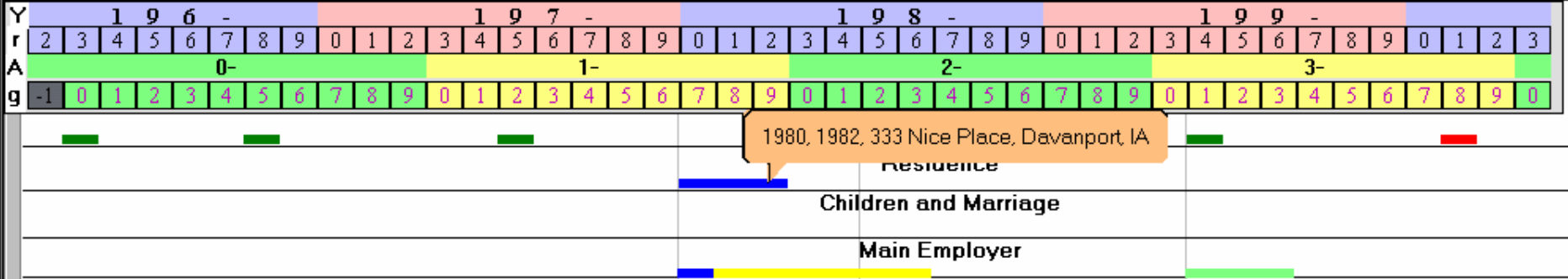
Q-list (1..2) Q-list (3..4.5) **Employment**

	Whether	Direct Quantity	Derived Quantity	When
Move	EHC			
Entered Residence			ehc	
Left Residence			=	
Jobs		ehc		
Income		EHC		
Employed		=	EHC	EHC
Unemployed		EHC	EHC	EHC
Out of Labor Force		=	ehc	
Vacation		=		
Self-III		EHC		
Other-III		EHC		
ADC/AFDC	=		Q-L	Q-L
Food Stamps	=		=	=

# PSID LIFECOURSE PILOT

- Respondents and interviewers randomly assigned to EHC and Q-list conditions
  - EHC N = 313 (94% response rate), mean age = 62.0 years
  - Q-list N = 318 (97% response rate), mean age = 61.6 years
- Interviewer training
  - 21 hours (over 3 days) in both conditions
  - Specific training in EHC for sequential and parallel probes
  - Specific training in Q-list for year/age conversion facility
- Outcome variables
  - Annual correspondence between experimental retrospective and prospective panel reports on moves, amount of time employed, years unemployed and cohabiting, smoking, and health status

File Help



Residence Marriage Children Education **Labor** Parent/Guardian Parental SES Health

Employer Questions

# LIFE COURSE PILOT

- Retrospective and panel agreement
  - With number of lifetime marriages excellent in both conditions (EHC kappa = .84, Q-L k = .92, z = -2.22)
    - EHC slightly underreported
      - 6.1% to 0.3% for CQ
  - With number of years in cohabitations
    - Approximately 80% of Rs in both conditions exactly matched
    - No tendency to over- or under-report in either condition
    - EHC led to significantly stronger correlation ( $r = .54$ ) with panel reports in comparison to CQ ( $r = .15$ )
  - With number of years unemployed
    - Poor agreement; levels of underreporting equally high in both conditions
      - EHC: 60.2%; CQ: 58.1%
    - EHC led to a significantly stronger correlation ( $r = .34$ ) with panel reports in comparison to CQ ( $r = .17$ )

- Calendar-based interviewing and data collection has a role in surveys
- Leads to higher quality retrospective reports in comparison to traditional standardized CQ interviews
  - Paper & pencil and computer-assisted
  - Face-to-face and telephone
  - Self-administered and web
  - Lifecourse and shorter reference periods
  - Confirms roles for
    - Autobiographical memory cues
    - Conversational flexibility
  - BUT, lessons to be learned (AFDC, marriage)
- Calendars can be integrated with Q-list questions in total questionnaire package

# RESEARCH USING EHC FILES

- To date simple summaries along the lines of q-list posted on-line in PSID Data Center
- Need to use the fine grained timing
- Analysis of Event History Models – spells of unemployment, residence
- Use of month strings in other (vehicle purchase, receipt of transfer income)

# EHC Applications

- Application to pre-study histories in Cross-sections
- Effective in domains such as partner histories (domestic partner violence study by Yoshihama et.al., 2005)
- Educational History Calendar?
- Health Conditions issues
- Redesign of time diaries (secondary and tertiary activities or conditions, location,...)