```
    __   __   __   __   __(R)
   /_   /   _/  /  __/
  __/  /  /__/ /  /__/
      Statistics/Data analysis
```

1 . do "C:\Users\HABIBA~1\AppData\Local\Temp\STD1e6c_000000.tmp"

2 . *Habiba Aziz
3 . *Data-755
4 . *Final Project
5 .
6 . set logtype text, perm
   (**set logtype** preference recorded)

7 .
8 . *pointing to my directory
9 . cd   "c:\users\habiba aziz\desktop\data-755"
   c:\users\habiba aziz\desktop\data-755

10 . use NHIS_rev_11-2-2020_EJ, clear

11 .
12 . svyset psu,[pweight=sampweight] strata(strata) singleunit(scaled)

        pweight: **sampweight**
            VCE: **linearized**
    Single unit: **scaled**
        Strata 1: **strata**
           SU 1: **psu**
          FPC 1: <zero>

13 . keep if astatflg==1 | astatflg==6
   (1,390,262 observations deleted)

14 . *sex
15 . tab sex

Sex	Freq.	Percent	Cum.
Male	296,469	44.14	44.14
Female	375,249	55.86	100.00
Total	671,718	100.00	

16 .
17 . *year
18 . tab year

Survey year	Freq.	Percent	Cum.
1997	36,117	5.38	5.38
1998	32,440	4.83	10.21
1999	30,802	4.59	14.79
2000	32,376	4.82	19.61
2001	33,328	4.96	24.57
2002	31,046	4.62	29.20
2003	30,855	4.59	33.79
2004	31,333	4.66	38.45
2005	31,430	4.68	43.13
2006	24,276	3.61	46.75
2007	23,393	3.48	50.23
2008	21,782	3.24	53.47
2009	27,731	4.13	57.60
2010	27,157	4.04	61.64
2011	33,014	4.91	66.56
2012	34,525	5.14	71.70
2013	34,557	5.14	76.84
2014	36,697	5.46	82.31
2015	33,672	5.01	87.32
2016	33,028	4.92	92.23
2017	26,742	3.98	96.22

2018	25,417	3.78	100.00
Total	671,718	100.00	

19 .
20 . *sexorien Sexual orientation
21 . tab sexorien

Sexual orientation	Freq.	Percent	Cum.
Lesbian or gay	3,176	1.67	1.67
Straight, that is, not lesbian or gay	178,100	93.68	95.35
Bisexual	1,744	0.92	96.27
Something else	636	0.33	96.60
I don't know the answer	1,259	0.66	97.27
Unknown-refused	1,133	0.60	97.86
Unknown-not ascertained	4,065	2.14	100.00
Total	190,113	100.00	

22 . tabulate year sexorien , missing

Survey year	Sexual orientation								Total
	Lesbian o	Straight,	Bisexual	Something	I don't k	Unknown-r	Unknown-n	.	
1997	0	0	0	0	0	0	0	36,117	36,117
1998	0	0	0	0	0	0	0	32,440	32,440
1999	0	0	0	0	0	0	0	30,802	30,802
2000	0	0	0	0	0	0	0	32,376	32,376
2001	0	0	0	0	0	0	0	33,328	33,328
2002	0	0	0	0	0	0	0	31,046	31,046
2003	0	0	0	0	0	0	0	30,855	30,855
2004	0	0	0	0	0	0	0	31,333	31,333
2005	0	0	0	0	0	0	0	31,430	31,430
2006	0	0	0	0	0	0	0	24,276	24,276
2007	0	0	0	0	0	0	0	23,393	23,393
2008	0	0	0	0	0	0	0	21,782	21,782
2009	0	0	0	0	0	0	0	27,731	27,731
2010	0	0	0	0	0	0	0	27,157	27,157
2011	0	0	0	0	0	0	0	33,014	33,014
2012	0	0	0	0	0	0	0	34,525	34,525
2013	571	32,546	233	56	155	223	773	0	34,557
2014	578	34,606	282	88	155	225	763	0	36,697
2015	569	31,430	276	121	232	166	878	0	33,672
2016	526	30,952	324	124	256	194	652	0	33,028
2017	476	24,826	333	131	221	160	595	0	26,742
2018	456	23,740	296	116	240	165	404	0	25,417
Total	3,176	178,100	1,744	636	1,259	1,133	4,065	481,605	671,718

23 .
24 . *droping the years in which sexorien data is missing
25 . drop if year < 2012
   (447,080 observations deleted)

```
26 .
27 . *missing values of sex orientation
28 . tabulate sexorien, missing
```

Sexual orientation	Freq.	Percent	Cum.
Lesbian or gay	3,176	1.41	1.41
Straight, that is, not lesbian or gay	178,100	79.28	80.70
Bisexual	1,744	0.78	81.47
Something else	636	0.28	81.76
I don't know the answer	1,259	0.56	82.32
Unknown-refused	1,133	0.50	82.82
Unknown-not ascertained	4,065	1.81	84.63
.	34,525	15.37	100.00
Total	224,638	100.00	

```
29 . tabulate sexorien, missing nolabel
```

