**Exercise 1: Time Use Variables**

In this exercise, you will become familiar with time use variable documentation on the ATUS-X site and the pieces that you can use to make time use variables. You will gather the information you will need to later create time use variables that capture participation in sports, exercise, and recreation at different times of the day both alone and with someone else.

**1) View the system-defined time use variables.** Click on "Time Use Variables" from the home page under "DATA."

Do any system-defined time use variables capture participation in sports, exercise, and recreation in the morning?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2) Learn more about time use variables.** Click on "About ATUS-X" from the home page. Jump down to "Creating and Selecting Time Use Variables." This section describes how to create time use variables in the ATUS-X system. For more information about what a time use variable is go to

<https://www.atusdata.org/atus/time_use_documentation.shtml>.

**a) Activities**

What major category includes participation in sports, exercise, and recreation? Hint: view the activity coding tree.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**b) Filters (other activity-level characteristics)**

What filters are available from the system?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What time use variable filters do you need to use to capture participation in sports, exercise, and recreation in the morning?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Can you create a single time use variable that captures the time spent in participation in sports, exercise, and recreation from midnight to 6 a.m.?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Exercise 2: Demographic Variables**

In this exercise, you will become familiar with household- and person-level documentation on the ATUS-X site. You will learn which weights to use and when to use them and you will learn the difference between variables with and without the \_CPS8 suffix.

**1) View the "weight" variables available from the "person" drop-down menu on the ATUS-X site.**

Which weight variable is appropriate for creating estimates of time use from 2003 to 2012?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Which weight variable is appropriate for creating estimates of time use for Eating and Health Module respondents?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Which replicate weights should be used with WT06?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2) View** **the "work status" variables from the "person" drop-down menu on the ATUS-X site**.

**EMPSTAT vs. EMPSTAT\_CPS8**

When is EMPSTAT collected?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is the universe for EMPSTAT?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

When is EMPSTAT\_CPS8 collected?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is the universe for EMPSTAT\_CPS8?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Exercise 3: Understanding the Data**

\*Create an extract including the following samples: 2003 and 2008 and the following variables: ACT\_WORK (TUV), DAY, YEAR.

**1) Distinguishing between data samples (years)**

Your analyses will compare estimates of time spent working in 2003 and 2008. To determine the total number of cases in each year, run a frequency on the year of participation in the ATUS (YEAR).

How many individuals are in the 2003 sample? \_\_\_\_\_\_\_\_

How many individuals are in the 2008 sample? \_\_\_\_\_\_\_\_

**2) Create WEEKDAY to distinguish between weekdays and weekends.**

**3) Weekdays vs. Weekends and the Importance of Weights**

**3a. Get frequencies of the newly created WEEKDAY variable by sample.**

How many survey respondents completed the survey on a weekday during each sample year?

2003\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2008 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What percentage of individuals completed the survey on a weekend during each sample year?

2003\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2008 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3b. Redo the analysis with the weight variable (WT06) to get accurate estimates.**

You will want to modify the commands in 3a. Because the ATUS has a complex survey design, you need to use the survey commands in Stata.

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

2003\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2008 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Exercise 4: Time Spent Working on Weekdays vs. Weekends**

**4a. Click on the ACT\_WORK variable name (Build an extract🡪Time Use🡪Activity coding structure🡪ACT\_WORK) so you know what types of activities are included in this time use variable.**

**4b. Get the mean number of minutes respondents spent working by WEEKDAY.**

Using weights, what was the mean number of minutes worked on weekdays vs. weekends?

weekday\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ weekend\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**4c. Redo the analysis, excluding those who did not report doing any work on their diary day.**

Using weights, what was the mean number of minutes worked on weekdays vs. weekends?

weekday\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ weekend\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**4d. See how time spent working varies by day of the week and sample.**

Using weights, what was the mean number of minutes worked by day of the week and sample among those who reported *any* work on their diary day?

2003: weekday\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ weekend\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2008: weekday\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ weekend\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Exercise 5:  Estimates of Time Spent Exercising**  
For this exercise, your objective is to create estimates of average time per day spent exercising for men and women aged 25 to 64 during 2006, broken out by time of day and by whether the person was alone or in the company of others while exercising, as specified in the Excel table shell for exercise 5.  For this purpose, exercise includes any activity in the activity category of "Participating in Sports, Exercise, or Recreation**"** (second tier activity category 130100).    
  
