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# Innovations and lessons from the UK 2014-2015 Everyday Life Survey

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The United Kingdom has a long history of time use research, spanning back to the early 20th century (Pember Reeves 1913). The Multinational Time Use Study includes British surveys collected in every decade since the 1960s (Fisher and Gershuny 2013). While the UK participated in the first round of the Harmonised European Time Use Surveys project, the most recent official survey was a small-scale light diary attached to four waves of the 2005 Omnibus survey – until now. The Centre for Time Use Research raised funding from the Economic and Social Research Council (grant ES/L011662/1) to conduct a second round British HETUS survey, which has been in the field from April 2014 through June 2015, with an additional period of data collection in the autumn of 2015.

CTUR commissioned the National Centre for Social Research (NatCen) to administer the survey. We initially sampled 10,960 private households drawn from the Postcode Address File (PAF) covering England, Wales, Scotland, and the Land Property Services Agency (LPSA) in Northern Ireland. In the main period of data collection, over 7,600 people in over 4,000 households returned at least one completed diary. The additional period of fieldwork involves different interviewers re-approaching some initial non-respondents as well as a fresh sample of new households to boost the overall response rate.

The survey includes an advance letter, then face to face follow-up with an interviewer, who collects a household questionnaire, then collects individual questionnaires from all household members aged 8 and older. Interviewers leave behind two time diaries and a one-week work schedule with each diarist (person eligible for the individual interview). All household diarists are asked to complete their work schedule for the same week and their diaries on the same two days (one week day and one weekend day) during the work schedule week. Following HETUS guidelines, the diaries contain 10 minute time slots for the period of 4AM through 4AM the next calendar day, and include columns for people to enter main and simultaneous activities as well as locations in their own words.

The diaries require a significant time input from participants. Each person who completed a diary was given a £10 gift voucher as token of appreciation for their participation. Experience on the doorstep showed that selling the survey as research into everyday life to find out what activities most contribute to people's wellbeing proved more effective than other approaches. NatCen also collects surveys with similar degrees of participation burden and higher response rates in collaboration with a number of UK government agencies. We suspect that British people may be more willing to participate in surveys more directly linked to government policies than in surveys co-ordinated by universities.

Initial review of the returns so far indicate that the survey has collected high quality data. Three features of the UK diary instrument offer new research opportunities currently not widely available in the time use field: allowing participants to record multiple secondary activities; including a tick-box for events which involved the use of a smart device; and collection of enjoyment ratings alongside each event. Our experience collecting these features raises questions for how this field handles some dimensions of capturing activities.

Conventionally, most time use surveys collect only a one main and one secondary activity. HETUS guidelines suggest asking participants to report only a single secondary activity (if they did more than one thing at the same time). Some participants in previous HETUS surveys nevertheless wrote more detailed activity descriptions, even with this instruction, forcing coders to prioritise which part of the account to code. Some multi-tasked activities have policy implications. In this survey, the secondary activity column asked only "If you did something else at the same time, what else did you do?"

In the beta version of the data (not including the final period of data collection), 92.8% of diaries contained at least one secondary activity in at least one episode. A smaller number, 37.5% of diaries, included two secondary activities in at least one episode, and a further 5% of diaries included three secondary activities at the same time at least once. Where participants recorded multiple simultaneous activities, coders entered these activities in the order in which participants wrote their account in the secondary activity field. Table 1 shows that a wider range of activities appear only as a first (or only) secondary activity.

Nevertheless, some of the common activities that also appear as a second or a third simultaneous activity have policy implications. Eating behaviours are associated with quality of life, health, and risk of obesity (Oh et al. 2014). Reading to children can have beneficial effects on children's language development and education outcomes (Mullan 2014). Patterns of sleep not only have association with health but also reflect changing social expectations (Hsu 2014, Michelson 2014) – the appearance of sleep as one of three simultaneous activities raises concerns as well as curiosity. Knowing the extra detail additionally may inform investigation of levels of physical activity as well as the environmental impact of chains of behaviours. These examples reflect only some of the possibilities to investigate simultaneous activities that this survey will facilitate. Results of such research might give rise to arguments to allow diarists to report more detail of their activities (or reinforce the current practice of collecting only one secondary activity).

