
name: <unnamed>
log: D:\Jason\workshop\sipp\2023\sipp_2023.log
log type: text
opened on: 10 Apr 2023, 11:34:18

```
.  
. *****  
. * look at the data  
. *****  
. clear  
  
. clear matrix  
  
. clear mata  
  
. set maxvar 10000  
  
. use "D:\Jason\workshop\sipp\2023\pu2021.dta", clear  
  
. rename *, lower  
  
. sort spanel swave monthcode ssuid pnum  
  
. merge 1:1 spanel swave monthcode ssuid pnum using D:\Jason\workshop\sipp\2023\data\rw2021.dta
```

```
Result                # of obs.  
-----  
not matched           1,600  
  from master         1,600  (_merge==1)  
  from using           0     (_merge==2)  
  
matched               669,078  (_merge==3)  
-----
```

```
.  
. *des ssuid pnum spanel swave monthcode  
. *  
. *****  
. * check out the data  
. *****  
. tab2 spanel swave, mis
```

-> tabulation of spanel by swave

Panel year	Wave number of interview			Total
	1	2	4	
2018	0	0	356,883	356,883
2020	0	139,198	0	139,198
2021	174,597	0	0	174,597
Total	174,597	139,198	356,883	670,678

```
.  
. *****  
. * Understand the data structure  
. *****
```

```
. des ssuid pnum spanel swave monthcode
```

variable name	storage type	display format	value label	variable label
ssuid	str14	%14s		Sample unit identifier. This identifier is created by scrambling together PSU, S
pnum	int	%12.0g		Person number
spanel	int	%12.0g		Panel year
swave	byte	%12.0g		Wave number of interview
monthcode	byte	%12.0g		Value of reference month

```
.
.
. *****
. * two ways of sorting the data
. *****
.
. *****
. * For examining changes at the individual level
. *****
. sort ssuid pnum spanel swave monthcode
```

```
. list ssuid pnum spanel swave monthcode shhadid if spanel ==2018, sepby (spanel swave ssuid)
```

670607.	91092598868818	101	2018	4	1	011
670608.	91092598868818	101	2018	4	2	011
670609.	91092598868818	101	2018	4	3	011
670610.	91092598868818	101	2018	4	4	011
670611.	91092598868818	101	2018	4	5	011
670612.	91092598868818	101	2018	4	6	011
670613.	91092598868818	101	2018	4	7	011
670614.	91092598868818	101	2018	4	8	011
670615.	91092598868818	101	2018	4	9	011
670616.	91092598868818	101	2018	4	10	011
670617.	91092598868818	101	2018	4	11	011
670618.	91092598868818	101	2018	4	12	011
670619.	91092598868818	102	2018	4	1	011
670620.	91092598868818	102	2018	4	2	011
670621.	91092598868818	102	2018	4	3	011
670622.	91092598868818	102	2018	4	4	011
670623.	91092598868818	102	2018	4	5	011
670624.	91092598868818	102	2018	4	6	011
670625.	91092598868818	102	2018	4	7	011
670626.	91092598868818	102	2018	4	8	011
670627.	91092598868818	102	2018	4	9	011
670628.	91092598868818	102	2018	4	10	011
670629.	91092598868818	102	2018	4	11	011
670630.	91092598868818	102	2018	4	12	011
670631.	91092598868818	103	2018	4	1	011
670632.	91092598868818	103	2018	4	2	011
670633.	91092598868818	103	2018	4	3	011
670634.	91092598868818	103	2018	4	4	011
670635.	91092598868818	103	2018	4	5	011
670636.	91092598868818	103	2018	4	6	011
670637.	91092598868818	103	2018	4	7	011
670638.	91092598868818	103	2018	4	8	011
670639.	91092598868818	103	2018	4	9	011
670640.	91092598868818	103	2018	4	10	011
670641.	91092598868818	103	2018	4	11	011
670642.	91092598868818	103	2018	4	12	011

