

Growing Up in Australia: The Longitudinal Study of Australian Children (LSAC)

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The Times of Their Lives: Collecting time use data from children in the Longitudinal Study of Australian Children (LSAC)

Joanne Corey, Jenny Gallagher, Elisabeth Davis, Michelle Marquardt

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Authors: Joanne Corey, Jenny Gallagher, Elisabeth Davis, Michelle Marquardt Australian Bureau of Statistics

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For more information, write to:

Research Publications Unit Policy Strategy Branch Australian Government Department of Social Services PO Box 7576 Canberra Business Centre ACT 2610

Phone: (02) 6146 8061

Fax: (02) 6293 3289

Email: publications.research@dss.gov.au

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About this report

Time use diaries have been incorporated into each wave of the *Growing Up in Australia* study, the Longitudinal Study of Australian Children (LSAC). They collect important information about how the children spend their time, which can be used, together with other information collected in the study, to analyse differences in child development outcomes based on different patterns of time use. This paper reviews the time use diaries used in the study so far, including what information they collected and whether the information was collected directly from the children or from their parents. The focus of the paper is an account of the development and introduction of a child-based diary collection instrument for the 10–11 year-old K cohort in Wave 4 of the study.

Introduction

Growing Up in Australia: the Longitudinal Study of Australian Children (LSAC), is a complex study conducted in partnership between the Department of Social Services (formerly the Department of Families, Housing, Community Services and Indigenous Affairs), the Australian Institute of Family Studies (AIFS) and the Australian Bureau of Statistics (ABS). The study aims to examine the impact of Australia's unique social and cultural environment on children born in the late 1990s and early 2000s. The study has a broad, multidisciplinary base, and examines policy-relevant questions about children's and adolescents' development and wellbeing. The study involves many different collection instruments, including a time use diary (TUD), deployed since the study's inception in 2004. These diaries are used to gather detailed information about how the child spends their time on a given day or days. When the children in the two cohorts were babies and toddlers, the diary was completed by the parents and collected information on parenting patterns as well as on the child's social environment, active/passive behaviour balance and even temperament. As the participating children have become older, the information collected has become primarily about the child from the child, as they progressively spend less and less time with their parents.

The inclusion of TUDs in LSAC enables the relationship between children's time use and their individual outcomes (such as physical fitness and obesity, family relationships, social skills and learning) to be explored. As noted by Harding:

For those interested in child wellbeing, time use can provide an unusually objective measure of exactly what youth are doing. Before we can evaluate how well children are doing and why some are doing better than others, it is important to understand what they are doing, with whom, and in which social contexts and institutions (Harding 1997).

By combining information from the TUDs with other study data collected from the child, their parents and teachers, many research questions can be explored, including:

- What are the patterns of children's time use (e.g. outdoor activities, unstructured play, use of media and technology, reading), and where and with whom do they conduct activities?
- What family and other environmental factors are associated with different patterns of time use?
- How do different patterns of time use relate to child outcomes including health, emotional and cognitive development, family relations, achievement, social skills and physical wellbeing?
- How does children's use of time change with age?
- How do children's outcomes change over time, and how does the impact of different patterns of time use change over time?

Researchers have already used the LSAC time use data in a number of research projects, including:

- an analysis of the nature of parental time spent with 4–5 year old children (Baxter 2010)
- a comparison of differences in infant activities between babies who were being breastfed and those who were not (Baxter and Smith 2009)
- an exploration of whether parents' working patterns are associated with their children's sleep (Magee, Caputi and Iverson 2011)
- a review of children's television use and its potential relationship with social advantage transmission (Bittman and Sipthorp 2012)
- an investigation of the potential relationship between sleep duration and obesity in children (Hiscock, Scalzo, Canterford and Wake 2011).

These and other papers are available through the Australian Government Department of Social Services (DSS) Longitudinal Surveys Electronic (FLoSse) Research archive <u>http://flosse.dss.gov.au/</u>.

Measurement of time use in surveys

As Harding (1997) noted in his review of methodologies used to collect children's time use data, there are three main methods that can be used:

- standard survey instruments which include activity-specific questions, in which respondents are asked to specify how much time they spent on, or how often they took part in, a particular activity
- time use diaries
- the experience sampling method (ESM), in which respondents are prompted on a regular basis by an electronic device to record information about what they are doing and with whom.

Activity-specific questions

The first of these methods is very commonly used in surveys that are designed to gather information from both adults and children about a particular issue or activity. For instance, the 2010 General Social Survey conducted by the Australian Bureau of Statistics (ABS) asked questions like 'Thinking about the journey from your home to work, how long does this journey usually take?' and 'How often have you had SMS/ Internet contact with friends or family who do not live with you in the last 3 months?'. This approach is very efficient in terms of the time taken to collect the information. The questions are also relatively easy to design and understand. The obvious limitation is that information is collected only for those activities about which questions are asked rather than the entire range of activities that someone might be involved in. Accuracy of recall can also be an issue, and depends on the style of the question, how often the respondent performs the activity, how recently they performed it and how much the amount of time spent on the activity varies.

Time use diaries

Time use diaries (TUDs) are quite commonly used to collect information from adults, but much less so for children. In Australia, the ABS has employed time use surveys at points over a 20-year period, with participants aged 15 years and over. There are some examples of children's TUD-based collections in Australia and overseas, but they tend to be for small geographic areas or about specific activities. For instance, in 2007 the Australian Communications and Media Authority commissioned a survey of children's home media use, using a three-day diary for selected days of the week and times of day. The Multinational Time Use Study is a major project to assemble and harmonise time use survey datasets from 22 countries; however, it includes youth components from only four of those countries (Fisher and Gershuny 2009).

The TUD approach involves either the respondent or an interviewer (or both together) completing a document that captures every activity performed on a given day or days. Respondents are asked either to complete the diary as they are performing activities during the day of interest, or to recall their day's activity the following day (usually using a structured interview format). The recall approach can be affected by memory issues, but may be less of an imposition on the respondent. Depending on the design of the diary and the number of days for which information is collected, it can be quite complex to understand and time-consuming to complete, imposing a considerable burden on respondents. Interviewers usually need to go through the diary with respondents beforehand to help them understand what is required, and in some cases must then work through the completed diary with them to capture the information and check for inconsistencies. Harding (1997) notes that 'pre and post-interviews can last for an hour or more each', which makes this the most resource-intensive and costly approach of the three. However, he also notes that this approach tends to provide 'the most accurate and comprehensive information'.

Ben-Arieh and Ofir (2002) broadly favoured recall self-reporting by the child, using a diary or questionnaire and supported by an interviewer. They noted that there was clear value in calibrating questions to the age of the child, and in enabling the children to report in their own way, placing their own value and importance on activities. They also found that the interviewer helped to keep the child focused (see also Reynolds 1991 in Vogler, Morrow and Woodhead 2009).

As the children participating in the *Growing up in Australia* study aged, the collection of time use data has evolved from a diary completed by parents to a child-based self-report diary supported by interviewer probing. The child self-report method is found to be very successful, combining the improved accuracy of recording on the day with an interviewer checking for gaps or inconsistencies and rounding out the context on the following day.