The current UK HETUS survey includes a "how much did you enjoy this time" rating column at the end of the diary grid. Surveys in the mid-1980s in both the USA and the UK included similar enjoyment rating scales for all activities. The 2009-10 French and 2008-09 Italian HETUS surveys also included an enjoyment column for all activities. The French survey asked people to rank activities from -3 to +3 (a seven point scale), and included this column only in a subsample of the diaries. A limited number of other surveys, including the American Time Use Survey, have asked six or more affect questions of three randomly selected events in a time diary.

This survey initially followed the French diary example, adding the enjoyment field for all activities only in a sub-sample of the diaries. Interviewers reported that they found sampled household members showed more interest in the survey when they were selected to complete the diary that included the enjoyment field, compared with those selected to complete the HETUS diary without this field. Early response rates in the UK were higher in households given the enjoyment diary. For this reason, all diaries in the remaining three-quarters of the UK HETUS survey fieldwork included the enjoyment field. The figure shows that Britons enjoy time periods when most people are home more than time when most people are at work, and enjoy weekends more than week days.

Diary level measures matter. First, policy research using well-being both seeks to promote greater well-being, and also to reduce harm and suffering. Negative daily experiences are associated with negative overall outlook, but negative experiences have separate drivers and mitigators. Activity level affect data inform understanding of what factors in the day make some experiences particularly unpleasant for certain groups of people and how policy might alter circumstances of daily experience to reduce the negativity of these experiences.

Second, policies which change people's behaviours generate unintended consequences. Convincing people to do more of something (like walking), less of something (like smoking) or to switch mode of doing something (more cycling, less driving), opens space in the day to be filled by other activities, reduces space in the day, forcing people to modify time in other activities, or puts people in locations and contexts that change other activity choices (Fisher, Shahbazian and Sepahvand 2012). A policy may generate any of a range of outcomes:

$\square$ A policy may succeed in fostering a behaviour change, but also incentivise other changes of behaviour that have negative consequences, and make the overall effect of the policy worse than doing nothing.
$\square$ A policy may succeed in fostering behaviour change, and produce neutral or complimentary entailments, making the overall policy a success, possibly a greater success than anticipated.
☐ A policy may have no effect whatever.
$\square$ A policy may fail to achieve the desired behaviour change, but incentivise other behaviour change that has positive policy value.
☐ A policy may fail to achieve the desired behaviour change and incentivise other undesired behaviour changes.

Emotional responses can represent a significant part of the judgement of the success of failure of a policy. For example, people who smoke modest amounts and smoke more often in pubs and bars may smoke less in response to an anti-smoking policy, and also report that they enjoy time in pubs and bars less on account of not being able to smoke (in the same way or at all) in these venues. Nevertheless, the enjoyment time of non-smokers in the same venues might increase. Even the light smokers might find themselves able to walk longer as a result of cutting smoking behaviours, and enjoy this additional walking time more — raising their overall reported level of life enjoyment. Diary level enjoyment or other satisfaction data addresses these questions with accuracy and detail that other survey designs cannot match.

Anecdotal evidence from the 2015 wave of the UK Millennium Cohort Survey suggests that the inclusion of the enjoyment column may have helped response rates. This column is one element of the survey the participating young people most frequently expressed an interest in completing and reported finding particularly meaningful. The French HETUS experience and early analysis of the MCS diaries (Chatzitheochari et. al. 2015) suggest that respondents are at least as likely to return completed enjoyment columns as they are to answer other context columns, and response in the enjoyment field sometimes is higher than in other context fields.

Subjective ratings of events represent an under-used element of time use surveys – but this may change soon as the value of using affect data associated with behaviour patterns to construct accounts of national wellbeing gains prominence (Gershuny 2013, Krueger 2009). Analysis of the UK HETUS will contribute to methodological research into which diary approach best captures affect for policy purposes.