670643.	|	91092598868818	105	2018	4	1	011	|
670644.	|	91092598868818	105	2018	4	2	011	|
670645.	|	91092598868818	105	2018	4	3	011	|
670646.	|	91092598868818	105	2018	4	4	011	|
670647.	|	91092598868818	105	2018	4	5	011	|
670648.	|	91092598868818	105	2018	4	6	011	|
670649.	|	91092598868818	105	2018	4	7	011	|
670650.	|	91092598868818	105	2018	4	8	011	|
670651.	|	91092598868818	105	2018	4	9	011	|
670652.	|	91092598868818	105	2018	4	10	011	|
670653.	|	91092598868818	105	2018	4	11	011	|
670654.	|	91092598868818	105	2018	4	12	011	|
670655.	|	91092598868818	107	2018	4	1	011	|
670656.	|	91092598868818	107	2018	4	2	011	|
670657.	|	91092598868818	107	2018	4	3	011	|
670658.	|	91092598868818	107	2018	4	4	011	|
670659.	|	91092598868818	107	2018	4	5	011	|
670660.	|	91092598868818	107	2018	4	6	011	|
670661.	|	91092598868818	107	2018	4	7	011	|
670662.	|	91092598868818	107	2018	4	8	011	|
670663.	|	91092598868818	107	2018	4	9	011	|
670664.	|	91092598868818	107	2018	4	10	011	|
670665.	|	91092598868818	107	2018	4	11	011	|
670666.	|	91092598868818	107	2018	4	12	011	|
670667.	|	91092598868818	108	2018	4	1	011	|
670668.	|	91092598868818	108	2018	4	2	011	|
670669.	|	91092598868818	108	2018	4	3	011	|
670670.	|	91092598868818	108	2018	4	4	011	|
670671.	|	91092598868818	108	2018	4	5	011	|
670672.	|	91092598868818	108	2018	4	6	011	|
670673.	|	91092598868818	108	2018	4	7	011	|
670674.	|	91092598868818	108	2018	4	8	011	|
670675.	|	91092598868818	108	2018	4	9	011	|
670676.	|	91092598868818	108	2018	4	10	011	|
670677.	|	91092598868818	108	2018	4	11	011	|
670678.	|	91092598868818	108	2018	4	12	011	|

+-----+-----+

. list ssuid pnum spanel swave monthcode shhadid if ssuid == "91092598868818", sepby (ssuid pnum)

+-----+-----+								
	|	ssuid	pnum	spanel	swave	monthc~e	shhadid	|
+-----+-----+								
670607.	|	91092598868818	101	2018	4	1	011	|
670608.	|	91092598868818	101	2018	4	2	011	|
670609.	|	91092598868818	101	2018	4	3	011	|
670610.	|	91092598868818	101	2018	4	4	011	|
670611.	|	91092598868818	101	2018	4	5	011	|
670612.	|	91092598868818	101	2018	4	6	011	|
670613.	|	91092598868818	101	2018	4	7	011	|
670614.	|	91092598868818	101	2018	4	8	011	|
670615.	|	91092598868818	101	2018	4	9	011	|
670616.	|	91092598868818	101	2018	4	10	011	|
670617.	|	91092598868818	101	2018	4	11	011	|
670618.	|	91092598868818	101	2018	4	12	011	|
+-----+-----+								
670619.	|	91092598868818	102	2018	4	1	011	|
670620.	|	91092598868818	102	2018	4	2	011	|
670621.	|	91092598868818	102	2018	4	3	011	|
670622.	|	91092598868818	102	2018	4	4	011	|
670623.	|	91092598868818	102	2018	4	5	011	|

670624.	|	91092598868818	102	2018	4	6	011	|
670625.	|	91092598868818	102	2018	4	7	011	|
670626.	|	91092598868818	102	2018	4	8	011	|
670627.	|	91092598868818	102	2018	4	9	011	|
670628.	|	91092598868818	102	2018	4	10	011	|
670629.	|	91092598868818	102	2018	4	11	011	|
670630.	|	91092598868818	102	2018	4	12	011	|