Experience sampling method (ESM)

This method has not commonly been used in large surveys (though that may change as electronic devices become more prevalent in the population). This method uses an electronic device to prompt participants on a regular basis (e.g., every 90 minutes) to record what they are doing and with whom, and how they feel about the activity. It has the advantage of significantly reducing recall issues. However, this approach can be burdensome and also potentially quite intrusive, depending on what respondents are doing at the time.

History of TUD collection in *Growing Up in* Australia

Waves 1–3

In Waves 1 to 3 of LSAC the study child's parent completed two 24-hour diaries (one weekend and one weekday) recording the child's activities. If the interview was conducted on a weekday, the next weekday was chosen as the weekday diary day. If the interview was conducted on a weekend, the weekday diary day was randomly chosen. The weekend diary day was always randomly chosen. These diaries allowed parents to record, in 15-minute time blocks, patterns of behaviours, activities, interactions, movements (including mode of travel), company (including pets) and the whereabouts of the study child. The diaries also included specific questions about the child's eating and drinking frequency on the day by types of food and drink, the nature of the day (whether a weekday or weekend, whether an ordinary day or a holiday), whether they were ill, whether they had a guest staying, whether a member of the family was away, and whether the weather allowed for outdoor activities. Copies of the diaries used in Waves 1–3 are available from the *Growing Up in Australia* website at <u>http://www.aifs.gov.au/growingup/studyqns/index.html</u>.

Table 1 shows that the response rates for the parent-completed TUD dropped with each wave. Although Wave 1 and Wave 2 response rates still exceeded the target of 70%, those for Wave 3 were below expectations. In addition, feedback from the interviewers after Wave 3 indicated that parents were reporting 'diary fatigue', as the diaries were quite burdensome for them to complete.

| Table 1: Time use diary response rates, Waves 1–3 | | | | | | | |
|---|-----------------|---------------|-------------|--------|-----------------|---------------|-------------|
| B COHORT K COHORT | | | | | | | |
| Diary day | Eligible No. | Actual No. | Actual % | | Eligible No. | Actual No. | Actual % |
| Ages 0–1 W | | | | | | Ages 4–5 | |
| Weekday | 5 107 | 4 031 | 79 | | 4 983 | 3 867 | 78 |
| Weekend | 5 107 | 3 751 | 73 | | 4 983 | 3 582 | 72 |
| | Ages 2–3 WAVE 2 | | | WAVE 2 | | Ages 6–7 | |
| Weekday | 4 606 | 3 477 | 75 | | 4 464 | 3 446 | 77 |
| Weekend | 4 606 | 3 459 | 75 | | 4 464 | 3 460 | 78 |
| Ages 4–5 | | | | WAVE 3 | | Ages 8–9 | |
| Weekday | 4 386 | 2 959 | 67 | | 4 331 | 2 961 | 68 |
| Weekend | 4 386 | 2 950 | 67 | | 4 331 | 2 963 | 68 |

Wave 4 onward

For Wave 4, the LSAC management group in consultation with the expert advisory group decided to develop a new approach. As noted above, the K cohort children would now complete a TUD directly, rather than having parents provide this information on their behalf. The main reason for this, in addition to the falling response rates outlined above, was that parents of the K cohort children were reporting that, as their children grew older, they knew less about what they were doing during the day. As part of this change, it was also decided to collect information about only one day. The key reasons for this were:

- concern about the burden that would be placed on children in asking them to provide information about multiple days, and the consequent risk to their ongoing participation in the study
- the cost of collecting the information, given the need for interviewer involvement as compared with just leaving a diary for the child to complete (which was the approach used with parents).

It was also decided to cease the collection of time use diary information from parents of the B cohort until Wave 6, when these children will be 10–11 years of age and able to self-report.

The new approach was tested during the Wave 4 Dress Rehearsal, and followed up with a 'Skirmish'. The method that was developed through these processes (described in more detail in the following sections) was used in Waves 4 and 5 for the K cohort and is expected to be used for both cohort collections in Wave 6.

Development of a TUD for children

Wave 4 Dress Rehearsal

Prior to each wave of the study, a Dress Rehearsal (DR) is conducted to test the collection instruments and procedures. The Wave 4 DR provided the first opportunity to test the new TUD approach of collecting data directly from children.

Dress Rehearsal procedures and objectives

Dress Rehearsals are conducted to test the end-to-end processes and procedures of a survey before it goes into the field for the main collection. The objectives of a *Growing Up in Australia* DR are to:

- assess any changes in collection methodology made from one Wave to the next
- identify any significant interviewer or field issues with the changes in methodology
- identify any significant issues from the perspective of the study participant, particularly in relation to new survey content
- identify any office processing issues due to the changes in methodology
- test the mechanical accuracy of survey instrument and forms, including sequencing and layout
- estimate overall interview and contact time to determine final assessed time for each cohort, plus timings for each of the interview components and individual modules in the instruments
- assess training materials and study documentation.

In relation to the new TUD, particular points of interest in the Wave 4 DR were the length of time it took to complete and whether there were any issues from either the child's or the interviewer's perspective.

In the DR, 195 K cohort children, aged 10 or 11, completed the interview. Following this, the ABS debriefed interviewers in order to gather information about their:

- experiences in the field
- observations of the children participating in the test and the children's reactions to the questionnaire content
- recommendations for any changes based on these experiences and observations.

The ABS also analysed how long the TUD component of the survey had taken.

Time use diary strategy tested in Wave 4 DR

In the Wave 4 DR the K cohort families were informed about the child TUD in a pre-interview letter. Children received a brochure that outlined what was involved in the Wave 4 home visit (see Attachment 1). Prior to the home visit, the interviewer rang the family and sent out a second copy of the brochure if needed. The brochure asked the child to make a note of when seven key daily 'anchor points' occurred on the day before the home visit. The anchor point activities listed in the brochure were: what time they woke up; what time they started school; what time recess started; what time they ate lunch; what time school finished; what time they ate dinner; and what time they went to bed. The child was also asked to write down other important things they did. Parents were asked to help them do this, and interviewers reminded the family about this in the appointment and interview reminder phone calls.

During the home visit, the children referred to these answers as the interviewer asked a series of questions during a Computer Assisted Interview (CAI) in order to obtain a comprehensive record of the child's activities during the 24 hour period prior to the interview. The interview covered similar activities to the paper diary that parents had previously completed, with the interviewer asking the child to recall:

- what they did
- when they did it
- who was doing it with them

- who was also present
- where they were
- whether they were doing any secondary activities.

Interviewer feedback following the DR

Feedback from the children (via the interviewers' observations) and from the interviewers themselves about the new TUD component was not positive. The interviewers did not find the brochure helpful—it was rarely completed and, when it was, it did not contain enough detail to be useful. The TUD approach used in the DR took from 16 to 43 minutes (an average of just over 23 minutes, significantly longer than the 15 minutes budgeted for due to other competing content in the Wave 4 interview). The children reportedly lost interest and found this part of the interview boring, as interviewers repeatedly asked the children 'What happened next?' and elicited further details about each activity identified. Children had trouble remembering what they had done the previous day, often did not know the start time of activities, and were annoyed that they were expected to remember everything. The interviewers also found the CAI instrument used in the DR cumbersome, as it involved repetitive loops of questioning to step the child through the preceding day.

