

FAQ 22: How do I ask children questions about time use?

What's the issue?

Estimating the time spent on an activity is notoriously difficult, even for adults, because (a) people do not usually time their routine activities; (b) media activities are not discrete but overlap with others; and (c) measures rely on memory, a problem compounded by the request not just to report on time spent yesterday but to report on "average" time spent.

Common practice

Every strategy has been tried, at one time or another – asking people about the proportion of their evening spent on television, or the amount of time spent online yesterday, or how long they spend reading the newspaper on a typical day, etc.

One rule of thumb is to provide a reference period when asking about time use, asking, for example: "How often in the last week [or month]", or "Thinking of your average school day, how many hours per day do you use the internet?"

Care is also needed with the response options. You could offer approximate ranges (e.g. more than once a day, almost every day, a few times a week, about once a week, two or three times a month, about once a month, and less than once a month) or vague quantifiers (e.g. often, sometimes, rarely, never), or exact hours (less than one hour per day, 1–2 hours, 2–3 hours, etc.). Beware that one person's "sometimes" could be another person's "often".

Asking about actual hours (or minutes) is often preferred, but then pilot research is vital to discover the relevant range of response options (time spent texting may be measured in minutes; if many children spend 4–6 hours per day online, then a scale with an upper limit of 4+ hours will lack sensitivity).

However, a comparison of multiple methods (using the same sample; see Livingstone & Bovill, 1999) found that children under-report time using a diary method (ticking activities for each hour of the day) compared with general survey answers (the same study found that parents and their 9- to 17-year-old children made similar time estimates of the child's media use, though parental responses were a little lower). Van der Voort and Vooijs (1990) found the same under-reporting for diary studies, and so recommend the use of direct time estimates.

Even if single survey questions have proven to give very accurate results for measuring time use, diary methods give more detailed information on the use itself and the time spent on individual activities. Diary methods, however, are quite demanding for young people, and can therefore lead to higher non-response.

Pitfalls to avoid

- Take care in reporting findings not to create a misleading impression of exactness in responses. While it may be reasonably reliable to compare responses to the same question across subgroups (e.g. boys spend longer online than girls), the absolute values may be less reliable (the claim that children spend 2.34 hours online per day may have been calculated from wide response options, e.g. less than two hours, 2–4 hours, more than 4 hours per day).
- Care is needed in relating findings to the pertinent sample: if only 50% of children surveyed actually use the internet, the average time spent online per day may be 1 hour for "internet users" but only 30 minutes for "all children". A similar problem applies for activities that are not daily: if the child spends one hour every other day.
- Days of the week differ: if you interview children on a Monday, then "yesterday" was a weekend, reflecting different media use from interviews done on a Tuesday. Some researchers therefore avoid Mondays. Others ask about Monday to Thursday as "typical days" and may, separately, ask about the weekend. For the internet, you may need to distinguish "hours spent in your leisure time" or "hours after school" from time spent during school (or work) time. Be sure that your reporting of time use relates directly to the question asked (e.g. children go online on average several times a week, or on a day when they use the internet, children go online for around 2 hours per day).

- Note that maximizing accuracy in time use measurements can occupy many questions in a survey, so determine in advance how the measure will be used and whether subtle discriminations are required.

Examples of ways to measure time use

The UK Children Go Online survey asked: 'Overall, how often do you use the internet THESE DAYS (anywhere)?' Responses: Several times per day/About once a day/A couple of times a week/About once a week/A couple of times a month/About once a month/Less often/Never/Don't know. Those who used the internet at least once each week were then asked: 'On a typical school/college or work day, how much of your leisure time do you spend ... playing computer/electronic games?' None/About 10 minutes or less/About half an hour/About 1 hour/About 1–2 hours/About 2–3 hours/About 3–4 hours/About 4–5 hours/About 5 hours or more/Don't know. This was repeated for 'at the weekend, or in the holidays'. An average figure was then calculated as $(\text{weekday} \times 5 + \text{weekend} \times 2)/7$.

Ofcom's Media Literacy Survey estimated time use in several steps:

1. ASK IF USE INTERNET AT HOME: Please think about the time you spend using the internet at home. How many hours would you say you spend using the internet at home on a typical school day? And how many hours would you say you spend using the internet at home on a day at the weekend?
2. ASK IF USE INTERNET AT SCHOOL: Please think about the time you spend using the internet at school. How many hours would you say you spend using the internet at school on a typical school day?
3. ASK IF USE INTERNET ELSEWHERE: Please think about the time you spend using the internet elsewhere (so not at home and not at school) in one week. How many hours would you say you spend using the internet elsewhere on a typical school day? And how many hours would you say you spend using the internet elsewhere on a day at the weekend?

The interviewer then calculated total weekly hours by adding the answers above using the formula: 5 x typical school day plus 2 x day at the weekend.

Taking a simpler approach, the Pew Research Center's Parents, Kids and the Internet 2001 Survey asked, 'How often do you go online, use email, or instant messaging – every day, a couple times a week, about once a week, or less often?' Their 2004 Teen Survey asked 'Overall, how often do you go online – several times a day, about once a day, 3–5 days a week, 1–2 days a week, every few weeks, or less often?'

An equally simple approach, focused on hours rather than days, was taken by the 2005 national survey conducted by the National Center for Missing and Exploited Children (Finkelhor, 2006): 'How many hours are you online on a usual day when you use the internet?' 1 hour or less 1/More than 1–2 hours/More than 2–3 hours/More than 3–4 hours/More than 4–5 hours/More than 5–6 hours/More than 6–7 hours/More than 7–8 hours/More than 8–9 hours/More than 9–10 hours/More than 10 hours/Don't know/not sure/Refused/Not ascertainable/not applicable.

Last, the Kaiser Family Foundation Kids Media @ The New Millennium (1999) approached the problem thus: 'Thinking only about yesterday/this past Friday/this past Saturday, about how much time did you spend using the computer for the following activities?' Visiting chat rooms/Looking at websites/Email. Response options (for each of these three activities) were: None/5 minutes/15 minutes/30 minutes/45 minutes/1 hour/1 1/2 hours/More than 1 1/2 hours (WRITE IN ANSWER). (Panayiota Tsatsou, UK)

In Sweden in the 1970s the Audience and Programme Research Department at the Swedish Broadcasting Corporation performed special methodological studies about at which age time-specific questions about television viewing (and other media, etc.) were possible to put to children (e.g. 'Did you watch television "yesterday"?'), as well as questions about 'how long' the child had spent on a certain media activity. The studies clearly showed that most children under 9 could not answer such questions properly (due to child development generally), while almost all children from age 9 onwards could.

References and further resources

Finkelhor, D. (2006). *The Second Youth Internet Safety Survey (2005-2006)*. Crimes Against Children Research Center & National Center for Missing and Exploited Children.

- Livingstone, S., & Bovill, M. (1999). *Young People New Media*. London: London School of Economics and Political Science.
- van der Voort, T. H. A., & Vooijs, M. W. (1990). Validity of children's direct estimates of time spent television viewing. *Journal of Broadcasting and Electronic Media*, 34(1), 93-99