670631.	|	91092598868818	103	2018	4	1	011	|
670632.	|	91092598868818	103	2018	4	2	011	|
670633.	|	91092598868818	103	2018	4	3	011	|
670634.	|	91092598868818	103	2018	4	4	011	|
670635.	|	91092598868818	103	2018	4	5	011	|
670636.	|	91092598868818	103	2018	4	6	011	|
670637.	|	91092598868818	103	2018	4	7	011	|
670638.	|	91092598868818	103	2018	4	8	011	|
670639.	|	91092598868818	103	2018	4	9	011	|
670640.	|	91092598868818	103	2018	4	10	011	|
670641.	|	91092598868818	103	2018	4	11	011	|
670642.	|	91092598868818	103	2018	4	12	011	|

670643.	|	91092598868818	105	2018	4	1	011	|
670644.	|	91092598868818	105	2018	4	2	011	|
670645.	|	91092598868818	105	2018	4	3	011	|
670646.	|	91092598868818	105	2018	4	4	011	|
670647.	|	91092598868818	105	2018	4	5	011	|
670648.	|	91092598868818	105	2018	4	6	011	|
670649.	|	91092598868818	105	2018	4	7	011	|
670650.	|	91092598868818	105	2018	4	8	011	|
670651.	|	91092598868818	105	2018	4	9	011	|
670652.	|	91092598868818	105	2018	4	10	011	|
670653.	|	91092598868818	105	2018	4	11	011	|
670654.	|	91092598868818	105	2018	4	12	011	|

670655.	|	91092598868818	107	2018	4	1	011	|
670656.	|	91092598868818	107	2018	4	2	011	|
670657.	|	91092598868818	107	2018	4	3	011	|
670658.	|	91092598868818	107	2018	4	4	011	|
670659.	|	91092598868818	107	2018	4	5	011	|
670660.	|	91092598868818	107	2018	4	6	011	|
670661.	|	91092598868818	107	2018	4	7	011	|
670662.	|	91092598868818	107	2018	4	8	011	|
670663.	|	91092598868818	107	2018	4	9	011	|
670664.	|	91092598868818	107	2018	4	10	011	|
670665.	|	91092598868818	107	2018	4	11	011	|
670666.	|	91092598868818	107	2018	4	12	011	|

670667.	|	91092598868818	108	2018	4	1	011	|
670668.	|	91092598868818	108	2018	4	2	011	|
670669.	|	91092598868818	108	2018	4	3	011	|
670670.	|	91092598868818	108	2018	4	4	011	|
670671.	|	91092598868818	108	2018	4	5	011	|
670672.	|	91092598868818	108	2018	4	6	011	|
670673.	|	91092598868818	108	2018	4	7	011	|
670674.	|	91092598868818	108	2018	4	8	011	|
670675.	|	91092598868818	108	2018	4	9	011	|
670676.	|	91092598868818	108	2018	4	10	011	|
670677.	|	91092598868818	108	2018	4	11	011	|
670678.	|	91092598868818	108	2018	4	12	011	|

```
. * For examining changes at the family level  
. *****  
.   
. sort spanel swave monthcode ssuid pnum  
  
. list spanel swave monthcode ssuid pnum if ssuid == "91092598868818", sepby (spanel swave monthcode ssuid)
```

