

OFFICERS

Andrew D. Krystal, MD President

H. Craig Heiler, PhD President-Elect

Sara J. Aton, PhD Secretary/Treasurer

DIRECTORS

Daniel J. Buysse, MD

Julie Carrier, PhD

Stephanie J. Crowley, PhD

Namni Goel, PhD

Martica Hall, PhD

Kristen L. Knutson, PhD

Frank A. Scheer, PhD

Kenneth P. Wright Jr., PhD

Jessica Dietch Trainee Member-at-Large

John A. Noel Executive Director July 29, 2019

Erin Good **BLS Clearance Officer** Division of Management Systems **Bureau of Labor Statistics** 2 Massachusetts Ave, NE, Room 4080 Washington, DC 20212

Dear Clearance Officer Good,

Thank you for the opportunity to provide comments on the proposed extension of the American Time Use Survey (84 FR 24825). The Sleep Research Society (SRS) would like to stress its support of a continuation of the Survey (ATUS) and provide guidance on potential improvements.

SRS was established in 1961 by a group of scientists who shared a common goal to foster scientific investigations on all aspects of sleep and sleep disorders. Since that time, SRS has grown into a professional society comprising over 1,300 researchers nationwide. From promising trainees to accomplished senior level investigators, sleep research has expanded into areas such as psychology, neuroanatomy, pharmacology, cardiology, immunology, metabolism, genomics, and healthy living. SRS recognizes the importance of educating the public about the connection between sleep and health outcomes. SRS promotes training and education in sleep research, public awareness, and evidence-based policy, in addition to hosting forums for the exchange of scientific knowledge pertaining to sleep and circadian rhythms.

The American Time Use Survey provides unique (and likely underutilized) data in a large sample on how Americans spend their time. One particular strength is the unbiased approach to assessing activities. The survey does not ask respondents to estimate time spent in specific activities, such as work, exercise or sleep, but rather it asks them to identify what they were doing across the day. The open-ended responses allow for a broad range of activities, however, this does constitute a challenge when classifying these responses. This classification system is particularly problematic for the assessment of sleep. Herein, we make recommendations to enhance the quality, utility, and clarity of the information to be collected.



First and foremost, the assessment of "sleep" is flawed because it includes activities that are not truly sleep. Specifically, "sleeping" (category 01-01-01) includes all of the following possible responses: sleeping, waking up, falling asleep, dreaming, dozing off, cat napping, napping, getting some shut-eye, getting up, dozing. Most of these responses are transitional stages (i.e. dozing, dozing off, falling asleep, waking up, getting up) that can include a substantial proportion of wake rather than sleep. As such, the ATUS overestimates sleep duration, which is problematic when these data are used to estimate "how much sleep" Americans are getting. We recognize that changing classifications could limit the ability to examine trends over time. However, a solution would be to code only the response "sleeping" into 01-01-01 and to create a new category, "resting", which is coded 01-01-03 and includes all the other responses. To examine trends over time one would simply combine these two categories.

Second, the quality of the data and the information gained would be enhanced if a question regarding shift work was included in addition to the other details regarding employment status. Working night shifts or rotating shifts will affect the timing and duration of daily activities, including sleep and work hours. Further, shift work varies among key demographic characteristics, such as age, gender and socioeconomic status.

Finally, from a public health perspective, this large study could contribute valuable information about American public health if it included some assessments of health status, including simply subjective health ratings (excellent, good, fair, poor). Similarly, a subjective rating of sleep quality would provide more precision in understanding the sleep health of Americans. For example, two people could have the same number of minutes "sleeping" (01-01-01) but if one has poor quality sleep, that suggests they are not getting as much restful sleep during that period.

Sincerely,

Andrew Krystal, MD President Sleep Research Society