"Happy Birthday": Life Events as Reminders of Spending

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Motivation

- Improve CE data quality by limiting underreporting caused by recall error

- Examine aided recall methods prompting respondent recall of expenses main CE Quarterly Interview Survey (CEQ) questions didn't prompt

- CE study attempting to balance respondents' income & expenditures found life events often used to add/revise expenditure reports (Fricker et al, 2011), suggesting some association of events with expenses

Overview

- Related research: aided recall methods
- Research approach
- Findings
  - what events reported (how they compare)
  - how events associate with expenditures
  - do events cue new reporting?
- Conclusion

Aided Recall Methods

SIPP study (Hillmer et al., 2011)

➢ Used Event History Calendar (EHC) to identify durations of prior year events and how they line up with possible changes in employment, residency and health insurance

■ Found life events only reported by ⅓ of sample

■ Those with relevant change (e.g. new job) often had no corresponding event report – events significant to respondent not necessarily relevant for topic of survey

■ Re-engineered SIPP to use a 12-month EHC

Aided Recall Methods

PSID study (van der Vaart et al., 2010)

➢ Used EHC to assist recall of events over a 2-3 year period

- Found recency effect in events reported
- Found females reported more events than males
- Associations between events and reporting accuracy for labor force measures were weak or non-existent

Aided Recall Methods

Dutch telephone survey
(van der Vaart and Glasner, 2011)

➢ Used calendar methods to test associations with respondent demographics and accuracy

■ Found weak positive associations of events and recall accuracy

■ Suggested landmarks most effective if they are:

- ■ Important
- ■ Domain-relevant
- ■ Personal events

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Research Approach

- Use of aided recall slightly different than in earlier studies
  - ▶ Not focused on interrelationship of events in time using visual calendar
  - ▶ Focused on whether events prompted reporting of associated expenditures
- Were not able to definitively identify if life events cued new expenditure reports
- Were able to get better idea of how method could be used

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CEQ Data

- Pooled cases completing interviews between April and September of 2012

- Part of a series of research section questions asked of respondents completing wave 5 interviews

Life Event Questions

■ Event question 1

"Since the first of [reference month] have you or your household had any major life events; things such as birthdays, weddings, moves, or new jobs?"

[if yes]:

• "What was the event?"

• "When was the event?"

• "What expenses did you have related to the event?"

• "When was the expense?"

■ Event question 2

"Since the first of [reference month] have you or your household experienced any other unusual or memorable events?"

[if yes]:

• "What was the event?"

• "When was the event?"

• "What expenses did you have related to the event?"

• "When was the expense?"

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Life Event Questions

■ Event question 1

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[if yes]:

• "What was the event?"

• "When was the event?"

• "What expenses did you have related to the event?"

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Methods

- Combined events (for those reporting 2)
- Classified events into categories with double-coding:
  - ▶ Coder used word-recognition to code 1,132 events into 11 larger event categories
  - ▶ Three other coders independently classified events into same 11 categories
  - ▶ Coder groups discussed ways to handle discrepancies (occurred for 11% of events)

Findings: Who Report Life Events?

- CUs with life events (versus those with none reported):
  - ▶ Had more CU members
  - ▶ Had no significant difference in incomes (on a per-earner basis)
  - ▶ Were more likely to have at least some college education (reference person)
  - ▶ Were not significantly different by gender (reference person)

Findings: How Many Life Events Reported?

Number of Life Events Reported (among 3,421 CUs)

4%

24%

71%
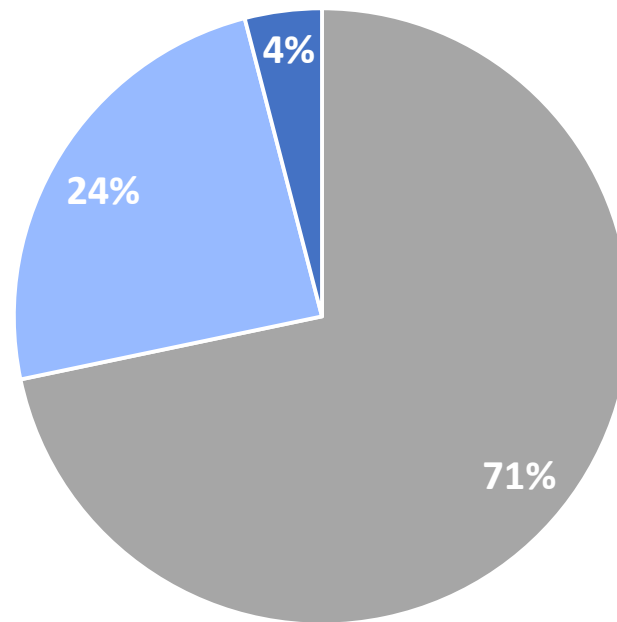
■ 0 ■ 1 ■ 2

Findings: What Type of Life Events are Reported?