	spanel	swave	monthcode	ssuid	pnum
30253.	2018	4	1	91092598868818	101
30254.	2018	4	1	91092598868818	102
30255.	2018	4	1	91092598868818	103
30256.	2018	4	1	91092598868818	105
30257.	2018	4	1	91092598868818	107
30258.	2018	4	1	91092598868818	108
60492.	2018	4	2	91092598868818	101
60493.	2018	4	2	91092598868818	102
60494.	2018	4	2	91092598868818	103
60495.	2018	4	2	91092598868818	105
60496.	2018	4	2	91092598868818	107
60497.	2018	4	2	91092598868818	108
90608.	2018	4	3	91092598868818	101
90609.	2018	4	3	91092598868818	102
90610.	2018	4	3	91092598868818	103
90611.	2018	4	3	91092598868818	105
90612.	2018	4	3	91092598868818	107
90613.	2018	4	3	91092598868818	108
120571.	2018	4	4	91092598868818	101
120572.	2018	4	4	91092598868818	102
120573.	2018	4	4	91092598868818	103
120574.	2018	4	4	91092598868818	105
120575.	2018	4	4	91092598868818	107
120576.	2018	4	4	91092598868818	108
150378.	2018	4	5	91092598868818	101
150379.	2018	4	5	91092598868818	102
150380.	2018	4	5	91092598868818	103
150381.	2018	4	5	91092598868818	105
150382.	2018	4	5	91092598868818	107
150383.	2018	4	5	91092598868818	108
180040.	2018	4	6	91092598868818	101
180041.	2018	4	6	91092598868818	102
180042.	2018	4	6	91092598868818	103
180043.	2018	4	6	91092598868818	105
180044.	2018	4	6	91092598868818	107
180045.	2018	4	6	91092598868818	108
209654.	2018	4	7	91092598868818	101
209655.	2018	4	7	91092598868818	102
209656.	2018	4	7	91092598868818	103
209657.	2018	4	7	91092598868818	105
209658.	2018	4	7	91092598868818	107
209659.	2018	4	7	91092598868818	108
239202.	2018	4	8	91092598868818	101
239203.	2018	4	8	91092598868818	102
239204.	2018	4	8	91092598868818	103
239205.	2018	4	8	91092598868818	105

239206.	2018	4	8	91092598868818	107
239207.	2018	4	8	91092598868818	108

268699.	2018	4	9	91092598868818	101
268700.	2018	4	9	91092598868818	102
268701.	2018	4	9	91092598868818	103
268702.	2018	4	9	91092598868818	105
268703.	2018	4	9	91092598868818	107
268704.	2018	4	9	91092598868818	108

298140.	2018	4	10	91092598868818	101
298141.	2018	4	10	91092598868818	102
298142.	2018	4	10	91092598868818	103
298143.	2018	4	10	91092598868818	105
298144.	2018	4	10	91092598868818	107
298145.	2018	4	10	91092598868818	108

327539.	2018	4	11	91092598868818	101
327540.	2018	4	11	91092598868818	102
327541.	2018	4	11	91092598868818	103
327542.	2018	4	11	91092598868818	105
327543.	2018	4	11	91092598868818	107
327544.	2018	4	11	91092598868818	108

356878.	2018	4	12	91092598868818	101
356879.	2018	4	12	91092598868818	102
356880.	2018	4	12	91092598868818	103
356881.	2018	4	12	91092598868818	105
356882.	2018	4	12	91092598868818	107
356883.	2018	4	12	91092598868818	108

```

.
.
. *****
. * Relationship data
. *****
.
.
. *****
. *Use the pointers of spouse, cohabiting partners, parents and child
. *****
.
. des erelrpe epnspouse epncohab epnpar1 epnpar2 epar1typ epar2typ rpnchild* rchtyp*
    
```