Sexual orientation	Freq.	Percent	Cum.
1	3,176	1.41	1.41
2	178,100	79.28	80.70
3	1,744	0.78	81.47
4	636	0.28	81.76
5	1,259	0.56	82.32
7	1,133	0.50	82.82
8	4,065	1.81	84.63
.	34,525	15.37	100.00
Total	224,638	100.00	

```
30 . *RECODE as MISSING the NIU, Refused, Not Ascertained responses
31 . recode sexorien (0=.) (7/8=.)
   (sexorien: 5198 changes made)

32 .
33 . *CHECK resulting sexual orientation frequency distribution
34 . tabulate sexorien, missing
```

Sexual orientation	Freq.	Percent	Cum.
Lesbian or gay	3,176	1.41	1.41
Straight, that is, not lesbian or gay	178,100	79.28	80.70
Bisexual	1,744	0.78	81.47
Something else	636	0.28	81.76
I don't know the answer	1,259	0.56	82.32
.	39,723	17.68	100.00
Total	224,638	100.00	

```
35 .
36 .  *ANALYSIS #1: Variation in Orientations by Gender (sex)
37 . tab sexorien sex, col chi
```

Key
frequency
column percentage

| | Sex | | |
Sexual orientation	Male	Female	Total
Lesbian or gay	1,752 2.10	1,424 1.40	3,176 1.72
Straight, that is, no	80,191 96.30	97,909 96.33	178,100 96.31
Bisexual	509 0.61	1,235 1.22	1,744 0.94
Something else	276 0.33	360 0.35	636 0.34
I don't know the answ	547 0.66	712 0.70	1,259 0.68
Total	83,275 100.00	101,640 100.00	184,915 100.00

Pearson chi2(**4**) = **310.5897**   Pr = **0.000**

38 . by sex, sort : tabulate sexorien sex, cchi2 chi2 column

-> sex = Male

Key
frequency *chi2 contribution* *column percentage*

| | Sex | |
Sexual orientation	Male	Total
Lesbian or gay	1,752 0.0 2.10	1,752 0.0 2.10
Straight, that is, no	80,191 0.0 96.30	80,191 0.0 96.30
Bisexual	509 0.0 0.61	509 0.0 0.61
Something else	276 0.0 0.33	276 0.0 0.33
I don't know the answ	547 0.0 0.66	547 0.0 0.66
Total	83,275 0.0 100.00	83,275 0.0 100.00

-> sex = Female

```
┌─────────────────────┐
│ Key                 │
├─────────────────────┤
│   frequency         │
│ chi2 contribution   │
│ column percentage   │
└─────────────────────┘
```

Sexual orientation	Sex Female	Total
Lesbian or gay	1,424	1,424
	0.0	0.0
	1.40	1.40
Straight, that is, no	97,909	97,909
	0.0	0.0
	96.33	96.33
Bisexual	1,235	1,235
	0.0	0.0
	1.22	1.22
Something else	360	360
	0.0	0.0
	0.35	0.35
I don't know the answ	712	712
	0.0	0.0
	0.70	0.70
Total	101,640	101,640
	0.0	0.0
	100.00	100.00

```
39 .
40 . *region
41 . tab region
```

Region of residence	Freq.	Percent	Cum.
Northeast	36,999	16.47	16.47
North Central/Midwest	48,818	21.73	38.20
South	80,550	35.86	74.06
West	58,271	25.94	100.00
Total	224,638	100.00	

```
42 .
43 . *age
44 . tab age
```

Age	Freq.	Percent	Cum.
18	2,258	1.01	1.01
19	2,589	1.15	2.16
20	2,750	1.22	3.38
21	2,938	1.31	4.69
22	3,093	1.38	6.07
23	3,195	1.42	7.49
24	3,335	1.48	8.97
25	3,564	1.59	10.56
26	3,588	1.60	12.16
27	3,821	1.70	13.86
28	3,821	1.70	15.56
29	3,743	1.67	17.23