	Event Type (1st & 2nd)	N	Percent
1	Birthday	563	50%
2	Change in job	132	12%
3	Move	89	8%
4	Other*	74	7%
5	Medical event	67	6%
6	Wedding	59	5%
7	Death	48	4%
8	Birth	34	3%
9	Graduation	27	2%
10	Anniversary	25	2%
11	Divorce/separation	12	1%
	Total	*1,130*	*100%*

*uncombinable (e.g., 'dinner for children,' 'son put into wilderness program')

Life Event Questions

- Event question 1

"Since the first of [reference month] have you or your household had any major life events; things such as birthdays, weddings, moves, or new jobs?"

[if yes]:

- "What was the event?"
- "When was the event?"
- "What expenses did you have related to the event?"
- "When was the expense?"

- SIPP Study question

"… are there any events during the last calendar year [2010] that stand out in your mind that you are able to date exactly or approximately? These might be family, financial, job, social or health related events?"

Findings: What Type of Life Events are Reported?

CE	SIPP	Event Type	Percent
1		Birthday	
2		Change in job	
3		Move	
4		Other*	
5		Medical event	
6		Wedding	
7		Death	
8		Birth	
9		Graduation	
10		Anniversary	
11		Divorce/separation	
		Total	

Findings: What Type of Life Events are Reported?

CE	SIPP	Event Type	Percent
1		Birthday	
10		Anniversary	
		Total	

Findings: What Type of Life Events are Reported?

CE	SIPP	Event Type (SIPP name in parentheses)	Percent
1,10	1	Birthdays/anniversaries ("Occasions")	32%
		Total	

Findings: What Type of Life Events are Reported?

CE	SIPP	Event Type (SIPP name in parentheses)	Percent
1,10	1	Birthdays/anniversaries ("Occasions")	32%
5		Medical event	
7		Death	
		Total	

Findings: What Type of Life Events are Reported?

CE	SIPP	Event Type (SIPP name in parentheses)	Percent
1,10	1	Birthdays/anniversaries ("Occasions")	32%
5,7	2	Medical event / death	16%
		Total	

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1,10	1	Birthdays/anniversaries ("Occasions")	32%
5,7	2	Medical event / death	16%
3 →		Moves	
		Total	

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3	3	Moves ("Residences")	12%
		Total	

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1,10	1	Birthdays/anniversaries ("Occasions")	32%
2		Change in Job	
		Total	

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8		Birth	
		Total	

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8	5	Births/engagements ("Life course events")	8%
		Total	

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2	4	Change in job ("Employment")	11%
8	5	Births/engagements ("Life course events")	8%
9		Graduation	
		Total	

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2	4	Change in job ("Employment")	11%
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9	6	Graduation ("Education")	8%
		Total	

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4		Other	
		Total	

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2	4	Change in job ("Employment")	11%
8	5	Births/engagements ("Life course events")	8%
9	6	Graduation ("Education")	8%
4	7	Other	5%
		Total	

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8	5	Births/engagements ("Life course events")	8%
6		Wedding	
11		Divorce/separation	
		Total	

Findings: What Type of Life Events are Reported?

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1,10	1	Birthdays/anniversaries ("Occasions")	32%
5,7	2	Medical event / death	16%
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2	4	Change in job ("Employment")	11%
8	5	Births/engagements ("Life course events")	8%
9	6	Graduation ("Education")	8%
4	7	Other	5%
6,11	8	Wedding/divorce/separation	3%
		Total	

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5,7	2	Medical event / death	16%
3	3	Moves ("Residences")	12%
2	4	Change in job ("Employment")	11%
8	5	Births/engagements ("Life course events")	8%
9	6	Graduation ("Education")	8%
4	7	Other	5%
6,11	8	Wedding/divorce/separation	3%
-	9	"Calendar" (national- holidays/events)	3%
		Total	

33

Findings: What Type of Life Events are Reported?