Since the first round, HETUS survey codes have distinguished some activities that take place on the internet and smart devices from off-line activities (for instance distinguishing household management on-line or using a banking app from off-line household management). Already, research considers the possibility that technologies might speed up the way people live their lives (Wajcman 2015). During preparations for the second round of the HETUS, Klas Rydenstam from Statistics Sweden noted a complication related to measuring internet-based activities: people for whom such behaviour is long-established and routine may feel less inclined to report this detail than those who recently started using smart devices. He proposed a tick-box for the use of the internet or smart devices. A limited number of HETUS surveys implemented this tick box. The French survey added this column only in a subsample of the diaries.

All diaries in this survey contain this tick box for a "yes" answer to the question "Did you use a smartphone, tablet, or a computer?" positioned just after the secondary activity column and before the location column. The UK survey additionally followed HETUS activity coding guidelines. If a diarist wrote an activity description like "ordered pizza using just eat app", this would be coded as "3722: shopping for and ordering food via the internet". As a result, the UK can give insight into the impact of adding this column by allowing comparison of the difference between using activity reports alone and using the device tick box.

The smart device column increased the number of episodes (changes of report in any diary column from the information on the previous 10 minute time slot) by nearly 4%. The mean daily time on-line in the UK rises from 50 minutes to over 2.5 hours with the addition of the tick box column. These device-tick-box-driven episodes would not appear in the traditional HETUS design without this column (shown in Table 2). Also, the tick box collected information modifying sleep, paid work, and education which otherwise would not have been collected in the traditional HETUS design (in the UK, apps monitoring quality of sleep attract many downloads).

The UK HETUS experience suggests that future surveys would benefit from including a similar device tick box column. Testing in the UK suggests that this column does not increase participant burden. Even though this is an extra column in the diary, the device tick box also offers a shorthand way of reporting some activities and might save more conscientious diarists time for some accounts. Adding this column is not unproblematic, however. By increasing the episode count and changing the reporting of some activities, the device column also introduces an element of complexity into analysis of changes of behaviour across time. Adding this device column requires analysis of the impact of this column to construct backwards comparability calibration strategies.

Once the data are released in the spring of 2016, we hope many researchers will make the most of this data.

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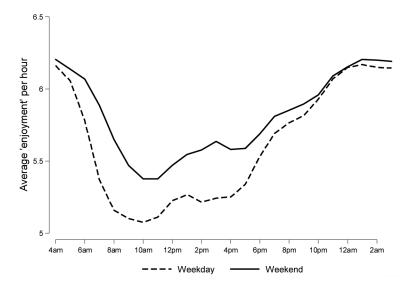


Figure 1. Enjoyment ratings (7= highest enjoyment) by time of day on week days and weekend days in the United Kingdom in 2014-2015

Source: United Kingdom 2014-2015 Everyday Life Survey, beta version (not including last round of fieldwork), own illustration.

Table 1

Most common UK secondary activities in 2014-15

	1st Mention	2nd Mention	3rd Mention
1) Eating; 2) Housework; 3) On-line activites; 4) Personal care; 5) Reading to children, 6) Socialising; 7) TV/Radio/Music	X	X	X
8) Fill in diary; 9) Pet care; 10) Rest; 11) Sleep	X	X	
12) Adult care; 13) Child care; 14) Computer games; 15) Education & Study; 16) Exercise & Sport; 17) Paid work; 18) Shops & Services; 19) Travel; 20) Volunteering	X		

Source: United Kingdom 2014-2015 Everyday Life Survey, beta version (not including last round of fieldwork), own calculations.

Table 2
Smart device and web use reports in UK HETUS surveys

	2000-01	2014-15 (Act codes)	2014-15 (Tick box)
% of episodes only from smart device use shifts	none	none	3.7%
% of episodes involving smart device use shifts	1.7%	7.1%	19.3%
% of diaries with no smart device or web use	85.3%	47.2%	22.8%
% of diaries with 24 hour smart device/web use	none	none	0.1%

Source: United Kingdom 2014-2015 Everyday Life Survey, beta version (not including last round of fieldwork), own calculations.