30	3,937	1.75	18.98
31	3,779	1.68	20.66
32	3,822	1.70	22.36
33	3,900	1.74	24.10
34	3,805	1.69	25.79
35	3,787	1.69	27.48
36	3,636	1.62	29.10
37	3,549	1.58	30.68
38	3,577	1.59	32.27
39	3,389	1.51	33.78
40	3,630	1.62	35.39
41	3,466	1.54	36.94
42	3,425	1.52	38.46
43	3,411	1.52	39.98
44	3,440	1.53	41.51
45	3,543	1.58	43.09
46	3,482	1.55	44.64
47	3,504	1.56	46.20
48	3,499	1.56	47.76
49	3,512	1.56	49.32
50	3,738	1.66	50.98
51	3,716	1.65	52.64
52	3,847	1.71	54.35
53	3,988	1.78	56.12
54	3,918	1.74	57.87
55	3,960	1.76	59.63
56	3,986	1.77	61.41
57	3,914	1.74	63.15
58	3,954	1.76	64.91
59	3,956	1.76	66.67
60	4,046	1.80	68.47
61	3,849	1.71	70.18
62	3,881	1.73	71.91
63	3,818	1.70	73.61
64	3,610	1.61	75.22
65	3,969	1.77	76.99
66	3,735	1.66	78.65
67	3,606	1.61	80.25
68	3,487	1.55	81.81
69	3,184	1.42	83.22
70	3,135	1.40	84.62
71	2,881	1.28	85.90
72	2,657	1.18	87.08
73	2,517	1.12	88.20
74	2,310	1.03	89.23
75	2,304	1.03	90.26
76	2,112	0.94	91.20
77	1,916	0.85	92.05
78	1,838	0.82	92.87
79	1,716	0.76	93.63
80	1,696	0.75	94.39
81	1,513	0.67	95.06
82	1,406	0.63	95.69
83	1,337	0.60	96.28
84	1,218	0.54	96.83
85	7,132	3.17	100.00
Total	224,638	100.00	

```
45 .
   end of do-file

46 . do "C:\Users\HABIBA~1\AppData\Local\Temp\STD1e6c_000000.tmp"

47 . *AgeC
48 . generate AgeC=age

49 . label var AgeC "Collapsed Age"

50 . recode AgeC (18/35=18)(36/50=36) ///
   >      (51/69=51) (70/85=70)
   (AgeC: 211893 changes made)

51 . label define AgeC_Lbl 18"18-35" 35"36-50" ///
   >      36"36-50" 51"51-69" 70"70+"

52 . label values AgeC AgeC_Lbl

53 . tab AgeC
```

Collapsed Age	Freq.	Percent	Cum.
18-35	61,725	27.48	27.48
36-50	52,801	23.50	50.98
51-69	72,424	32.24	83.22
70+	37,688	16.78	100.00
Total	224,638	100.00	

```
54 .
55 . *smokestatus2  Cigarette smoking recode 2: Currentdetailed/former/never
56 . tab smokestatus2
```

Cigarette smoking recode 2: Current detailed/former/never	Freq.	Percent	Cum.
Current every day smoker	28,730	12.79	12.79
Current some day smoker	8,841	3.94	16.73
Former smoker	52,323	23.29	40.02
Never smoked	133,716	59.53	99.54
Has smoked, current smoking status unkn	67	0.03	99.57
Unknown if ever smoked	961	0.43	100.00
Total	224,638	100.00	

```
57 .
58 . *missing values
59 . tabulate smokestatus2  , missing
```

Cigarette smoking recode 2: Current detailed/former/never	Freq.	Percent	Cum.
Current every day smoker	28,730	12.79	12.79
Current some day smoker	8,841	3.94	16.73
Former smoker	52,323	23.29	40.02
Never smoked	133,716	59.53	99.54
Has smoked, current smoking status unkn	67	0.03	99.57
Unknown if ever smoked	961	0.43	100.00
Total	224,638	100.00	

60 . tabulate smokestatus2 , missing nolabel

Cigarette smoking recode 2: Current detailed/fo rmer/never	Freq.	Percent	Cum.
11	28,730	12.79	12.79
12	8,841	3.94	16.73
20	52,323	23.29	40.02
30	133,716	59.53	99.54
40	67	0.03	99.57
90	961	0.43	100.00
Total	224,638	100.00	

61 . *RECODE as MISSING the NIU, Refused, Not Ascertained responses
62 . recode smokestatus2 (40/90=.)
   (smokestatus2: 1028 changes made)

63 . *ANALYSIS #2: Variation in smokestatus2 by region
64 . tabulate smokestatus2, missing

Cigarette smoking recode 2: Current detailed/former/never	Freq.	Percent	Cum.
Current every day smoker	28,730	12.79	12.79
Current some day smoker	8,841	3.94	16.73
Former smoker	52,323	23.29	40.02
Never smoked	133,716	59.53	99.54
.	1,028	0.46	100.00
Total	224,638	100.00	

65 .
66 . * Frequency drank alcohol in past year: Days per week
67 .
68 . tab alcdayswk

Frequency drank alcohol in past year: Days per week	Freq.	Percent	Cum.
Less than one day per week	66,554	29.63	29.63
1 day per week	28,517	12.69	42.32
2 days per week	17,327	7.71	50.04
3 days per week	10,063	4.48	54.51
4 days per week	4,003	1.78	56.30
5 days per week	3,621	1.61	57.91
6 days per week	1,140	0.51	58.42
7 days per week	10,946	4.87	63.29
Did not drink in past year	34,496	15.36	78.65
NIU	46,392	20.65	99.30
Unknown-refused	290	0.13	99.43
Unknown-not ascertained	30	0.01	99.44
Unknown-don't know	1,259	0.56	100.00
Total	224,638	100.00	

```
69 . tab alcdayswk, nolabel
```