variable name	storage type	display format	value label	variable label
erelrpe	byte	%12.0g		Household relationship (detailed categories)
epnspouse	int	%12.0g		Person number of spouse
epncohab	int	%12.0g		Person number of unmarried partner
epnpar1	int	%12.0g		Person number of parent 1
epnpar2	int	%12.0g		Person number of parent 2
epar1typ	byte	%12.0g		Type of relationship to parent 1
epar2typ	byte	%12.0g		Type of relationship to parent 2
rpnchild1	int	%12.0g		Person number of child 1
rpnchild2	int	%12.0g		Person number of child 2
rpnchild3	int	%12.0g		Person number of child 3
rpnchild4	int	%12.0g		Person number of child 4
rpnchild5	int	%12.0g		Person number of child 5
rpnchild6	int	%12.0g		Person number of child 6
rpnchild7	int	%12.0g		Person number of child 7
rpnchild8	int	%12.0g		Person number of child 8

```

rpnchild9      int      %12.0g      Person number of child 9
rpnchild10     int      %12.0g      Person number of child 10
rpnchild11     byte     %12.0g      Suppressed
rpnchild12     byte     %12.0g      Suppressed
rpnchild13     byte     %12.0g      Suppressed
rpnchild14     byte     %12.0g      Suppressed
rpnchild15     byte     %12.0g      Suppressed
rpnchild16     byte     %12.0g      Suppressed
rpnchild17     byte     %12.0g      Suppressed
rpnchild18     byte     %12.0g      Suppressed
rpnchild19     byte     %12.0g      Suppressed
rchtyp1        byte     %12.0g      Way child is related to respondent
rchtyp2        byte     %12.0g      Way child is related to respondent
rchtyp3        byte     %12.0g      Way child is related to respondent
rchtyp4        byte     %12.0g      Way child is related to respondent
rchtyp5        byte     %12.0g      Way child is related to respondent
rchtyp6        byte     %12.0g      Way child is related to respondent
rchtyp7        byte     %12.0g      Way child is related to respondent
rchtyp8        byte     %12.0g      Way child is related to respondent
rchtyp9        byte     %12.0g      Way child is related to respondent
rchtyp10       byte     %12.0g      Way child is related to respondent
rchtyp11       byte     %12.0g      Suppressed
rchtyp12       byte     %12.0g      Suppressed
rchtyp13       byte     %12.0g      Suppressed
rchtyp14       byte     %12.0g      Suppressed
rchtyp15       byte     %12.0g      Suppressed
rchtyp16       byte     %12.0g      Suppressed
rchtyp17       byte     %12.0g      Suppressed
rchtyp18       byte     %12.0g      Suppressed
rchtyp19       byte     %12.0g      Suppressed
    
```

```

.
.
. list spanel swave monthcode ssuid pnum erelrpe epnspouse epncohab epnpar1 epnpar2 epar1typ epar2typ rpnchild1 ///
> rpnchild2 rchtyp1 rchtyp2 if ssuid =="91092598868818" & monthcode ==12
    
```

	spanel	swave	monthcode	ssuid	pnum	erelrpe	epnspouse	epncohab	epnpar1	epnpar2	epar1typ	epar2typ	rpnchild1	rpnchild2
356878.	2018	4	12	91092598868818	101	3	102	.	.	.	.	.	103	105
356879.	2018	4	12	91092598868818	102	1	101	.	.	.	.	.	103	105
356880.	2018	4	12	91092598868818	103	7	.	.	102	101	1	1	108	.
356881.	2018	4	12	91092598868818	105	7	.	.	102	101	1	1	.	.
356882.	2018	4	12	91092598868818	107	12	.	.	.	.	.	.	.	.
356883.	2018	4	12	91092598868818	108	8	.	.	103	.	1	.	.	.

```

.
.
. *****
. * Use the relation matrixs
. *****
.
. des rrel1* rrel_pnum1*
    
```