Wave 4 DR time use diary recommendation

Assessing feedback from the Wave 4 DR, LSAC management were loath to abandon the collection of time use data altogether, given the value that researchers had placed on it from previous LSAC waves. They recommended that the design and administration of the TUD be reviewed and altered, to improve the experience for the child and to reduce the time taken to administer the interview. Instead of the brochure, it was resolved to try using a four-page, structured paper diary. Like the brochure, this would be sent to the child beforehand. Because of the range and seriousness of the problems identified in the Wave 4 DR, it was important that any new approach was tested prior to its use in the main collection.

Wave 4 Skirmish process and objectives

In order to meet the timeline for finalisation of content for the main fieldwork for Wave 4, it was not possible to repeat a full DR incorporating the new approach. Instead, a small scale Skirmish was carried out to test the new TUD. Two primary schools in Canberra agreed to participate in the Skirmish. A consent form was sent home with around 50 children aged 10–11 years, selected across a range of abilities. The form explained the study and Skirmish, and asked for parental consent to interview the child at school.

The objectives of the Skirmish were to:

- obtain 10–11 year old children's reaction to the new diary
- assess the level of completion and usefulness of the pre-sent paper diary
- obtain timing data on how long it took interviewers to enter diary information into the CAI instrument.

A total of 43 students participated in the Skirmish.

Time use diary collection methodology tested in the Skirmish

The revised version of the TUD collection for Wave 4 was driven primarily by a structured paper diary (see Attachment 2). Prior to the interview, the child was sent a four-page paper diary with an explanatory letter, clock pen, and food/drink stickers to assist them in completing it. Instead of being asked to record just seven key 'anchor point' activities on the day before the interview (as in the DR), the children were encouraged to record all their activities in the diary.

During the subsequent interview, the CAI instrument was not used to take the child step by step through the previous day. Rather, it was used primarily as a data entry tool to capture what the child had recorded, and for interviewers to cue the child to recall and elaborate. Additional information was drawn from the child, including who they were doing the activity(ies) with, where they were doing the activity, and whether they were outside. Interviewers also gave additional prompts to elicit missing information where necessary. A coding frame (see Attachment 3) was developed to help the interviewer to code the activities into the CAI instrument.

In order to test how well the new approach worked for both weekend days and school days, each school was allocated a different diary day (one a Sunday and one a Monday).

Results of the Skirmish

The feedback from the children involved in the Skirmish was that they enjoyed filling in the paper TUD, and found it interesting and easy (see Attachment 4 for more detail). In the test, 89% of the children used the diary and remembered to bring it to school. Of these, 13% had only partially completed the diary. Partially completed diaries included those with gaps during the day and those with only half the day recorded. The results showed that where the interviewer was entering data for fully completed diaries, or was prompting and entering data for those who did not complete a diary at all, the average number of activities coded in the instrument was very similar. The average number of activities coded for partially completed diaries was lower, probably because (as indicated by interview time) there was a much lower level of prompting.

| Table 2: Number of activiti | es and timing, Wave 4 S | Skirmish | |
|--------------------------------|--|---|--|
| Completeness of paper diary | Main activities in the paper diary Average No. | Main activities in the instrument Average No. | Time taken in the interview Average Min. |
| Fully completed | 29.0 | 24.7 | 10.3 |
| Partially completed | 13.2 | 17.4 | 8.4 |
| No diary | 0 | 24.0 | 15.5 |

The average TUD interview time was 10.3 minutes, ranging from 4.6 minutes to 20.2 minutes. This was lower than the 15 minutes average time planned for the main Wave 4 collection, and considerably lower than the 23 minutes it had taken during the DR. However, it was anticipated that the interview might take longer in the main Wave 4 collection. The interviewers in the Skirmish were working only with children who attended one of the two participating Canberra schools, and many were reporting the same start, finish and break times. This meant the interview went faster as the interviewer became familiar with these times.

The average number of activities recorded was also higher than in the DR. However, this was somewhat influenced by the fact that information was collected about only two days (Sundays and Mondays—see above). A higher number of activities was recorded for Sundays than for the school day, Monday, where time in class was all coded to one activity category.

Where the child had indicated that they were doing more than one activity simultaneously (e.g. eating and watching TV), the CAI process also captured the secondary activity. Secondary activities were recorded in 58% of the diaries overall, 68% of the fully recorded diaries and none in partially completed diaries. The main secondary activities were communication (37%) and eating (25%).

All the children were asked some questions at the end of the interview about how they found the exercise, and they were also asked to answer some questions on a self-complete form (see Attachment 4 for details of the questions and responses). The overall response was very positive. The children were enthusiastic about the stickers, recognising that these helped them remember eating times. They loved the clock pens, which helped them be quite specific about the times they recorded in their diaries. Nearly all the children understood what they were supposed to do. The overall feedback from the children was that they enjoyed filling in the paper diary, and found it interesting and easy.

Follow-up focus group with DR interviewers

Following the Skirmish, a group of interviewers who had been involved in the DR participated in a focus group that sought their views on whether the revised method addressed the concerns they had raised following the DR. Their initial reaction to the new TUD was that it was bright and colourful and they thought that the children would really enjoy filling it out. They thought it would take less time to code the more detailed paper diary entries into the CAI instrument than the approach tested in the Wave 4 DR. The interviewers in the focus group suggested that, if the child had completed the diary the day before the interview, this would alleviate the problem of children interrupting their parents during the face-to-face interview. They had some concerns that the TUD module could still take some time if the child had forgotten to complete their diary.

Recommendations from the Skirmish

Overall, the study managers considered the Skirmish to be very successful in demonstrating that the new process was engaging for the children, could be completed within the allocated time and would maintain the level of activity previously reported by parents. They recommended that the approach tested in the Skirmish be taken forward into the main Wave 4 collection. The only significant changes recommended following the Skirmish were that the coding frame should be expanded to better reflect the full range of the children's activities, and that some minor improvements be made to the look and feel of the diary (see Attachments 5 and 6).

Main Wave 4 results

Given the success of the Skirmish, the new methodology for collecting time use data from children was introduced into the main collection for Wave 4. As recommended, some improvements were made to the look and feel of the diary, the most substantive of which was the inclusion of child-friendly instructions for completing the diary's coloured time sections (see Attachment 5). Minor changes were also made to the coding frame to clarify what activities fell under certain categories (see Attachment 6).