Frequency drank alcohol in past year: Days per week	Freq.	Percent	Cum.
0	66,554	29.63	29.63
10	28,517	12.69	42.32
20	17,327	7.71	50.04
30	10,063	4.48	54.51
40	4,003	1.78	56.30
50	3,621	1.61	57.91
60	1,140	0.51	58.42
70	10,946	4.87	63.29
80	34,496	15.36	78.65
96	46,392	20.65	99.30
97	290	0.13	99.43
98	30	0.01	99.44
99	1,259	0.56	100.00
Total	224,638	100.00	

```
70 . recode alcdayswk (0=0.5)(80=0)(10=1)(20=2)(30=3)(40=4)(50=5)(60=6)(70=7)(96/99=.), generate (alcdayswk2)
   (224638 differences between alcdayswk and alcdayswk2)

71 . tab alcdayswk2
```

RECODE of alcdayswk (Frequency drank alcohol in past year: Days per week)	Freq.	Percent	Cum.
0	34,496	19.53	19.53
.5	66,554	37.67	57.20
1	28,517	16.14	73.34
2	17,327	9.81	83.15
3	10,063	5.70	88.84
4	4,003	2.27	91.11
5	3,621	2.05	93.16
6	1,140	0.65	93.80
7	10,946	6.20	100.00
Total	176,667	100.00	

```
72 .
73 . label var alcdayswk2"Drinking Status"

74 . recode alcdayswk2(0=1)(0.5=2) ///
   >      (1/2=3) (3/4=4) (5/6 = 5)(7=6)
   (alcdayswk2: 169043 changes made)
```

75 . label define alcdayswk2_Lbl 1"No Drinks" 2"less than a day" ///
   >   3"Between 1 to 2 days" 4"Between 3 to 4 days" 5"Between 5 to 6 days" 6"All seven days"

76 . label values alcdayswk2 alcdayswk2_Lbl

77 . *tab AgeC
78 . tab alcdayswk2

Drinking Status	Freq.	Percent	Cum.
No Drinks	34,496	19.53	19.53
less than a day	66,554	37.67	57.20
Between 1 to 2 days	45,844	25.95	83.15
Between 3 to 4 days	14,066	7.96	91.11
Between 5 to 6 days	4,761	2.69	93.80
All seven days	10,946	6.20	100.00
Total	176,667	100.00	

79 .
   end of do-file

80 . do "C:\Users\HABIBA~1\AppData\Local\Temp\STD1e6c_000000.tmp"

81 . *deprx (Take medication for |depression)
82 . tab deprx

Take medication for depression	Freq.	Percent	Cum.
NIU	108,069	48.11	48.11
No	101,008	44.96	93.07
Yes	10,688	4.76	97.83
Unknown-refused	381	0.17	98.00
Unknown-not ascertained	4,353	1.94	99.94
Unknown-don't know	139	0.06	100.00
Total	224,638	100.00	

83 . tabulate deprx , missing

Take medication for depression	Freq.	Percent	Cum.
NIU	108,069	48.11	48.11
No	101,008	44.96	93.07
Yes	10,688	4.76	97.83
Unknown-refused	381	0.17	98.00
Unknown-not ascertained	4,353	1.94	99.94
Unknown-don't know	139	0.06	100.00
Total	224,638	100.00	

84 . tabulate deprx , missing nolabel

Take medication for depression	Freq.	Percent	Cum.
0	108,069	48.11	48.11
1	101,008	44.96	93.07
2	10,688	4.76	97.83
7	381	0.17	98.00
8	4,353	1.94	99.94
9	139	0.06	100.00

```
      Total │    224,638      100.00
```

85 . *RECODE as MISSING the NIU, Refused, Not Ascertained responses
86 . recode deprx (0=.) (7/9=.)
   (deprx: 112942 changes made)

87 . tabulate deprx, missing

```
  Take medication for │
          depression  │    Freq.     Percent      Cum.
 ─────────────────────┼──────────────────────────────────
                  No  │  101,008       44.96      44.96
                 Yes  │   10,688        4.76      49.72
                   .  │  112,942       50.28     100.00
 ─────────────────────┼──────────────────────────────────
               Total  │  224,638      100.00
```

88 . svy : tabulate alcdayswk2 deprx , row
   (running **tabulate** on estimation sample)

```
Number of strata   =        352        Number of obs    =        88,849
Number of PSUs     =      1,259        Population size  =  694,317,541
                                       Design df        =           907
```

```
            │ Take medication for
 Drinking   │      depression
 Status     │   No    Yes   Total
 ───────────┼─────────────────────
 No Drink   │ .8658  .1342      1
 less tha   │  .91    .09       1
 Between    │ .9346  .0654      1
 Between    │ .9202  .0798      1
 Between    │ .926   .074       1
 All seve   │ .9124  .0876      1
 ───────────┼─────────────────────
    Total   │ .9105  .0895      1
```