Select the 2006 sample and the rectangular data option in ATUS-X.  You will need to use both the time-of-day and the with-whom filters to create the appropriate time use variables.  Note that the ATUS-X time-of-day filter is not designed to produce time use variables that include time both at the beginning and at the end of the diary day.  In other words, it is not designed to define time use variables for time periods that begin before 4 a.m. and end after 4 a.m.  To produce estimates of time spent exercising at night, where night is defined to include the hours between 6 p.m. and 6 a.m., you must create two separate time use variables and sum them.  The time use variables you should create include

* Morning exercise (6 a.m. to noon)
* Afternoon exercise (noon to 6 p.m.)
* Night exercise (6 p.m. to 6 a.m.) (note that two time use variables must be created and summed)
  + exercise between 6 p.m. and 4 a.m.
  + exercise between 4 a.m. and 6 a.m.

A data set containing as few as 8 time use variables would be sufficient to fill in the rows and columns of Table 5.  You could, for example, create time use variables for time spent exercising alone and time spent exercising in the company of others for each of four time intervals, and use those to calculate the other values needed to complete the table.  Because more generally it is a good idea to calculate sums directly as a check on more disaggregated calculations, we suggest that you also create variables that include all time spent exercising during the day and variables that include all time spent exercising regardless of whether alone or in the company of others.  If you do this, you will need to create a total of 15 time use variables.  
  
In addition to the 15 time use variables, your data set should include the sex and age of each respondent and the day of the week for which time use information was collected.  You also will need to include WT06, the estimation weight variable, on your data set.  WT06 is included by default when you create an extract.  
  
Once you have created a suitable extract, you will write a program to create the estimates needed to populate Table 5.  Solutions to the exercise, including sample programs, are available in the answers packet so that you can check your work.  

**Exercise 6:  Parent Time with Own Household Children**  
  
For this exercise, your objective is to create estimates of the time that parents spend with their *own household children* in different types of activities.  For this purpose, only households in which the ATUS respondent has *at least one own child under the age of 18* will be analyzed.  As shown in Table 6, estimates should be produced for women who are not married, married women and married men, in each case by level of educational attainment.  For married women and married men, separate estimates should be produced for time with own household children with spouse present (with whom “all”) and own time with children without spouse present.   The activities of interest are direct physical care of children (activity code 030101); reading, playing and teaching (activity codes 030102, 030103, 030104, 030105, 030106, 030107, 030201, and 030203); time watching television (activity codes 120303 and 120304); and all other activities not previously listed.    
  
Again, select the 2006 sample and the rectangular data option in ATUS-X.  You will need to use the with-whom filter to define the time use variables needed for this exercise.    
  
A data set containing as few as 8 time use variables would be sufficient to fill in the rows and columns of Table 6.  As with Table 5, however, we suggest that you create the time use variables needed to fill in all of the cells directly, so that you have a check on your numbers.  If you do this, you will need to create a total of 15 time use variables.  
  
In addition to the 15 time use variables, your data set should include a variable that tells you whether the household includes at least one own child of the respondent under age 18 ([KIDUND18](https://www.atusdata.org/atus-action/variables/KIDUND18)),respondent's sex (SEX), presence of spouse (SPOUSEPRES) and education level (EDUC) for each respondent; and WT06, the estimation weight.    
  
Once you have created a suitable extract, you will write a program to create the estimates needed to populate Table 6.  Solutions to the exercise, including sample programs, are available in the answers packet so that you can check your work.    

**Exercise 7:  Mothers' Child Care Time**  
  
For this exercise, your objective is to create estimates using 2006 data that show the relationship between mothers' child care time and the age of youngest household child, by the marital status of the mother and the presence of adult relatives other than a spouse in the household.  For this purpose, child care time is time spent in activity 030100 (caring for and helping household children).  An adult relative may be a parent, brother or sister, or other relative age 25 or older. Mothers are defined as women who have an own household child under 18 in the home.  
  
For this exercise, select the 2006 sample and the "respondents and members of their household" data option in ATUS-X.   The household member records in the data file may be used to identify whether an adult relative of the respondent is co-resident. There is a household-level variable in the ATUS-X that you may use to create a categorical variable indicating the age of youngest household child.    
  