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1,10	1	Birthdays/anniversaries ("Occasions")	32%
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2	4	Change in job ("Employment")	11%
8	5	Births/engagements ("Life course events")	8%
9	6	Graduation ("Education")	8%
4	7	Other	5%
6,11	8	Wedding/divorce/separation	3%
-	9	"Calendar" (national- holidays/events)	3%
-	10	"Major financial" (income change, big purchase)	1%
		Total	

Findings: What Type of Life Events are Reported?

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1,10	1	Birthdays/anniversaries ("Occasions")	32%
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9	6	Graduation ("Education")	8%
4	7	Other	5%
6,11	8	Wedding/divorce/separation	3%
-	9	"Calendar" (national- holidays/events)	3%
-	10	"Major financial" (income change, big purchase)	1%
-	11	"Government programs/health insurance"	1%
		Total	*100%*

Findings: Events Associated with Expenses

- "What expenses did you have related to the event?"

- Mix of responses (some descriptive, some dollar amounts)

- Divided responses into three groups:
  - Events with expense (e.g., "$40 gift", "cake")
  - Events with no expenses (e.g., "$0", "none")
  - Events with unknown expense

# Findings: Events Associated with Expenses

- "What expenses did you have related to the event?"

- Mix of responses (some descriptive, some dollar amounts)

- Divided responses into three groups:
  - Events with expense (e.g., "$40 gift", "cake")   63.5%
  - Events with no expenses (e.g., "$0", "none")
  - Events with unknown expense

Findings: Events Associated with Expenses

- "What expenses did you have related to the event?"

- Mix of responses (some descriptive, some dollar amounts)

- Divided responses into three groups:
  - ▶ Events with expense (e.g., "$40 gift", "cake")   63.5%
  - ▶ Events with no expenses (e.g., "$0", "none")   30.1%
  - ▶ Events with unknown expense

Findings: Events Associated with Expenses

- "What expenses did you have related to the event?"

- Mix of responses (some descriptive, some dollar amounts)

- Divided responses into three groups:
  - ▶ Events with expense (e.g., "$40 gift", "cake")   63.5%
  - ▶ Events with no expenses (e.g., "$0", "none")   30.1%
  - ▶ Events with unknown expense   6.4%

Findings:
1. Birthday Events

- 50% of events (n=563)

Percent of Events with Expenses

3% DK

33% No Expense
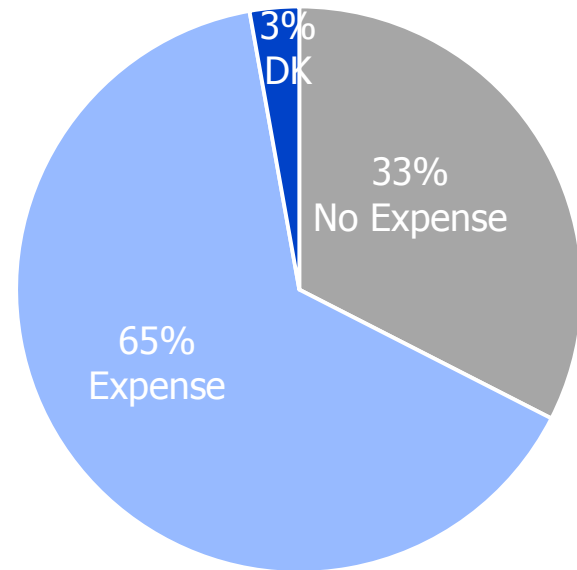
65% Expense

Findings:
1. Birthday Events

- Analyzed amounts for those reporting a birthday event and providing non-zero dollar amount (first event, n=249)

Birthday expenses

	Mean	Median
	$283	$120
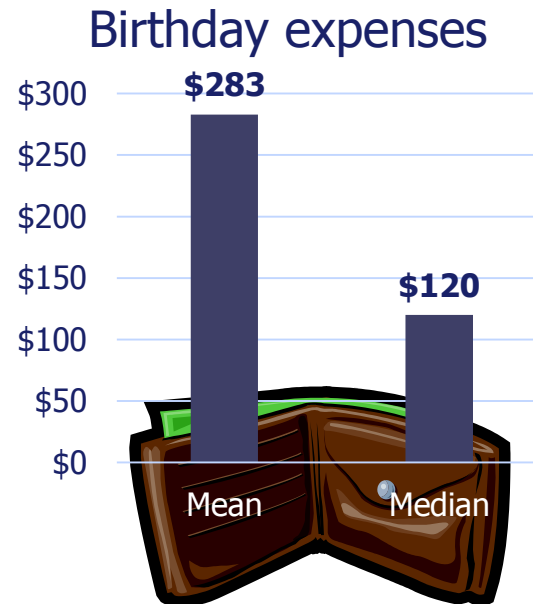
Findings:
2. Change in Job Events