  Key: **row proportion**

  Pearson:
    Uncorrected   chi2(**5**)   = 560.6320
    Design-based F(**4.91, 4450.50**)=   70.5325   P = **0.0000**

89 .
90 . tab deprx, nolabel

```
      Take │
 medication │
        for │
 depression │    Freq.     Percent      Cum.
 ───────────┼──────────────────────────────────
          1 │  101,008       90.43      90.43
          2 │   10,688        9.57     100.00
 ───────────┼──────────────────────────────────
      Total │  111,696      100.00
```

91 . tab deprx, nolabel

```
      Take
  medication
        for
 depression        Freq.       Percent        Cum.
───────────────┼──────────────────────────────────────
           1    101,008         90.43         90.43
           2     10,688          9.57        100.00
───────────────┼──────────────────────────────────────
       Total    111,696        100.00
```

92 . gen deprx_new = deprx
   (112,942 missing values generated)

93 . recode deprx_new (1=0) (2=1)
   (deprx_new: 111696 changes made)

94 . tab deprx deprx_new

```
 Take medication for │          deprx_new
          depression │         0            1  │      Total
─────────────────────┼───────────────────────────┼──────────────
                  No │   101,008            0  │    101,008
                 Yes │         0       10,688  │     10,688
─────────────────────┼───────────────────────────┼──────────────
               Total │   101,008       10,688  │    111,696
```

95 .
   end of do-file

96 . do "C:\Users\HABIBA~1\AppData\Local\Temp\STD1e6c_000000.tmp"

97 . *depfeelevl - Level of depression, last time depressed
98 . tab depfeelevl, nolabel

```
     Level of
  depression,
    last time
    depressed        Freq.       Percent        Cum.
───────────────┼──────────────────────────────────────
           0    178,689         79.55         79.55
           1     24,622         10.96         90.51
           2      6,360          2.83         93.34
           3     14,140          6.29         99.63
           7        437          0.19         99.83
           8         10          0.00         99.83
           9        380          0.17        100.00
───────────────┼──────────────────────────────────────
       Total    224,638        100.00
```

99 . *missing values of depfeelevl
100 . tabulate depfeelevl , missing

```
   Level of depression, last time
                        depressed │      Freq.      Percent        Cum.
──────────────────────────────────┼──────────────────────────────────────
                              NIU │    178,689       79.55        79.55
                         A little │     24,622       10.96        90.51
                            A lot │      6,360        2.83        93.34
      Somewhere between little and lot │ 14,140        6.29        99.63
                  Unknown-refused │        437        0.19        99.83
           Unknown-not ascertained │        10        0.00        99.83
              Unknown-don't know │        380        0.17       100.00
──────────────────────────────────┼──────────────────────────────────────
                            Total │    224,638      100.00
```

```
101 . tabulate depfeelevl , missing nolabel

     Level of
  depression,
   last time
    depressed │     Freq.       Percent        Cum.
  ────────────┼─────────────────────────────────────
            0 │   178,689        79.55        79.55
            1 │    24,622        10.96        90.51
            2 │     6,360         2.83        93.34
            3 │    14,140         6.29        99.63
            7 │       437         0.19        99.83
            8 │        10         0.00        99.83
            9 │       380         0.17       100.00
  ────────────┼─────────────────────────────────────
        Total │   224,638       100.00

102 . *RECODE as MISSING the NIU, Refused, Not Ascertained responses
103 . recode depfeelevl (0=.) (7/9=.)
    (depfeelevl: 179516 changes made)

104 . *CHECK resulting depression frequency distribution
105 . tabulate depfeelevl, missing

    Level of depression, last time
                       depressed │     Freq.     Percent        Cum.
  ───────────────────────────────┼───────────────────────────────────
                        A little │    24,622      10.96        10.96
                           A lot │     6,360       2.83        13.79
   Somewhere between little and lot │  14,140       6.29        20.09
                               . │   179,516      79.91       100.00
  ───────────────────────────────┼───────────────────────────────────
                           Total │   224,638     100.00

106 . generate depression_level=depfeelevl
    (179,516 missing values generated)

107 .
    end of do-file

108 . do "C:\Users\HABIBA~1\AppData\Local\Temp\STD1e6c_000000.tmp"

109 . tab depression_level

  depression_
        level │     Freq.       Percent        Cum.
  ────────────┼─────────────────────────────────────
            1 │    24,622        54.57        54.57
            2 │     6,360        14.10        68.66
            3 │    14,140        31.34       100.00
  ────────────┼─────────────────────────────────────
        Total │    45,122       100.00

110 . label var depression_level "Depression level"
```

```
111 . label define depression_level_Lbl 1"A little depressed" 3"Somewhere b/w A litte and A lot" ///
    >    2"A lot depressed"

112 . label values depression_level depression_level_Lbl

113 . tab   depression_level
```

