

Food and Eating Consequences of Time-Use Decisions: A Research and Policy Conference

Identification of Research Issues/Discussant Comments

Charlene Kalenkoski

Ohio University

A proposed use of the ATUS and Food and Eating Module data is to compute a time poverty index and/or time poverty thresholds. These would be used in conjunction with existing poverty measures to determine whether individuals who are monetarily poor are also time poor and to determine the effects of various food assistance program requirements on individuals' time constraints and well-being. These comments primarily deal with this use of the data.

Limitations of the ATUS Data

- The ATUS data provide very little information on secondary activities. Information is provided on child care as a secondary activity, however, and the proposed Food and Eating Module would add information on eating as a secondary activity. As child care and eating are necessary activities, this information is needed to compute a time poverty index or time poverty thresholds. In addition, modules could be added that would provide information on other activities performed as secondary activities that might be deemed necessary.
- The ATUS data collect time diary information only on one household member. While this would likely not be a problem when analyzing the time constraints or "time pressure" of single parents (and from a policy perspective one might be primarily interested in low income single parents), it creates difficulties when dealing with families with more than one adult. However, while intra-household allocations of time cannot be directly examined with the ATUS data, one can at least proxy for time constraints faced by a particular household given available information about the number of individuals in a household and the marital status of the respondent.

The Food and Eating Module

- Dr. Karen Hamrick presented a list of research questions that could be answered using the data collected as part of this proposed module. The underlying theme of these questions is whether food assistance programs affect individuals' time constraints and whether these effects are detrimental or beneficial to individuals' well-being (e.g. obesity, human capital accumulation). There is a potential problem, however, as the questions regarding food assistance recipient status relate to the household but the time use questions relate only to the individual respondent. Ideally one would need information on the time use of other household members to get a complete picture of the household's well-being. Perhaps questions could be added to the module to address this issue.
- Two excellent questions are proposed as part of the module. First, "How much money does this household usually spend on food and beverages per week?" Second, "How much money does this household usually spend per week eating out?" These questions will allow researchers to investigate the time/money tradeoff with respect to

food. Another presenter, Dr. Daniel Hamermesh, suggested an alternative method that would match Consumer Expenditure Survey data to the ATUS data to obtain a measure of this tradeoff. It would be interesting to see whether both methods obtain the same results.

Research Questions Proposed by Dr. Daniel Hamermesh

- Dr. Hamermesh stated that there exists very little research on the timing of various activities and notes that the ATUS and the Food and Eating Module will allow one to determine when eating occurs and how often. Such information may be important for issues of obesity and labor productivity that could not be analyzed before.
- Dr. Hamermesh also stated that the data would allow researchers to analyze the timing of food shopping and the related implications for regulations on store opening hours. One could also analyze the effects of restrictions on alcohol sales (e.g. no sales of alcohol on Sundays) on eating and drinking patterns and obesity.
- Dr. Hamermesh suggested several theoretical economic models that could be adapted to analyze food-related activities. For example, he suggested that search theory could be used to investigate food shopping behavior. He also suggested that economic theory on set-up costs and the demand for variety could be used to analyze “grazing” behavior. Most importantly, however, he suggested estimation of a “meal” production function that would answer the question “How are time and goods inputs into eating related?” The production of “meals” is often discussed as household production in labor economics classes, but the focus has always been theoretical. Now one can use the ATUS and Food and Eating Module data to determine the actual form of this production function.
- Dr. Hamermesh suggested that one could use the ATUS and Food and Eating Module data to relate the location of and the time spent in food consumption to obesity. As Clark Nardinelli of the Food and Drug Administration indicated earlier in the day, there are popular perceptions about fast food consumption, vending machines in schools, etc. and their relation to obesity, but it would be prudent to investigate whether these relationships actually hold before making policy decisions. Also, researchers could investigate the work timing of eating (i.e. whether one eats at work and while working or on a break) and its importance for labor productivity.

Presentation by Dr. Sandra Hofferth

- Dr. Hofferth noted that existing data show no change in energy intake between 1965 and 1990, although weight increased by 5 kg. She also noted that these data show little evidence for a decline in physical activity during leisure time. Thus, existing data document but cannot explain the increase in overweight and obesity. The new ATUS data, however, will provide additional information on the timing and location of eating as well as the timing and location of all physical activity, not just that performed during leisure time. Thus, the ATUS data may help identify the cause of the increase in overweight and obesity not answered by existing data.
- Dr. Hofferth presented a flow chart showing that family structure affects income and thus the food that is consumed and the activities that are performed and thus a person’s weight. However, family structure should also have a direct effect on uses

of time other than work time and thus would also have a direct effect on an individual's weight apart from its effect via income.

- Dr. Hofferth cited previous research showing that time spent in sports was linked to lower overweight for both boys and girls and that time spent studying was linked to less overweight for boys. The second result is particularly curious as it is not obvious why more studying would lead to less overweight. Perhaps time spent studying is capturing an unobservable personal characteristic or characteristics that are related to overweight. Or perhaps it is a peculiarity of the particular small sample for which the result is obtained. It would be interesting to see whether this result is reproduced using the much larger ATUS data.
- Dr. Hofferth discussed a research strategy in which BMI or an indicator for overweight status is regressed on time spent in different categories of activities. However, a high BMI or overweight status might lead to less participation in physical activities. It would be important to consider this feedback effect in any econometric specification.

Presentation by Dr. Diego Rose

- Dr. Rose discussed how a measure of time poverty could be constructed and presented actual measures that were constructed for New York by Vickery (1977). The ATUS data would presumably allow construction of better measures given the nationally representative nature of the data and the more detailed uses of time available. Dr. Rose did not address the difficulties in constructing such measures, however. The total time "needed" in household production is subjective and depends upon the quality of child care, food, etc. that is assumed to be necessary. If basing such a measure on what people actually do, should time "needed" be based on average time use, minimum time use, or something else?

Additional Research Issue

- It would be particularly interesting to use the data from the ATUS and the Food and Eating Module to analyze time spent in preparing food for children, eating with children, and food shopping for and with children, particularly to determine whether there are differences by gender and family structure and whether these differences affect child well-being.