



# ATUS Exercise: Weekday and Weekend Time Diaries

## Learning goals

- Become familiar with documentation about the ATUS interview day
- Learn how to analyze time diary variables by type of day
- Learn how and when to use weights to analyze time diary variables

## Summary

In this exercise, you will browse the ATUS variable-level documentation about the ATUS interview day to help you become familiar with creating day type indicators. You will create an extract to compare unweighted and weighted time in Sports, Exercise and Recreation on weekdays and weekends in 2003 and 2017.

Part 1 Answers: Browse the ATUS interview variables available in ATUS-X

1. Review the documentation for DAY available under Person → Technical Variables. How are diaries distributed across days of the week?  

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2. Review the documentation for the ACT\_SPORTS time use variable available under Time Use → Activity Coding Structure. What three activities are included in the ACT\_SPORTS variable?  

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3. Using the weekday and weight variables you used in Exercise 4, get the *unweighted* mean number of minutes reported in ACT\_SPORTS on WEEKDAYS and WEEKEND days.
  - a. Mean number of minutes on weekdays in each sample year?  
2003 \_\_\_\_\_ 2017 \_\_\_\_\_
  - b. Mean number of minutes on weekends in each sample year?  
2003 \_\_\_\_\_ 2017 \_\_\_\_\_
4. Using the weekday and weight variables you used in Exercise 4, get the *weighted* mean number of minutes reported in ACT\_SPORTS on WEEKDAYS and WEEKEND days.
  - a. Mean number of minutes on weekdays in each sample year?  
2003 \_\_\_\_\_ 2017 \_\_\_\_\_
  - b. Mean number of minutes on weekends in each sample year?  
2003 \_\_\_\_\_ 2017 \_\_\_\_\_
5. Redo the analysis to produce *weighted* means, excluding respondents who did not report any time in ACT\_SPORTS on their diary day.
  - a. Mean number of minutes on weekdays in each sample year?  
2003 \_\_\_\_\_ 2017 \_\_\_\_\_
  - b. Mean number of minutes on weekends in each sample year?  
2003 \_\_\_\_\_ 2017 \_\_\_\_\_



## Part 1 Answers: Browse the ATUS interview variables available in ATUS-X

1. Review the documentation for DAY available under Person → Technical Variables. How are diaries distributed across days of the week?  
Diaries are not equally distributed across days of the week. Weekend days are oversampled, accounting for about half of all diaries.
2. Review the documentation for the ACT\_SPORTS time use variable available under Time Use → Activity Coding Structure. What three activities are included in the ACT\_SPORTS variable?  
Sports, Exercise, and Recreation
3. Using the weekday and weight variables you used in Exercise 4, get the *unweighted* mean number of minutes reported in ACT\_SPORTS on WEEKDAYS and WEEKEND days.
  - a. Mean number of minutes on weekdays in each sample year?  
2003 16.45                      2017 15.68
  - b. Mean number of minutes on weekends in each sample year?  
2003 23.68                      2017 23.23
4. Using the weekday and weight variables you used in Exercise 4, get the *weighted* mean number of minutes reported in ACT\_SPORTS on WEEKDAYS and WEEKEND days.
  - a. Mean number of minutes on weekdays in each sample year?  
2003 17.44                      2017 16.43
  - b. Mean number of minutes on weekends in each sample year?  
2003 25.31                      2017 25.38
5. Redo the analysis to produce *weighted* means, excluding respondents who did not report any time in ACT\_SPORTS on their diary day.
  - a. Mean number of minutes on weekdays in each sample year?  
2003 93.75                      2017 82.97
  - b. Mean number of minutes on weekends in each sample year?  
2003 139.77                      2017 127.48