variable name	storage type	display format	value label	variable label
rrel1	byte	%12.0g		Monthly household relationship to person
rrel10	byte	%12.0g		Monthly household relationship to person
rrel11	byte	%12.0g		Monthly household relationship to person
rrel12	byte	%12.0g		Monthly household relationship to person

```
rrel13      byte    %12.0g      Monthly household relationship to person
rrel14      byte    %12.0g      Monthly household relationship to person
rrel15      byte    %12.0g      Monthly household relationship to person
rrel16      byte    %12.0g      Monthly household relationship to person
rrel17      byte    %12.0g      Monthly household relationship to person
rrel18      byte    %12.0g      Suppressed
rrel19      byte    %12.0g      Suppressed
rrel_pnum1  int     %12.0g      Person number for monthly relationship
rrel_pnum10 int     %12.0g      Person number for monthly relationship
rrel_pnum11 int     %12.0g      Person number for monthly relationship
rrel_pnum12 int     %12.0g      Person number for monthly relationship
rrel_pnum13 int     %12.0g      Person number for monthly relationship
rrel_pnum14 int     %12.0g      Person number for monthly relationship
rrel_pnum15 byte    %12.0g      Person number for monthly relationship
rrel_pnum16 byte    %12.0g      Person number for monthly relationship
rrel_pnum17 byte    %12.0g      Person number for monthly relationship
rrel_pnum18 byte    %12.0g      Suppressed
rrel_pnum19 byte    %12.0g      Suppressed
```

```
. list spanel swave monthcode ssuid pnum rrel1 rrel2 rrel3 rrel4 rrel5 rrel6 rrel7 rrel_pnum1 rrel_pnum2 rrel_pnum3 ///
> rrel_pnum4 rrel_pnum5 rrel_pnum6 rrel_pnum7 if ssuid == "91092598868818" & monthcode == 12, sepby(spanel swave monthcode ssuid)
```

	spanel	swave	monthcode	ssuid	pnum	rrel1	rrel2	rrel3	rrel4	rrel5	rrel6	rrel7	rrel_pnum1	rrel_pnum2	rrel_pnum3	rrel_pnum4
356878.	2018	4	12	91092598868818	101	99	1	5	5	13	8	.	101	102	103	1
356879.	2018	4	12	91092598868818	102	1	99	5	5	15	8	.	101	102	103	1
356880.	2018	4	12	91092598868818	103	5	5	99	9	16	5	.	101	102	103	1
356881.	2018	4	12	91092598868818	105	4	5	9	99	16	16	.	101	102	103	1
356882.	2018	4	12	91092598868818	107	13	15	16	16	99	17	.	101	102	103	1
356883.	2018	4	12	91092598868818	108	8	8	5	16	17	99	.	101	102	103	1

```
.
.
. *****
. * weighting the results
. *****
.
.
. tab1 ems if spanel ==2021 [iweight=wpfinwgt]
```

```
-> tabulation of ems if spanel ==2021
```

Is ... |	Freq.	Percent	Cum.
currently |			
married, |			
widowed, |			
divorced, |			
separated, |			
or never |			
married? |			
1 |	294,719,376	46.42	46.42
2 |	8,857,437.2	1.40	47.82
3 |	30255148.8	4.77	52.58
4 |	63922548.4	10.07	62.65
5 |	9,769,897	1.54	64.19
6 |	227,362,983	35.81	100.00
Total |	634,887,390	100.00	

```
. tab1 ems if monthcode==21 [iweight=wpfinwgt]
```



```
-----+-----
1      | (base outcome)
-----+-----
2      |
   tage | -.0178202  .0027081  -6.58  0.000  -.0231549  -.0124854
   _cons | -2.518891  .1498581  -16.81  0.000  -2.814102  -2.223679
-----+-----
3      |
   tage |  .105983   .0022936  46.21  0.000   .1014646   .1105013
   _cons | -8.937582  .1681616  -53.15  0.000  -9.268851  -8.606314
-----+-----
4      |
   tage |  .0168322  .0009975  16.87  0.000   .0148672   .0187971
   _cons | -2.41655   .0623497  -38.76  0.000  -2.539376  -2.293725
-----+-----
5      |
   tage | -.0195853  .0026916  -7.28  0.000  -.0248876  -.014283
   _cons | -2.426077  .1429097  -16.98  0.000  -2.707601  -2.144554
-----+-----
6      |
   tage | -.0936204  .0012553  -74.58  0.000  -.0960932  -.0911476
   _cons |  3.47607   .0499501   69.59  0.000   3.377671   3.574469
-----+-----
```

```
. log close
   name: <unnamed>
   log:  D:\Jason\workshop\sipp\2023\sipp_2023.log
 log type: text
closed on: 10 Apr 2023, 11:49:28
-----
```