- 12% of events (n=132)

Percent of Events with Expenses

- 6% DK
- 54% No Expense
- 40% Expense
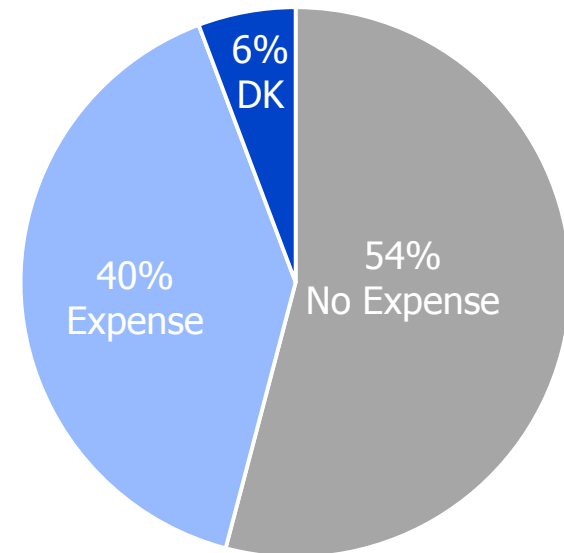
Findings:
2. Change in Job Events

- Those reporting a change in job event and providing non-zero dollar amount (first event, n=28)

Change in job expenses
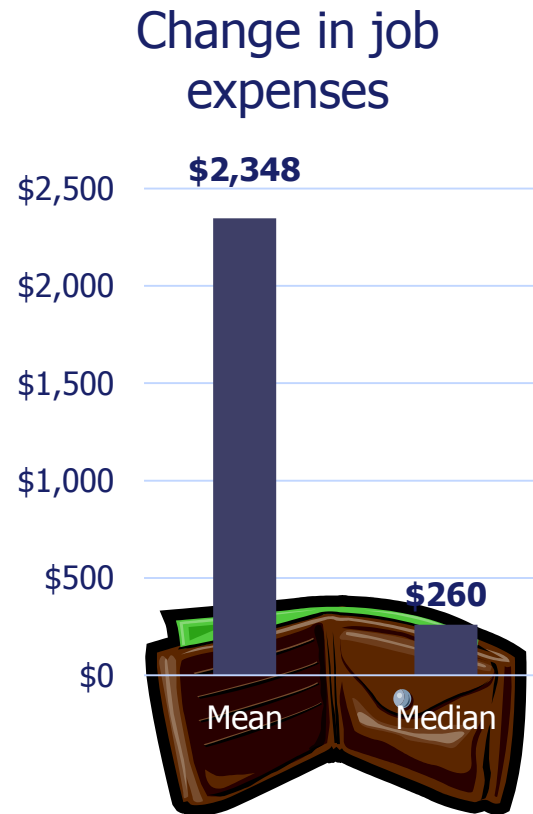
Findings:
3. Moving Events

- 8% of events (n=89)

Percent of Events with Expenses

7% DK

15% No Expense
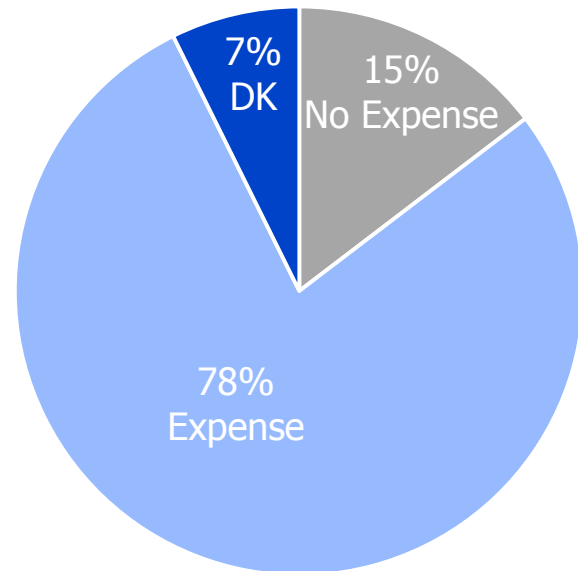
78% Expense

Findings: 3. Moving Events

- Those reporting a moving event and providing non-zero dollar amount (first event, n=42)