Depression level	Freq.	Percent	Cum.
A little depressed	24,622	54.57	54.57
A lot depressed	6,360	14.10	68.66
Somewhere b/w A litte and A lot	14,140	31.34	100.00
Total	45,122	100.00	

```
114 .
    end of do-file

115 . do "C:\Users\HABIBA~1\AppData\Local\Temp\STD1e6c_000000.tmp"

116 . *cross-tab depression level over alcohol status
117 . svy : tabulate   depression_level alcdayswk2
    (running tabulate on estimation sample)
```

Number of strata	=	352	Number of obs	=	37,657
Number of PSUs	=	1,256	Population size	=	282,571,519
			Design df	=	904

Depression level	No Drink	less tha	Between	Between	Between	All seve	Total
A little	.097	.2117	.1396	.0475	.0174	.0337	.5469
A lot de	.0283	.0545	.0303	.0087	.0033	.0072	.1323
Somewher	.0561	.1286	.0822	.0285	.0082	.0171	.3208
Total	.1814	.3948	.2522	.0848	.0289	.058	1

Key: **cell proportion**

```
    Pearson:
      Uncorrected   chi2(10)      =  102.4953
      Design-based  F(9.76, 8819.16)=   6.0881     P = 0.0000

118 .
    end of do-file

119 . do "C:\Users\HABIBA~1\AppData\Local\Temp\STD1e6c_000000.tmp"

120 . *cross-tab region level over alcohol status
121 . svy : tabulate   region alcdayswk2   , row
    (running tabulate on estimation sample)
```

Number of strata	=	352	Number of obs	=	176,667
Number of PSUs	=	1,259	Population size	=	1,330,649,761
			Design df	=	907

Region of residence	Drinking Status						Total
	No Drink	less tha	Between	Between	Between	All seve	
Northeas	.1536	.3823	.2863	.0835	.0287	.0656	1
North Ce	.1647	.4047	.2826	.0761	.0252	.0466	1
South	.1977	.3873	.2581	.076	.0248	.0561	1
West	.1675	.3913	.2574	.0875	.0302	.0661	1
Total	.1749	.3914	.2688	.0801	.0269	.0579	1

Key: **row proportion**

Pearson:
    Uncorrected   chi2(**15**)   = **708.6963**
    Design-based F(**12.55, 11385.22**)=   **19.8535**   P = **0.0000**

122 .
    end of do-file

123 . do "C:\Users\HABIBA~1\AppData\Local\Temp\STD1e6c_000000.tmp"

124 . *cross-tab region level over smoke status
125 . svy : tabulate region smokestatus2 , row
    (running **tabulate** on estimation sample)

Number of strata   =   **352**   Number of obs   =   **223,610**
Number of PSUs   =   **1,259**   Population size   = **1,688,213,486**
                                           Design df   =   **907**

Region of residence	Cigarette smoking recode 2: Current detailed/former/never				Total
	Current	Current	Former s	Never sm	
Northeas	.1066	.0345	.2383	.6206	1
North Ce	.1505	.0381	.2307	.5808	1
South	.1303	.0389	.2108	.62	1
West	.0875	.0368	.2146	.6612	1
Total	.1206	.0375	.221	.6209	1

Key: **row proportion**

Pearson:
    Uncorrected   chi2(**9**)   = **1374.1169**
    Design-based F(**8.00, 7255.69**)=   **54.1760**   P = **0.0000**

126 .
    end of do-file

127 . do "C:\Users\HABIBA~1\AppData\Local\Temp\STD1e6c_000000.tmp"

128 . *female variable generate
129 . gen female=sex

130 . recode female (1=0)(2=1)
    (female: 224638 changes made)

131 . tab sex female

| | female | | |
	0	1	Total
Male	100,819	0	100,819
Female	0	123,819	123,819
Total	100,819	123,819	224,638

132 . *pause
133 . tab racenew ,nolabel

Self-report ed Race (Post-1997 OMB standards)	Freq.	Percent	Cum.
10	174,083	77.49	77.49
20	30,165	13.43	90.92
30	2,437	1.08	92.01
40	12,870	5.73	97.74
50	4,533	2.02	99.76
61	550	0.24	100.00
Total	224,638	100.00	

134 . recode racenew (61/99=.)
    (racenew: 550 changes made)

135 . tab racenew

Self-reported Race (Post-1997 OMB standards)	Freq.	Percent	Cum.
White	174,083	77.69	77.69
Black/African American	30,165	13.46	91.15
American Indian/Alaskan Native	2,437	1.09	92.23
Asian	12,870	5.74	97.98
Multiple Race	4,533	2.02	100.00
Total	224,088	100.00	

136 .
    end of do-file

137 . do "C:\Users\HABIBA~1\AppData\Local\Temp\STD1e6c_000000.tmp"