Response rates and diary completion rates

The response rates for the TUD component were very high in Wave 4, with 3,994 out of 4,169 K cohort children (96%) providing information. This was much higher than the rate achieved for the K cohort in Wave 3 (68%), when information was collected from a diary left with parents. When they came to the in-home interview, 75% of the participating children had completed their paper diary, and a further 14% had partially recorded their activities. This was the same rate as in the Skirmish, when 89% had brought either completed or partially completed diaries to the interview. Only 11% did not complete their diary at all. Girls were more likely to fully complete the diary prior to interview (79% compared to 71% for boys). Boys were more likely than girls not to have completed any part of the diary prior to interview (13% compared to 9%).

| Table 3: Completeness of paper diary prior to interview by sex of study child, main Wave 4* | | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|--|--|
| | В | oys | (| Girls | | Total | | |
| Completeness of paper diary | No. | % | No. | % | No. | % | | |
| Fully completed | 1 448 | 71.1 | 1 551 | 79.1 | 2 999 | 75.1 | | |
| Partially completed | 318 | 15.6 | 224 | 11.4 | 542 | 13.6 | | |
| Total fully or partially completed | 1 766 | 86.8 | 1 775 | 90.6 | 3 541 | 88.7 | | |
| Not completed at all | 268 | 13.2 | 185 | 9.4 | 453 | 11.3 | | |
| Total | 2 034 | 100.0 | 1 960 | 100.0 | 3 994 | 100.0 | | |

* Based on interviewer analysis of the paper diaries

Activity recording

Table 3 demonstrates that the involvement of the interviewer adds to the participation rate for this part of the collection. Without the interviewers, potential data loss would have come from all the non-completed diaries, and from a proportion of the partially completed diaries where the information could have been too inadequate to use—up to a 29% loss for boys and 21% for girls, averaging up to 25% in total.

As shown in Table 4, it is clear that the interview process improved the quality of the data collected. Following the interview, the average number of activities collected from study children who had not used their diaries at all was not significantly different to the number of activities collected when the diary had been partially completed prior to interview (t=0.82, p > 0.05). Clearly, having the interviewer take the study child through the preceding day and probing for further information during the home visit produces a more complete and richer dataset.

The results also demonstrate that providing the children with a tailored record to complete prior to interview was effective in assisting their recall on the day of the interview. Table 4 also shows that, on average, more activities were recorded in the CAI instrument when the child had fully completed a diary prior to interview than when they had only partially completed one (t = 15.3, p < 0.05) or had not completed a diary at all (t = 15.6, p < 0.05).

| Table 4: Number of activities coded by completeness of paper d | liary, main Wave 4 |
|--|--|
| Completeness of paper diary | Main activities coded in instrument Average No. |
| Fully completed | 22.7 |
| Partially completed | 18.9 |
| Not completed at all | 18.6 |
| Total | 21.7 |

The average number of activities coded in the CAI instrument in the main Wave 4 collection was slightly lower overall than in the Skirmish. This probably related in large part to the wider range of days (including Tuesdays to Saturdays and school holidays) covered in the main collection. However, the number of activities recorded on a Sunday was also slightly lower than in the Skirmish.

Table 5 indicates that the day on which the diaries were completed was spread relatively evenly across the weekdays (Monday to Friday), with Tuesdays having the highest proportion (17.9%) and Fridays the lowest (13.4%). The day with the lowest proportion of diaries completed was Saturday (only 4.4%). This was because the diary was completed on the day prior to interview, and only a small number of interviews were conducted on a Sunday.

A frequent approach to analysing the diary data is to look at either school days or non-school days, or to compare the two. The balance of diary days between school and non-school days (ie weekends or holidays) was a good reflection of the actual ratio of school to non-school days over the collection period.

| Table 5: Day of diary completion, main Wave 4 | | |
|---|--------------|--------------------------------|
| | Diaries % | Main activities Average No. |
| DAY OF WEEK | | |
| Monday | 16.5 | 21.6 |
| Tuesday | 17.9 | 22.2 |
| Wednesday | 16.9 | 22.4 |
| Thursday | 14.7 | 22.3 |
| Friday | 13.6 | 22.3 |
| Total weekdays | 79.7 | 22.1 |
| Saturday | 4.4 | 20.7 |
| Sunday | 16.0 | 19.9 |
| Total weekend days | 20.4 | 20.0 |
| TYPE OF DAY | | |
| School day | 55.0 | 22.7 |
| Non-school day | 45.0 | 20.5 |

The average number of activities was very similar across both the different days of the week and the different types of day, ranging from 19.9 on Sundays to 22.4 on Wednesdays. The children had been encouraged to fill in their diaries during the course of the day. Almost half (49%) had done so, and a further 35% had filled in their diary at the end of the day. The average number of activities declined only slightly when children deferred filling in the diary, from 22.9 activities for diaries filled in during the day to 21.5 for those filled in at the end of the day, and 19.2 for others (including diaries not filled in at all).

Most activity records were for main activities only (79%). A further 20% included a secondary activity, most commonly eating/drinking. This was also captured through the CAI process. In the interest of keeping the children engaged in completing the survey, interviewer prompting for secondary activities had not been encouraged. This approach was in line with other international child-based surveys (see Fisher and Gershuny 2009).

Interview duration

The average time taken by interviewers to code the activities into the CAI instrument was 15.3 minutes. While this was longer than the time taken in the Skirmish, it was very close to the time expected and allocated for this part of the interview. The average time varied only slightly if the paper diary was partially completed (15.4 minutes), and if the diary was not completed at all the average time dropped to 14.4 minutes.

| Table 6: Interview duration by completeness of paper diary, main Wave 4 | |
|---|---|
| Completeness of paper diary | Time taken in interview Average Min. |
| Fully completed | 15.4 |
| Partially completed | 15.4 |
| Not completed at all | 14.4 |
| Total | 15.3 |

Children's experience of completing the Wave 4 diary

At the beginning of the TUD interview, the children were asked whether they had received help from their parent(s) or someone else to fill out their paper diary. Just over half (51%) said they had received help.

| Table 7: Whether child received assistance to complete paper diary, main Wave 4* | | | | | | |
|--|-------|-------|-------|-------|-------|-------|
| | Boys | % | Girls | % | Total | % |
| Parent assisted child | 1 113 | 54.7 | 926 | 47.2 | 2 039 | 51.1 |
| Parent did not assist child | 725 | 35.6 | 916 | 46.7 | 1 641 | 41.1 |
| Diary not completed | 196 | 9.6 | 118 | 6.0 | 314 | 7.9 |
| Total | 2 034 | 100.0 | 1 960 | 100.0 | 3 994 | 100.0 |

* This information was collected by interviewers from the children during the face-to-face interview. A smaller number were categorised as having an incomplete diary than in Table 3 which is based on interviewer's observations. It is likely that some children who did not complete a paper diary reported that their parent did not assist them rather than that they hadn't completed the paper diary.

Interviewers recorded in their Interviewer observations module the study child's experience of completing the TUD component of their interview. In the vast majority of cases, study children completed this part of the interview with no difficulties.

| Table 8: Child's experience with time use diary, main Wave 4* | |
|---|-------|
| | % |
| Did not experience difficulties | 85.8 |
| Experienced difficulties | 2.9 |
| Not reported | 11.3 |
| Total | 100.0 |

* Based on interviewer's observations. This question was not asked in cases where the interviewers indicated that the child had not completed the paper diary.

Recommendations from Wave 4

Overall, the time use diary approach used in Wave 4 was seen as very successful, and a suitable model for Wave 5. The timing, response rates, number and range of activities entered and range of diary days all met or exceeded expectations. In general, the experience of both the children and the interviewers confirmed that the approach used was not unduly burdensome and was unlikely to have any impact on children's willingness to continue participating in the study.

Teenagers now: Wave 5 Dress Rehearsal

For Wave 5, LSAC management decided to continue the collection of child self-report time use data using the methodology from Wave 4. The substantial numbers of activities and paper diaries collected in Wave 4 made it possible to review the activity coding framework, both to see how well it had worked in Wave 4 and to assess its continued suitability for an older age group.