Moving expenses

	Mean	Median
	$1,248	$600
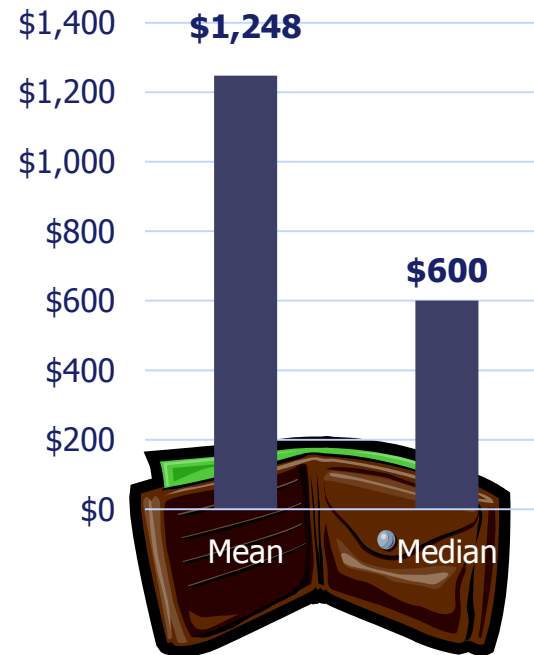
Findings:
Overall Event Expenses

- Aside from change in job, most events were expense events more frequently than not

- In terms of the magnitude of expenses, the most frequently-reported expense events (e.g., birthday, change in job) were not the ones associated with the largest expenditures

Findings:
Overall Event Expenses

(Non-Zero) Expenses Associated with 1st Event Reports (N=425)

Event Type	N	Percent	Mean	Median
Birthday	249	59%	$283	$120
Change in job	28	7%	$2,348	$260
Move	42	10%	$1,248	$600
Other	13	3%	$9,485	$550
Medical event	13	3%	$10,330	$600
Wedding	35	8%	$3,561	$700
Death	13	3%	$3,250	$600
Birth	9	2%	$2,231	$500
Graduation	14	3%	$384	$225
Anniversary	8	2%	$393	$83
Divorce/separation	1	0%	$4,000	$4,000
Total	425	100%		

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Findings:
Did Events Cue Reporting?

- Regressed CU event reports (expense events, events with no expenses, no events) on expenditures; controls for age, tenure, HH income, number of reported events.

- Did CUs with expense events report more in response to the standard interview questions than other CUs, suggesting expense event amounts had been previously incorporated into the survey questions?

Findings:
Did Events Cue Reporting?

	Coefficient	SE
Intercept	4.373***	(0.163)
Log(HH income)	0.442***	(0.015)
Age (reference person)	-0.003***	(0.006)
Household size	0.050***	(0.020)
Tenure (own)	0.155***	(0.001)
Expense event	0.118*	(0.055)
Event with no expense	-0.032	(0.056)
Event with unknown expense	-0.030	(0.079)
Number of events reported (0,1,2)	0.032	(0.043)

Model R^2=0.56

*$p<.05$; **$p<.01$; ***$p<0.001$

Findings:
Did Events Cue Reporting?

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Number of events reported (0,1,2)	0.032	(0.043)
Model R^2=0.56		

*$p<.05$; **$p<.01$; ***$p<0.001$

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Findings:
Did Events Cue Reporting?

- CUs with expense events reported significantly more in total expenditures (vs CUs w/ no events)
  - ▶ Suggests that some or all of their event-related expenses had been captured through the current interview questions
- CUs with no expenses associated with events did not report more in expenditures than those with no life events reported
- Found no significant association between how many events reported and total expenditures

Summary

- 28% of CUs reported at least 1 life event
- 64% of reported events involved expenses
- Most frequent events – 'birthdays,' 'change in job' (tended to have lower associated expenses)
- Some events did not have expenses involved
- Findings suggest CUs reporting expense events were not underreporting associated expenses at prior questions

Conclusions

- Findings encouraging: what respondents consider salient expense events in their recent past are not being overlooked when they respond to CEQ

- Personal events easier to recall than proxy events, yet less likely to be associated with underreported expenditures

- Use of life events may be more effective as a bounding technique than a cuing technique…

- In CE, events viewed as personally significant are distributed over time, limiting their use as a universal reference period for bounding

Contact Information

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