

Proportion of Life Events

Age Cohorts	Younger, Mid-age and Older
Surveys	All, except Older Survey 4
Derived Variable	Proplev
Definition	Proportion of life events that occurred for the individual
Statistical Form	Continuous (on range 0 to 1)
Source Items	
Index Number	
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Background

“Major stressful life events instruments ask respondents to report which of a list of events ... happened to them in a specific time line, usually the last year. The events on the list are supposed to be representative of the population of major stressful life events that occur in people’s lives. ... In general, the idea of life events instruments is that whatever major events do to us (e.g., require adaptation, induce negative affect and cognition), this accumulates as the number of events accumulate. The more events, the greater the stress.”⁽¹⁾

Researchers believe that major life events have an effect on an individual’s health. These life events are believed to cause increased stress, which in turn may have an effect on physical or mental health or both.

Source Items

“Because it is impossible and undesirable to develop lists that include all possible life events, Gohrenwend et al. (1978) offered two criteria to guide item sampling: (a) The objective occurrence or event should be of sufficient magnitude to bring about changes in the usual activities of most individuals who experience the event, and (b) both events that represent universal human experiences (e.g., marriage, births, illnesses) and events that vary with social and cultural settings should be included.”⁽²⁾

The overall items included in the life event question differ across both cohorts and surveys. Some items are common to all, however the researcher needs to be aware that the exact items were designed specifically for the population the survey was targeted at. As an example, all surveys for the mid-aged cohort contain the item “Going through menopause” whereas this item would not be found in the younger or older cohort. The number of items included in the life event question also differs, however the *proplev* variable has been standardised such that it is comparable across both cohorts and surveys.

Excluded Items

Note: Three items included in all life event questions in the ALSWH, are for the sole purpose of face validity. These items should be excluded from any analysis, and are subsequently excluded from the calculation of ‘*proplev*’. They are “major personal illness”, “major personal injury”, and “major surgery”.

Response Format

The format for responding to each item on the life event question differs across surveys in the ALSWH. The possible formats for the response are outlined below:

- Requests that the respondent reply ‘yes/no’ to the life event having occurred ‘within the last 12 months’.^a
- Respondent given the option to reply ‘yes’ (‘no’ is considered the default here, i.e. for a non-response) to the life event having occurred ‘within the last 12 months’ and/or ‘more than 12 months ago’.^b
- Respondent given the option to reply ‘yes’ to the life event having occurred ‘within the last 12 months’ and/or ‘1-2 years ago’ and/or ‘more than 2 years ago’.^c
- Respondent given the option to reply ‘yes’ to the life event having occurred ‘within the last 3 years’.^d

For all ALSWH data sets, the *proplev* variable is calculated for life events occurring ‘within the last 12 months’, with the exception of the Older Surveys 2 and 3 for which the *proplev* variable is calculated for life events occurring ‘within the last 3 years’.

Coding Issues

Note: Researchers constructing a life event score manually (i.e. not using the already constructed *proplev* variable in the data set) must be aware that due to the differing response formats, the coding for a “No” response is different at Survey 1. A response of ‘No’ is coded with a value of 2 in Survey 1, however for later Surveys “No” is coded with a value of 0 (refer to SAS Code below).

^a Y1, M1, O1

^b Y2-Y4, M3-M4

^c M2

^d O2-O4

SAS Code

An example of the SAS code for constructing the *proplev* variable is given below. The example refers to the Mid-age Survey 4.

```
/******  
***  
*** Create a life events variable which is a proportion ***  
*** of possible life events, omitting 'major illness', ***  
*** 'major injury' and 'major surgery'. ***  
***  
*** numlev is number of life events, after exclusions. ***  
*** This value will differ across cohorts and surveys. ***  
***  
*** m4proplev is created, rounded to 4 decimal places. ***  
*** Set to missing for short surveys (only in Mid 2). ***  
***  
*****/  
  
numlev = 30 ;  
survey = m4survey ;  
  
/**** array without items a,b,c ****/  
array le(numlev) m4q53Ad m4q53Ae m4q53Af m4q53Ag m4q53Ah  
m4q53Ai m4q53Aj m4q53Ak m4q53Al m4q53Am  
m4q53An m4q53Ao m4q53Ap m4q53Aq m4q53Ar  
m4q53As m4q53At m4q53Au m4q53Av m4q53Aw  
m4q53Ax m4q53Ay m4q53Az m4q53Aaa m4q53Abb  
m4q53Acc m4q53Add m4q53Aee m4q53Aff m4q53Agg;  
  
if survey=1 then do ;  
sumle = sum(of le{*}) ;  
m4proplev = round(sumle/numlev,.0001) ;  
end ;  
else if survey=2 then m4proplev=. ;
```

SAS Code

An example of the SAS code for constructing the *proplev* variable is given below. The first part of the example refers to the Young Survey 1, whilst the second part of the example refers to Mid-age Survey 2.

```

/*****
***
*** Create a life events variable which is a proportion ***
*** of possible life events, omitting 'major illness', ***
*** 'major injury' and 'major surgery'. ***
***
*** y1proplev is created, rounded to 4 decimal places. ***
*** Set to missing for short surveys (only in Mid 2). ***
***
*****/

/**** Survey 1 - requires recoding of "No" response ****/

array y1q29(*) y1q29d--y1q29ii;
do i = 1 to dim(y1q29);
  if y1q29(i) = 2 then y1q29(i) = 0;
end;

survey = y1survey;
if survey = 1 then do;
  sumle = sum(of y1q29(*));
  y1proplev = round(sumle/dim(y1q29),.0001);
end;
else if survey = 2 then y1proplev = . ;

/**** Survey 2 onwards ****/

array m2q32(*) m2q32Ad--m2q32Abb;

survey = m2survey;
if survey = 1 then do;
  sumle = sum(of m2q32(*));
  m2proplev = round(sumle/dim(m2q32),.0001);
end;
else if survey = 2 then m2proplev = . ;
```

References

1. Cohen S. Measures of Psychological Stress. 2000.
URL: <http://www.macses.ucsf.edu/Research/Psychosocial/notebook/stress>
2. Norbeck JS. Modification of Life Event Questionnaires for Use with Female Respondents. *Research in Nursing and Health* 1984; 7:61-71.