Activity coding review and changes

The coded Wave 4 time use diaries returned a total of 78,510 activity records. Of these, only 3% (2,355 activities) had been coded to the top (most generic) level of their activity group, and this had occurred across most major categories. Nevertheless, the study managers sought improvements that would allow interviewers to code more records at the lower level, providing greater detail for researchers. Analysis of a sample of paper diaries compared with their coded versions on file showed that:

- Interviewers had frequently used the generic code when there was information in the paper diary to support a more detailed classification. This often happened when the detailed categories included some examples, but not one that covered the specific activity being reported by the child.
- Further prompting could sometimes have enabled a more detailed classification.
- In some cases the generic coding was correct, as an appropriate detailed activity code was lacking.

As a result of this review, a number of changes were made to the activity framework for the Wave 5 DR (compare Attachments 6 and 7). These changes were designed to allow a more detailed description of activities without unduly affecting possible comparisons between Waves 4 and 5. For example, the self-care components of the framework were split from one activity code (21: Bathing, dressing, toileting, teeth brushing, hair care) into four (20: Cleaning teeth, 21: Showering/bathing, 22: Getting dressed/getting ready, 23: Personal care nec). These could still be added together to be comparable to Wave 4 results. A new code for time spent completing the diary was also added.

In addition to these changes, a new top level category, 'work', was added to the framework. This category was introduced in recognition that, as the children grow older, they are more likely to undertake work. The new work classification included a range of categories reflecting the jobs children were likely to do (e.g. umpiring/refereeing, mowing the lawn, delivering pamphlets). Some of these had emerged from activities recorded in the Wave 4 diaries—for example, assisting with different types of farm work. The category included both paid and unpaid work, since unpaid work in a family business or farm is classified as employment in the ABS Labour Force Survey. Volunteering was also included as a code within the 'work' category to capture this type of work as another situation in which children interact with people outside the family and school context.

Finally, changes were made to the framework to support emerging fields of social research, particularly around children's use of new forms of electronic media and communications. For instance, video chatting and using social networking sites were added as new categories of activity.

Alterations to paper diary and CAI instrument for Wave 5 DR

In addition to the changes introduced to the coding framework for the Wave 5 DR, the paper diary was also modified slightly (see Attachments 5 and 8). The main change to the paper diary was in its layout. The new layout consisted of two A4 pages folded into a B4 size booklet with a total of 8 pages. This was lighter and more convenient to carry around. It allowed a separate page for each block of time, with two pages for after 6:00pm. On the front of the diary, extra hints were added such as 'We want to collect as much detail as possible. Sometimes you do more than one thing at a time, so make sure you write everything that you do'. Examples were also provided, such as getting dressed (it looked as if some kids in Wave 4 went to school in their pyjamas), getting ready, travelling, hanging out or doing nothing. The time section pages were, as before, distinctively coloured, now with a cartoon character illustrating a number of different relevant activities throughout the booklet. The question 'What time did you go to bed?' was added before 'What time did you go to sleep?'. This was in response to researchers' interest in activities in bed before sleeping, such as reading, resting, listening to music or watching TV programs, and texting.

Two additional contextual questions were also added to the CAI instrument: 'Was the Internet used for that activity?' and 'Was the chore carried out for the family?'. The instrument prompted the interviewer to ask for this extra information for relevant activities.

W5 DR procedures and objectives

The objectives of the Wave 5 DR were very similar to the W4 DR, with greater emphasis on ensuring that the children, now two years older, were still engaged in the process. The procedures tested were very similar to those in the main Wave 4 collection. The paper diary was sent directly to the child, along with a clock pen and eating/drinking stickers. Prior to the interview, the interviewer contacted the family to make sure the diary had been received and sent out another one if necessary. The child was instructed to complete the diary the day before the interviewer came to the home to conduct the interview. When the interviewer visited the home, they went through the completed paper diary with the study child and turned the free text entries into set activity codes which were then entered into the CAI instrument.

Wave 5 DR results

The results of the Wave 5 Dress Rehearsal were very similar to those of Wave 4. Again, as shown in Table 9, the response rate for the TUD component was very high, with a 97% participation rate, comparable with the Wave 4 response (96%). Prior to the interview, 76% of the study children had fully completed paper diaries (75% in Wave 4), a further 13% had partially recorded their activities, and 11% of children had not filled in the paper diary at all. As in Wave 4, girls were more likely to have fully completed their diary—86% of girls compared to 68% of boys. Eighty-nine per cent of children (85% of boys and 93% of girls) had at least partially filled the diary on the specified day, equal to usage in Wave 4.

| Table 9: Completeness of paper diary by sex of study child, Wave 5 DR and main Wave 4 | | | | | | | |
|---|------------------|-------|-----|-------|-----|--------|-------|
| Wave 5 Dress Rehearsal | | | | | | Wave 4 | |
| | Boys Girls Total | | | | | | |
| Diary completeness | No. | % | No. | % | No. | % | % |
| Fully completed | 63 | 67.7 | 63 | 86.3 | 126 | 75.9 | 75.1 |
| Partially completed | 16 | 17.2 | 5 | 6.8 | 21 | 12.7 | 13.6 |
| Fully or partially completed | 79 | 84.9 | 68 | 93.1 | 147 | 88.6 | 88.7 |
| Not completed prior to interview | 14 | 15.1 | 5 | 6.9 | 19 | 11.4 | 11.3 |
| Total | 93 | 100.0 | 73 | 100.0 | 166 | 100.0 | 100.0 |

As in Wave 4, the interviewer's involvement added greatly to the participation rate, enabling the collection of substantial quantities of data from partially completed and non-completed diaries which otherwise would have been non-responses.

The extra encouragement in the redesigned paper diaries to record secondary activities, and probing by the interviewers, resulted in a larger number of activities on file, almost doubling the proportion of secondary activities compared to the Wave 4 result. Altogether, 5,077 activities were recorded in the Wave 5 Dress Rehearsal—3,600 main (71%) and 1,477 secondary—compared to Wave 4, in which 79% of activities recorded had been main activities.

An average of 28.8 activities (including secondary activities) was recorded in the instrument for boys compared to an average of 21.6 activities in the paper diaries. For girls the average in the instrument was 30.5 compared to 26 in the paper diaries. In both cases, the difference between the number of activities in the paper diaries and the instrument was significant (t = 4.05, p < 0.05 for boys and t = 2.4, p < 0.05 for girls). This confirms that using part of the LSAC face-to-face interview time for the TUD interview adds substantial value to this collection, particularly in achieving a comparable depth of data across genders, and given the potential longitudinal dataset.

| Table 10: Paper diary versus instrument activities* | | | | |
|---|------|--------|---------|---------|
| | Mean | Median | Minimum | Maximum |
| BOYS | | | | |
| Number of paper diary activities | 21.6 | 21.0 | 8.0 | 39.0 |
| Number of instrument activities | 28.8 | 27.5 | 5.0 | 67.0 |
| GIRLS | | | | |
| Number of paper diary activities | 26.0 | 24.5 | 12.0 | 47.0 |
| Number of instrument activities | 30.5 | 30.0 | 2.0 | 69.0 |

* Number of activities includes a total of main and secondary.