The only time use variable you need is a variable that measures the time the respondent devotes to care of household children.   You also should select person-level variables that tell you whether the woman has a co-resident own child under 18 in the household; the age of the youngest child under 18 in the household; the sex of each respondent and presence of a spouse (vs. not); and WT06, the estimation weight.    
  
Once you have the data file, you will use all of the person records for each household to create a dummy variable for whether the household in which the respondent resides does or does not include an adult relative of the respondent.

Once you have created a suitable extract, you will write a program to create the estimates needed to populate Table 7.  Solutions to the exercise, including sample programs, are available in the answers packet so that you can check your work.

**Exercise 8:  Participation in Various Activities by Hour of the Day**  
  
For this exercise, your objective is to create estimates using 2006 data that show the fraction of the population who are engaged in different activities during each hour of the day.  You will code activities into four categories: 1) sleeping (activity code 010101); 2) working (activity codes from 050101 to 059999); 3) leisure and sports (activity codes from 120101 to 139999); and 4) all other activities.  As shown in Table 8, you would like to know whether the respondent spent any time engaged in each of the four activities during each hour of the day.  Note that the shares of people engaged in the different activities may sum to more than 100 percent, since some people may have engaged in more than one of the four types of activities during any given hour.    
  
For this exercise, select the 2006 sample and the hierarchical data option in ATUS-X.  Selecting the hierarchical data will give you household-level records, person-level records, activity-level records and who-level records.  It is possible to generate the estimates for Table 8 directly using the ATUS-X system but since 96 different time use variable would be required (4 activities times 24 hours of the day), this would be tedious.  Hierarchical data can be considerably more efficient to work with when a very large number of time use variables must be created.  Check to confirm that WT06 is included in your data.  
  
Once you have the hierarchical data ready to analyze, you will use your statistical package to create the variables needed for your analysis.  You will need to look at each activity record for a person in turn, determine whether the activity was in progress during the first hour of the day (4:01 a.m. through 5:00 a.m.), the 2nd  hour of the day (5:01 a.m. through 6:00 a.m.), and so on through the 24th hour of the day (3:01 a.m. to 4:00 a.m.) and whether the activity should be classified as sleeping, working, playing or something else.  You should create a set of 96 indicator variables based on these determinations.  For example, Sleep5 might take a value of 1 if the person reported any sleep in the hour from 4:01 a.m. to 5:00 a.m., 0 otherwise; Sleep6 might should take a value of 1 if the person reported any sleep during the hour from 5:01 a.m. to 6:00 a.m..; and so on.   Because there are so many variables to be created, the most efficient strategy is to use loops to create them.  If you are not familiar with using loops, try writing the code to create just a few of the required variables. Looking for repetitiveness in the way variables are created will help you see how you might automate the process. We provide our versions of the loops with the solutions.  
  
The hard part of this exercise is creating the indicator variables.  Once they have been created, you need only calculate their weighted mean values.  A weighted mean value of 0.920, for example, implies that 92.0 percent of the population engaged in the given activity during the hour in question.    
  
Solutions to the exercise, including sample programs, are available in the answers packet so that you can check your work.

**Exercise 9: Understanding the Well-being Module**

In this exercise, you will become familiar with the data from the well-being module. You will also compare estimates of well-being during sports (activity codes 130101 - 139999) and paid work and work-related activities (activity codes 050101 - 059999) and you will examine age and gender differences in affect during paid work activities.

Create a hierarchical extract including the 2010 sample, activity-level well-being data, and AWBWT, the activity-level well-being module estimation weight, as well as person-level characteristics to make gender comparisons and WBWT, the person-level well-being module estimation weight.

**1) Examine frequencies of the six subjective well-being items.**

**1a. Understanding subjective well-being coding: HAPPINESS and STRESS.**

In how many *activities* do respondents report being 'very happy'? \_\_\_\_\_\_\_\_

In how many *activities* do respondents report being 'very stressed'? \_\_\_\_\_\_\_\_

**1b. Why are so many records coded as 'NIU (Not in universe)'?**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**1c. How many activity records have subjective well-being data available?**

\_\_\_\_\_\_\_\_

**2) Recode NIU as missing.**

**3) Generate weighted means for the six subjective well-being items using AWBWT. Solutions to the exercise, including sample programs, are available in the answer packet so that you can check your work.**