138 . *creating new sexorien variable
139 . tab sexorien, nolabel

Sexual orientation	Freq.	Percent	Cum.
1	3,176	1.72	1.72
2	178,100	96.31	98.03
3	1,744	0.94	98.98
4	636	0.34	99.32
5	1,259	0.68	100.00
Total	184,915	100.00	

```
140 . gen sexorien_new = sexorien
    (39,723 missing values generated)

141 .
142 . label var sexorien_new"Sexorien new"

143 . recode sexorien_new  (4/5=7)
    (sexorien_new: 1895 changes made)

144 . label define sexorien_new_Lbl  2"Straight" 1"Gay/Lesbian" ///
    >      3"Bisexual" 7"Other"

145 . label values sexorien_new sexorien_new_Lbl

146 . tab sexorien_new
```

Sexorien new	Freq.	Percent	Cum.
Gay/Lesbian	3,176	1.72	1.72
Straight	178,100	96.31	98.03
Bisexual	1,744	0.94	98.98
Other	1,895	1.02	100.00
Total	184,915	100.00	

```
147 .
    end of do-file

148 . do "C:\Users\HABIBA~1\AppData\Local\Temp\STD1e6c_000000.tmp"

149 . ** ordered Logistic Regression
150 .
151 . sort depression_level

152 . svy: ologit  depression_level i.alcdayswk2  i.smokestatus2    i.sexorien_new i.AgeC i.racenew i.region, or
    (running ologit on estimation sample)

    Survey: Ordered logistic regression
```

Number of strata	=	352		Number of obs	=	34,761
Number of PSUs	=	1,256		Population size	=	263,513,925
				Design df	=	904
				F(21, 884)	=	17.76
				Prob > F	=	0.0000

depression_level	Odds Ratio	Linearized Std. Err.	t	P>|t|	[95% Conf. Interval]	
alcdayswk2						
less than a day	.9595615	.0364337	-1.09	0.277	.8906562	1.033798
Between 1 to 2 days	.9085615	.0378109	-2.30	0.021	.8373038	.9858835
Between 3 to 4 days	.9036978	.0506542	-1.81	0.071	.8095573	1.008786
Between 5 to 6 days	.7874999	.0680702	-2.76	0.006	.664623	.9330945
All seven days	.8397819	.0542884	-2.70	0.007	.7397179	.9533819
smokestatus2						
Current some day smoker	.8688842	.0570731	-2.14	0.033	.7637924	.9884359
Former smoker	.8108755	.0350524	-4.85	0.000	.7449193	.8826716
Never smoked	.6980475	.0268042	-9.36	0.000	.6473752	.7526861
sexorien_new						
Straight	.6448555	.0522793	-5.41	0.000	.5499988	.7560717
Bisexual	1.08399	.1206946	0.72	0.469	.8712104	1.348738
Other	.9762655	.158388	-0.15	0.882	.7100436	1.342304

AgeC						
36-50	.8917275	.0342791	-2.98	0.003	.8269268	.9616062
51-69	.7477769	.0300891	-7.22	0.000	.6909959	.8092238
70+	.6372048	.0321633	-8.93	0.000	.5771072	.7035607
racenew						
Black/African American	1.031238	.0447159	0.71	0.478	.9471089	1.122839
American Indian/Alaskan Native	.9961093	.1324442	-0.03	0.977	.7673231	1.293111
Asian	.7454205	.0613349	-3.57	0.000	.634262	.8760603
Multiple Race	1.154304	.1067411	1.55	0.121	.9627249	1.384007
region						
North Central/Midwest	1.070057	.0488256	1.48	0.138	.9783976	1.170303
South	1.051996	.0440533	1.21	0.226	.9689946	1.142107
West	1.12072	.0505127	2.53	0.012	1.025843	1.224373
/cut1	-.6487829	.0976575			-.8404448	-.457121
/cut2	-.0809389	.0978806			-.2730385	.1111607

Note: Estimates are transformed only in the first equation.

153 .
    end of do-file

154 . do "C:\Users\HABIBA~1\AppData\Local\Temp\STD1e6c_000000.tmp"

155 . *Average Adjusted Predictions & Marginal Effects
156 .
157 . margins alcdayswk2

Predictive margins

Number of strata	=	352	Number of obs	=	34,761
Number of PSUs	=	1,256	Population size	=	263,513,925
Model VCE	:	Linearized	Design df	=	904

1._predict : Pr(depression_level==1), predict(pr outcome(1))
2._predict : Pr(depression_level==2), predict(pr outcome(2))
3._predict : Pr(depression_level==3), predict(pr outcome(3))