Table 11 shows that, although the days of the week during which individual children completed their diaries varied, the distribution of diary completion across weekdays and weekend days was very similar for Wave 4 and the Wave 5 Dress Rehearsal. However, the proportion of school days and non-school days was quite different. This was to be expected for the Wave 5 DR, as the eight-week enumeration period included two weeks of school holidays. As in Wave 4, diaries completed on a school day had more activities recorded on average (21.8) than on a non-school day (20.7).

| Table 11: Day of diary completion, main Wave 4 and Wave 5 DR | | | | | |
|--|--------------|--------------------------------|--------------|--------------------------------|--|
| Wave 4 | | | Wave 5 DR | | |
| | Diaries % | Main activities Average No. | Diaries % | Main activities Average No. | |
| DAY OF WEEK | | | | | |
| Monday | 16.5 | 21.6 | 15.3 | 22.4 | |
| Tuesday | 17.9 | 22.2 | 14.7 | 23.2 | |
| Wednesday | 16.9 | 22.4 | 18.8 | 19.6 | |
| Thursday | 14.7 | 22.3 | 15.9 | 21.0 | |
| Friday | 13.6 | 22.3 | 14.7 | 21.9 | |
| Weekday | 79.7 | 22.1 | 79.4 | 21.6 | |
| Saturday | 4.4 | 20.7 | 4.1 | 20.4 | |
| Sunday | 16.0 | 19.9 | 16.5 | 19.8 | |
| Weekend day | 20.4 | 20.0 | 20.6 | 20.1 | |
| TYPE OF DAY | | | | | |
| School day | 55.0 | 22.7 | 39.4 | 21.8 | |
| Non-school day | 45.0 | 20.5 | 60.6 | 20.7 | |

Recommendations from Wave 5 DR

Again, the collection of TUD information went well in the Wave 5 DR. Participation rates were very high, and on the range of measures there was a reassuring consistency between the Wave 4 and the Wave 5 DR test results. The modifications to the paper diary, such as the prompt for more secondary activities, appear to have succeeded in their intent. While interviewers mentioned some concern about motivation, it does not appear to have affected the results. The approach tested in the Wave 5 DR was carried forward to the main Wave 5 collection with no further changes to the diary or the surrounding procedures.

Conclusions

The introduction of a child-based time use diary into the *Growing Up in Australia* study has been very successful in terms of the efficiency and effectiveness of the collection and the children's engagement with the process. Innovations, such as providing the child with a clock pen along with the diary and tailoring the diary to the child's developmental stage, have enabled children to successfully and actively participate in this part of the study. Finally, the addition of an interviewer-based component to the collection has clearly improved response rates and increased the number of activities recorded, leading to higher quality results for the study.

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Attachments

Attachment 1: Wave 4 Dress Rehearsal Brochure (2 pages)





Attachment 2: Wave 4 Skirmish Diary (3 pages)









Attachment 3: Wave 4 Skirmish Coding List (2 pages)



Time Use Diary Coding system – first and second level categories

| Top level Category | Second level Category | Details |
|------------------------------|--|---|
| | | Includes |
| 1.0. Eating/drinking | | Eating main meals, snacks Drinking <u>Comment</u> If doing other activity at same time, eating/drinking is secondary activity |
| | | |
| 2.0. Personal/Health Care | 2.1 Bathing, dressing, toileting, teeth brushing, hair care etc. | |
| | 2.2 Dentist, Doctor, Chiropractor, Physio etc | |
| 3.0 Chores | 3.1 Making own bed,tidying own room | |
| | 3.2 Making, preparing own food | |
| | 3.3 Getting self ready, packing or unpacking | |
| | own school or sports bag | |
| | 3.5 Cooking meal preparation making | |
| | lunch, setting table for others, etc | |
| | 3.6 Washing dishes, stacking, emptying | |
| | dishwasher | |
| | 3.7 Gardening, putting out the bin | |
| | 3.8 Taking care of siblings, other children | |
| | 3.9 Taking care of pets | • Walking pets (see active activities) |
| 4.0. Active activities | 4.1 Organised team sports and training i.e. football, basketball, netball etc. | |
| | 4.2 Organised individual sports and training | |
| | i.e. swimming, dancing, martial arts, etc. | |
| | 4.3 Ball games, riding a bike /scooter/ skateboard, skipping, running games, other free activities | |
| | 4.4 Taking pet for a walk | |
| | 4.5 Scouts, girl guides, etc | |
| | 4.6 Shopping | |
| | 4.7 Going out to museums, cultural events, | |
| | fairs, community events, church etc. | |
| | 4.0 Live Sporting Events | |
| 50 Non activo | 5.1 Private music/language/religion/tutoring | |
| activities | lessons | |
| | 5.2 Listening to music, CDs, playing music for leisure | |
| | 5.3 Reading or being read to for leisure | |

