ATUS Exercise: Using Weights

Learning goals

- Become familiar with documentation on ATUS weights
- Learn which weights to use and when to use them
- Learn why to use weights in ATUS

Summary

In this exercise, you will browse the ATUS variable-level documentation for the different weight variables. You will explore various features of the documentation to help you become familiar with the different weights. You will create an extract to compare unweighted and weighted estimates of the percentage of respondents with weekend and weekday diaries.

Part 1: Browse the weight variables in ATUS-X

1. Using the person drop-down menu, what weight variables are available?

   _____

2. Which weight variable should be used for creating time use variables from 2003 to 2017?

   _____

   _____

3. Which replicate weights should be used for WT06?

   _____

4. Which weight variable should be used for creating time use variables for Eating and Health Module Respondents?

   _____

5. Which weight variable should be used for creating time use variables for Well-being Module Respondents?

   _____

Part 2: Understanding how to use weight variables in ATUS-X

6. Create an extract that includes the following samples: 2003 and 2017 and the following variables: ACT_SPORTS (TUV), DAY, YEAR. In this exercise, you will compare unweighted and weighted estimates of the number and percentage of respondents in 2003 and 2017 with weekday and weekend diaries. You will use ACT_SPORTS (TUV) in a later exercise

7. Determine the total number of cases in each sample by getting a frequency on the year of participation in the ATUS (YEAR).
   a. How many individuals are in the 2003 sample? _____
   b. How many individuals are in the 2017 sample? _____

8. Create a weekday variable to distinguish between diary days reported on weekdays and diary days reported on weekends. Obtain frequencies of your weekday variable by sample.
   a. How many survey respondents completed the survey on a weekday during each sample year?
   2003 _____   2017 _____

b. What percentage of survey respondents completed the survey on a weekday during each sample year?

2003_____   2017 _____

c. How many survey respondents completed the survey on a weekend during each sample year?

2003_____   2017 _____

d. What percentage of survey respondents completed the survey on a weekend during each sample year?

2003_____   2017 _____

9. Redo the analysis in #8 using the weight variable (WT06) to obtain accurate estimates. Because ATUS has a complex survey design, use the survey commands in your statistical package.

a. Using weights, what percentage of survey respondents completed the survey on a weekday during each sample year?

2003_____   2017 _____

b. Using weights, what percentage of survey respondents completed the survey on a weekend during each sample year?

2003_____   2017 _____

Part 1 Answers: Browse the weight variables in ATUS-X

1. Using the person drop-down menu, what weight variables are available?
   WT06, RWT06, WT04, WT03, BWT, RBWT, EHWT, REHWT, WBWT, RWBWT, LVWT, RLVWT

2. Which weight variable should be used for creating time use variables from 2003 to 2017?
   WT06

3. Which replicate weights should be used for WT06? RWT06

4. Which weight variable should be used for creating time use variables for Eating and Health Module Respondents? EHWT

5. Which weight variable should be used for creating time use variables for Well-being Module Respondents? WBWT

Part 2 Answers: Understanding how to use weight variables in ATUS-X

6. Create an extract that includes the following samples: 2003 and 2017 and the following variables: ACT_SPORTS (TUV), DAY, YEAR. In this exercise, you will compare unweighted and weighted estimates of the number and percentage of respondents in 2003 and 2017 with weekday and weekend diaries. You will use ACT_SPORTS (TUV) in a later exercise

7. Determine the total number of cases in each sample by getting a frequency on the year of participation in the ATUS (YEAR).
   a. How many individuals are in the 2003 sample? 20,720
   b. How many individuals are in the 2017 sample? 10,223

8. Create a weekday variable to distinguish between diary days reported on weekdays and diary days reported on weekends. Obtain frequencies of your weekday variable by sample.
   a. How many survey respondents completed the survey on a weekday during each sample year?
      2003   10,223   2017   5,079
   b. What percentage of survey respondents completed the survey on a weekday during each sample year?
      2003   49.34   2017   49.68

  c. How many survey respondents completed the survey on a weekend during each sample year?

   2003 10,497   2017 5,144

  d. What percentage of survey respondents completed the survey on a weekend during each sample year?

   2003 50.66   2017 50.32

9. Redo the analysis in #8 using the weight variable (WT06) to obtain accurate estimates. Because ATUS has a complex survey design, use the survey commands in your statistical package.

  a. Using weights, what percentage of survey respondents completed the survey on a weekday during each sample year?

   2003 71.51   2017 71.23

  b. Using weights, what percentage of survey respondents completed the survey on a weekend during each sample year?

   2003 28.49   2017 28.77