**4) Interpret the mean for happiness.**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**5) Generate weighted means and unweighted N's for each subjective well-being measure during sports, exercise, and recreation and during work and work-related activities. Using the extract you used to answer the previous questions in this exercise, write a program to create the estimates needed to populate Table 9.  Solutions to the exercise, including sample programs, are available in the answers packet so that you can check your work.**

**6) Generate weighted person-level estimates using WBWT of average subjective well-being (for each of the six well-being measures) for men and women aged 25 to 64 during paid work and work-related activities.**

The well-being module respondent reports his or her subjective well-being for (up to) three randomly selected *activities*. The number of work activities that also have subjective well-being reports will range from zero to three. This occurs because the well-being module data are on activity records rather than person records. For each subjective well-being variable, you will need to create a *person-level average* assessment of well-being during paid work.

You may pursue one of two strategies to accomplish this work. You may either work with the activity-level data and create summary measures which you then merge with the person-level data or you may rectangularize/transpose/reshape the data so it is at the person level.

Solutions to the exercise, including sample programs, are available in the answer packet so that you can check your work.

**Exercise 10: Spouse characteristics in ATUS-X**

The aims of this exercise are to become familiar with 1) thinking about how to leverage the rich information available in the ATUS about respondents and household members, 2) creating couple-level variables, and 3) analyzing couple-level data. While the ATUS only collects time use information for one member of each surveyed household, sociodemographic information is obtained for all the members of the household. ATUS-X provides the following characteristics about the ATUS respondent's spouse: age, sex, race, Hispanic origin, educational attainment, spouse employed, employment status, usual work hours and weekly earnings. *Note that when analyzing couple-level characteristics from the ATUS, you may need to keep in mind whether the respondent is male or female.*

Create a rectangular extract including all the members in respondent’s household for the 2012 sample along with the following variables: time spent in household activities (ACT\_HHACT), individual characteristics (AGE, SEX, EDUC, EMPSTAT), and spouse characteristics (SPOUSEPRES, SPAGE, SPSEX, SPSPEDUC, SPEMPSTAT).

1. Get the characteristics of the sample.

* How many couples are in the sample? \_\_\_\_\_\_\_\_
* How many respondents are male? \_\_\_\_\_\_\_\_ Female? \_\_\_\_\_\_\_\_
* What proportion of respondents are employed? \_\_\_\_\_\_\_\_
* What proportion of spouses are employed? \_\_\_\_\_\_\_\_
* What proportion of couples both members have the same educational attainment (1: less than HS diploma, 2: HS diploma, no college, 3: Some college, 4: college degree or higher)? \_\_\_\_\_\_\_\_

1. Only for heterosexual couples, create typologies of couples according to the age, employment status and educational attainment of both members of the couple.

* Couple-level variables:
  + CAGE: male is 5 years old than female, difference lower than 5 years, female is 5 years old than male
  + CEMPSTAT: both employed (dual earner couples), only male is employed (male breadwinner couple), only female is employed (female breadwinner couple), neither is employed
  + CEDUC: male is higher educated than female (hypergamy), both same level of education (homogamy), female is higher educated than male (hypogamy)
* How many dual earner couples are there in the sample? \_\_\_\_\_\_\_\_ Male breadwinner? \_\_\_\_\_\_\_\_
* In how many couples is the male older than the female? \_\_\_\_\_\_\_\_
* How many hypergamous couples are there in the sample? \_\_\_\_\_\_\_\_ Hypogamous? \_\_\_\_\_\_\_\_

1. Compare time spent in household activities according to the characteristics of the couples.

* What is the mean number of minutes spent in household activities for:
  + men in dual-earner couple arrangements? \_\_\_\_\_\_\_\_
  + women in dual-earner couple arrangements? \_\_\_\_\_\_\_\_
* What is the difference between men's and women's time spent in household activities when:
  + men are older than their wives? \_\_\_\_\_\_\_\_
  + wives are older than their husbands? \_\_\_\_\_\_\_\_
  + husbands and wives are within five years of one another? \_\_\_\_\_\_\_\_
  + men are more educated than their wives? \_\_\_\_\_\_\_\_
  + women are more educated than their husbands? \_\_\_\_\_\_\_\_
  + husbands and wives have the same level of education? \_\_\_\_\_\_\_\_