| | 5.4 Board or card games, puzzles, toys, art | |
|---|--|---|
| | and craft, etc | |
| | 5.6 Doing nothing | |
| | 5.7 Sleening nanning | |
| | 5.0 However, (not an accurate) in the dime | |
| | music practice | |
| 6.0 Electronic | 6.1 Computer for homework - internet | |
| media/games/computer | | |
| use | | |
| | 6.2 Computer for homework – not internet | |
| | 6.3 Computer games - internet | |
| | 6.4 Computer games – not internet | |
| | 6.5 Xbox, Playstation, Nintendo, WII etc. | |
| | 6.6 Internet not covered elsewhere | |
| | 6.7 TV/DVD | |
| 7.0 School Lessons | | Includes |
| | | |
| | | • Excursions |
| 7.0. School Lessons | | • Excursions Exclude |
| | 9.1 Talling face to face | Excursions <u>Exclude</u> Recess and Lunch |
| 8.0 Communication | 8.1 Talking face-to-face | Excursions <u>Exclude</u> Recess and Lunch |
| 8.0 Communication | 8.1 Talking face-to-face 8.2 Talking on a landline phone | Excursions Exclude Recess and Lunch |
| 8.0 Communication | 8.1 Talking face-to-face 8.2 Talking on a landline phone 8.3 Talking on a mobile phone | Excursions Exclude Recess and Lunch |
| 8.0 Communication | 8.1 Talking face-to-face 8.2 Talking on a landline phone 8.3 Talking on a mobile phone 8.4 Texting,email, social networking such as facebook or twitter | Excursions Exclude Recess and Lunch |
| 8.0 Communication | 8.1 Talking face-to-face 8.2 Talking on a landline phone 8.3 Talking on a mobile phone 8.4 Texting,email, social networking such as facebook or twitter 8.5 Skype or webcam | Excursions Exclude Recess and Lunch |
| 8.0 Communication | 8.1 Talking face-to-face 8.2 Talking on a landline phone 8.3 Talking on a mobile phone 8.4 Texting,email, social networking such as facebook or twitter 8.5 Skype or webcam 9.1 By foot | Excursions Exclude Recess and Lunch Note: Travelling must be for the |
| 8.0 Communication 9.0 Travel | 8.1 Talking face-to-face 8.2 Talking on a landline phone 8.3 Talking on a mobile phone 8.4 Texting,email, social networking such as facebook or twitter 8.5 Skype or webcam 9.1 By foot 9.2 By bike, scooter, skateboard etc. | Excursions Exclude Recess and Lunch Note: Travelling must be for the purpose of going to and from |
| 8.0 Communication 9.0 Travel | 8.1 Talking face-to-face 8.2 Talking on a landline phone 8.3 Talking on a mobile phone 8.4 Texting,email, social networking such as facebook or twitter 8.5 Skype or webcam 9.1 By foot 9.2 By bike, scooter, skateboard etc. 9.3 Be driven in a private car | Excursions Exclude Recess and Lunch Note: Travelling must be for the purpose of going to and from somewhere, not play |
| 8.0 Communication 9.0 Travel | 8.1 Talking face-to-face 8.2 Talking on a landline phone 8.3 Talking on a mobile phone 8.4 Texting,email, social networking such as facebook or twitter 8.5 Skype or webcam 9.1 By foot 9.2 By bike, scooter, skateboard etc. 9.3 Be driven in a private car 9.4 By public transport i.e. Bus, taxi or | Excursions Exclude Recess and Lunch Note: Travelling must be for the purpose of going to and from somewhere, not play |
| 8.0 Communication 9.0 Travel | 8.1 Talking face-to-face 8.2 Talking on a landline phone 8.3 Talking on a mobile phone 8.4 Texting,email, social networking such as facebook or twitter 8.5 Skype or webcam 9.1 By foot 9.2 By bike, scooter, skateboard etc. 9.3 Be driven in a private car 9.4 By public transport i.e. Bus, taxi or aeroplane | Excursions Exclude Recess and Lunch Note: Travelling must be for the purpose of going to and from somewhere, not play |
| 8.0 Communication 9.0 Travel 99 Other | 8.1 Talking face-to-face 8.2 Talking on a landline phone 8.3 Talking on a mobile phone 8.4 Texting,email, social networking such as facebook or twitter 8.5 Skype or webcam 9.1 By foot 9.2 By bike, scooter, skateboard etc. 9.3 Be driven in a private car 9.4 By public transport i.e. Bus, taxi or aeroplane | Excursions Exclude Recess and Lunch Note: Travelling must be for the purpose of going to and from somewhere, not play This code to be used only if the activity |
| 8.0 Communication 9.0 Travel 99 Other | 8.1 Talking face-to-face 8.2 Talking on a landline phone 8.3 Talking on a mobile phone 8.4 Texting,email, social networking such as facebook or twitter 8.5 Skype or webcam 9.1 By foot 9.2 By bike, scooter, skateboard etc. 9.3 Be driven in a private car 9.4 By public transport i.e. Bus, taxi or aeroplane | Excursions Exclude Recess and Lunch Note: Travelling must be for the purpose of going to and from somewhere, not play This code to be used only if the activity cannot be coded to any category above, identify here the provided and the provided activity |

Attachment 4: Wave 4 Skirmish Cognitive Interview Results (3 pages)

Cognitive Interview Questions and results following the TUD skirmish – Interviewer Questions

Asked if child filled in the paper TUD well:

1. What was it like filling in the paper diary?

Most children said it was easy and fun filling out the paper diary and they found it interesting. A couple of children said that it was hard at first but then they managed it.

2. What was your favourite part?

The children stated that their favourite part of doing the diary was writing down what they did (33%), the stickers (22%) and the pen (15%).

3. What didn't you like?

Seventy-nine per cent said there was nothing they didn't like., Thirteen per cent (8% boys) said they didn't like writing, 4% said they didn't like trying to get the time right and 4% found it time consuming.

4. Did you fill it in during the day or at the end of the day?

Eighteen (41%) children filled the diary out from the middle of the day, 4 (32%) filled their diaries out throughout the day, 11 (25%) filled their diaries out at the end of the day and 1 (2%) did not fill the diary in at all.

5. Were there any parts that you found hard to do?

Sixty-seven per cent said there wasn't anything they found hard. Some children who had been given their diaries in the middle of the day by the school said they had trouble remembering when they had done things (11%). Some children found it hard to write the times in the right time blocks (7%).

6. Were there any bits you didn't understand?

Ninety-one per cent of children understood what to do, with the remaining children saying they repeatedly made mistakes in the time blocks.

7. Did you ask your parent(s) for help? Which parts did you need help with? How often did you ask your parent(s) for help?

Thirty-six per cent of children asked their parent(s) for help and this was mainly asking them what time they got up (22%), and whether they needed to put a sticker on the diary when they drank (11%).

8. Did you use the pen? Was it useful to help you with the times?

The pen was well received by all the children and they said it helped them with the time. One child was confused with the digital time.

9. Do you have any ideas about how to make it easier or more fun to fill in?

A number of children who were not given the diary until lunch time suggested that children should be given the diary at the beginning of the day. One child suggested we should let them be more imaginative and let them draw pictures instead of putting food stickers on the diary. Two boys suggested using the computer would make it more fun. One child suggested that the times could be bold so that they stood out. A number of children said they would have liked the diary to be more colourful. Most children said they did not have any ideas.

Asked if used stickers:

10. Did you like using the stickers? Were they helpful to remind you to write when you ate something?

All children liked the food stickers saying that it helped them to remember when they ate.

Asked if the child did not fill in the paper TUD well/at all:

11. Why didn't you fill in the paper TUD/fill in much of the paper TUD?

One child did not complete the diary, the reason being that her parents arrived back from overseas on the diary day and she totally forgot.

Self-complete child questions from the skirmish

How much did you like doing this?

Liked it a lot Liked it a bit It was just OK Didn't like it much Really didn't like it

Seventeen (39%) children said they liked doing the diary a lot and further 18 (41%) said they liked doing it a bit. Seven (15%) children said that it was just okay with one (2%) child saying they didn't like it much. There were no children who said they really didn't like it.

How interesting was it?

Very interesting A bit interesting It was just OK A bit boring Very boring

Answers ranged from Very Interesting (32%), A bit interesting (41%), It was just okay (11%), and A bit boring (11%). No children found it very boring. Of the five children who found it a bit boring, 3 children were boys and 2 were girls.

How easy or hard was it for you to do it?

Very easy Easy Just Ok Hard Very hard

Forty-one per cent of children thought the diary was very easy, another 41% said it was easy, and a further 14% said it was just okay. Of those children who thought it was just okay, 71% had not filled in their diary throughout the day and they had found it difficult to remember the activities and times.

How well could you remember what you'd done?

Very well Well Just OK Not very well Not at all well

Twenty-one per cent said they could remember very well, 34% said they remembered well what they had done. Fourteen (32%) said they were just okay at remembering what they'd done, of these 11 children said they didn't fill their diary out until the end of the day. Seven per cent of children said they could remember not at all well and all these children filled the diary out at the end of the day.

Do you think other kids would like doing this?

Yes Maybe No

Twenty-nine per cent of children said they thought other children would like to do the diary and 21% said they thought that maybe other children would like doing it. There weren't any children who said that other children would not like doing the diary. Half the children did not answer this question.

Would you like to do it again in two years time?

Yes Maybe No

72% said they would like to do the diary again in two years time and 21% said maybe they would.