	Margin	Delta-method Std. Err.	t	P>|t|	[95% Conf. Interval]	
_predict#alcdayswk2						
1#No Drinks	.5318802	.0077185	68.91	0.000	.5167319	.5470285
1#less than a day	.5419898	.0054803	98.90	0.000	.5312342	.5527455
1#Between 1 to 2 days	.5553111	.0067351	82.45	0.000	.5420928	.5685295
1#Between 3 to 4 days	.5566164	.0111582	49.88	0.000	.5347175	.5785154
1#Between 5 to 6 days	.5897731	.0191046	30.87	0.000	.5522784	.6272677
1#All seven days	.5743695	.0142871	40.20	0.000	.5463298	.6024091
2#No Drinks	.1334711	.0025967	51.40	0.000	.1283749	.1385673
2#less than a day	.1323631	.0025398	52.12	0.000	.1273785	.1373476
2#Between 1 to 2 days	.1307576	.0025319	51.64	0.000	.1257886	.1357266
2#Between 3 to 4 days	.1305915	.0028174	46.35	0.000	.1250622	.1361209
2#Between 5 to 6 days	.1258592	.0036874	34.13	0.000	.1186224	.133096
2#All seven days	.1281794	.0032244	39.75	0.000	.1218512	.1345076
3#No Drinks	.3346487	.0069684	48.02	0.000	.3209726	.3483247
3#less than a day	.3256471	.0048731	66.83	0.000	.3160831	.335211
3#Between 1 to 2 days	.3139312	.0060291	52.07	0.000	.3020987	.3257638
3#Between 3 to 4 days	.312792	.0097382	32.12	0.000	.2936798	.3319042
3#Between 5 to 6 days	.2843677	.0162545	17.49	0.000	.2524669	.3162686
3#All seven days	.2974511	.0121177	24.55	0.000	.2736691	.3212331

158 . margins smokestatus2

Predictive margins

Number of strata	=	352	Number of obs	=	34,761
Number of PSUs	=	1,256	Population size	=	263,513,925
Model VCE	: Linearized		Design df	=	904

1._predict : Pr(depression_level==1), predict(pr outcome(1))
2._predict : Pr(depression_level==2), predict(pr outcome(2))
3._predict : Pr(depression_level==3), predict(pr outcome(3))

	Margin	Delta-method Std. Err.	t	P>|t|	[95% Conf. Interval]	
_predict#smokestatus2						
1#Current every day smoker	.4866046	.0078143	62.27	0.000	.4712683	.5019409
1#Current some day smoker	.5213322	.0142859	36.49	0.000	.4932948	.5493696
1#Former smoker	.53835	.0066711	80.70	0.000	.5252574	.5514426
1#Never smoked	.5748959	.0050938	112.86	0.000	.5648989	.5848929
2#Current every day smoker	.1377187	.0026355	52.25	0.000	.1325462	.1428912
2#Current some day smoker	.134998	.0028781	46.91	0.000	.1293495	.1406464
2#Former smoker	.1332337	.0025693	51.86	0.000	.1281912	.1382763
2#Never smoked	.1285303	.0024685	52.07	0.000	.1236856	.1333749
3#Current every day smoker	.3756767	.0072345	51.93	0.000	.3614783	.3898752
3#Current some day smoker	.3436698	.0129005	26.64	0.000	.3183515	.3689882
3#Former smoker	.3284163	.0060281	54.48	0.000	.3165857	.3402469
3#Never smoked	.2965738	.0045032	65.86	0.000	.2877358	.3054119

159 . margins sexorien_new

Predictive margins

Number of strata	=	352	Number of obs	=	34,761
Number of PSUs	=	1,256	Population size	=	263,513,925
Model VCE	: Linearized		Design df	=	904

1._predict : Pr(depression_level==1), predict(pr outcome(1))
2._predict : Pr(depression_level==2), predict(pr outcome(2))
3._predict : Pr(depression_level==3), predict(pr outcome(3))

	Margin	Delta-method Std. Err.	t	P>|t|	[95% Conf. Interval]	
_predict#sexorien_new						
1#Gay/Lesbian	.4467868	.0194446	22.98	0.000	.408625	.4849485
1#Straight	.5547944	.0036689	151.21	0.000	.5475938	.5619951
1#Bisexual	.4271709	.0198994	21.47	0.000	.3881165	.4662253
1#Other	.4526639	.0348156	13.00	0.000	.3843351	.5209926
2#Gay/Lesbian	.1392787	.0026002	53.56	0.000	.1341755	.1443819
2#Straight	.1312715	.0024677	53.20	0.000	.1264285	.1361145
2#Bisexual	.1394259	.0025926	53.78	0.000	.1343377	.1445142
2#Other	.139152	.002709	51.37	0.000	.1338353	.1444686
3#Gay/Lesbian	.4139345	.0191845	21.58	0.000	.3762833	.4515858
3#Straight	.3139341	.0032941	95.30	0.000	.3074691	.320399
3#Bisexual	.4334032	.019969	21.70	0.000	.3942122	.4725941
3#Other	.4081842	.034009	12.00	0.000	.3414384	.4749299

160 .
    end of do-file

161 .