Attachment 5: Wave 4 Main Wave Diary (4 pages)



| Day | _ Date | What did you do today? |
|------------------------------------|-----------------------------------|---|
| Vhat time did you | wake up? | л |
| Before 6:00am: What time is it? | What did you do? | Put stickers here if you had something to eat or drink |
| | | |
| | - FAS | |
| | | |
| Between 6:00am What time is it? | and 9:00am: What did you do? | Put stickers here if you had something to eat or drink |
| Between 6:00am | What did you do? | Put stickers here if you had something to eat or drink |
| Between 6:00am | and 9:00am: What did you do? | Put stickers here if you had something to eat or drink |
| Between 6:00am | What did you do? | Put stickers here if you had something to eat or drink |
| Between 6:00am | Tand 9:00am: What did you do? | Put stickers here if you had something to eat or drink |
| Between 6:00am | T and 9:00am: What did you do? | Put stickers here if you had something to eat or drink |
| Between 6:00am | Tand 9:00am: What did you do? | Put stickers here if you had something to eat or drink |



| Between 3:00pn | 1 and 6:00pm: 8 | today. Put sticker here if you h |
|------------------|--|---|
| What time is it? | What did you do? | eat or drin |
| | | |
| | | |
| 86-88 | | |
| | | |
| | | |
| | 154 (2) | |
| | | |
| | 61 | |
| | | |
| | The second secon | |
| | LARAS - | |
| | | |
| | | |
| After 6:00pm | | Put sticker |
| What time is it? | What did you do? | something |
| | What did you do? | eat or drin |
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Attachment 6: Wave 4 Main Wave Activity Codes (2 pages)



Time Use Activity Codes

10 Eating/Drinking

20 Personal/Health care

- 21 Bathing, dressing, toileting, teeth brushing, hair care
- 22 Dentist, Doctor, Chiropractor, Physio, Optometrist

30 Chores

- 31 Making own bed, tidying own room
- 32 Making/preparing own food
- 33 Getting self ready, packing/unpacking own school/sports bag
- 34 Cleaning, tidying other rooms
- 35 Cooking, meal preparation, making lunch, setting table for others
- 36 Washing dishes, stacking, emptying dishwasher
- 37 Gardening, putting out bin
- 38 Taking care of siblings, other children
- 39 Taking care of pets

40 Active activities

- 41 Organised team sports and training football, basketball, netball, cricket
- 42 Organised individual sports and training swimming, dancing, tennis, martial arts, gymnastics
- 43 Ball games, riding bike/scooter/skateboard, skipping, running, chasing
- 44 Taking pet for walk
- 45 Scouts, girl guides, cadets, youth groups
- 46 Shopping
- 47 Going to church, museums, cultural events, fairs, community events
- 48 Cinema
- 49 Going to live sporting events

50 Non-active activities

- 51 Private music, language or religion lessons, tutoring
- 52 Listening to music, CDs, playing music for leisure
- 53 Reading/being read to for leisure
- 54 Board/card games, puzzles, toys, art and craft
- 55 Non-active club activities Chess Club, art/craft groups
- 56 Doing nothing
- 57 Sleeping, napping
- 58 Homework (not on computer) including music practice

60 Electronic media/ Games/ Computer use

- 61 Computer for homework --internet
- 62 Computer for homework not internet
- 63 Computer games --internet
- 64 Computer games not internet
- 65 Xbox, Playstation, Nintendo, Wii
- 66 Internet not covered elsewhere
- 67 TV/DVD

70 School lessons

80 Communication

- 81 Talking face-to-face
- 82 Talking on landline phone
- 83 Talking on mobile phone
- 84 Texting, email, social networking facebook/twitter
- 85 Skype, webcam

90 Travel

- 91 By foot
- 92 By bike, scooter, skateboard
- 93 By private car
- 94 By public transport bus, train, tram, ferry, taxi, plane

99 Other

Attachment 7: Wave 5 Dress Rehearsal and Main Wave Activity Codes (1 page)



Time Use Activity Codes

| Work | Non-Active Activities |
|---|---|
| 00. Retailing (including fast food) | 50. Filling out the diary |
| 01. Pamphlet delivering | 51. Private music lessons/practice, academic tutoring |
| 02 Limpiring/refereeing | 52. Listening to music, playing musical instruments or |
| | singing for leisure |
| 03. Car washing | 53. Reading or being read to for leisure |
| 04. Gardening / lawn mowing | 54. Unstructured non-active play |
| 05. Babysitting | 55. Non-active club activities |
| 06. Animal care | 56. Doing nothing |
| 07. Working in a family business or farm | 57. Sleeping/napping (not end of day bed-time) |
| 08. Work nec. | 58. Doing homework (not via electronic devices) |
| 09. Volunteering | 59. Non-active activities nec. |
| | |
| Eating/Drinking | Electronic Device Use |
| 10. Eating/drinking | 60. Doing homework |
| | 61. Playing games |
| Personal Care / Medical/Health Care | 62. Watching TV programs or movies/videos |
| 20. Cleaning teeth | 63. Spending time on social networking sites |
| 21. Showering/bathing | 64. Downloading/posting media |
| 22. Getting dressed / getting ready | 65. Internet shopping |
| 23. Personal care nec. | 66. General Internet browsing |
| 24. Doctor | 67. Creating/maintaining websites |
| 25. Dentist | 68. General application use |
| 26. Physiotherapist / Chiropractor | 69. Electronic device use nec. |
| 27. Medical/Health care nec. | |
| | School Lessons |
| Chores | 70. School lessons |
| 30. Cleaning/tidying | |
| 31. Laundry/clothes care | Communication |
| 32. Food/drink preparation | 80. Talking face-to-face |
| 33. Food/drink clean up | 81. Talking on a landline phone |
| 34. Gardening / lawn mowing | 82. Talking on a mobile phone |
| 35. Animal care | 83. Video chatting |
| 36. Home maintenance | 84 Texting/email |
| t | |
| 37. Taking care of siblings | 85. Online chatting / Instant messaging |
| 37. Taking care of siblings38. Chores nec. | 85. Online chatting / Instant messaging 86. Non-verbal interaction |
| 37. Taking care of siblings 38. Chores nec. | 85. Online chatting / Instant messaging 86. Non-verbal interaction 87. Communication nec. |
| 37. Taking care of siblings 38. Chores nec. Active Activities | 85. Online chatting / Instant messaging 86. Non-verbal interaction 87. Communication nec. |
| 37. Taking care of siblings 38. Chores nec. Active Activities 40. Organised team sports and training | 85. Online chatting / Instant messaging 86. Non-verbal interaction 87. Communication nec. Travel |
| 37. Taking care of siblings 38. Chores nec. Active Activities 40. Organised team sports and training 41. Organised individual sport and training | St. Toxing, cintai St. Online chatting / Instant messaging S6. Non-verbal interaction S7. Communication nec. Travel 90. By foot |
| 37. Taking care of siblings 38. Chores nec. Active Activities 40. Organised team sports and training 41. Organised individual sport and training 42. Unstructured active play | 85. Online chatting / Instant messaging 86. Non-verbal interaction 87. Communication nec. Travel 90. By foot 91. By bike, scooter, skateboard etc. |
| 37. Taking care of siblings 38. Chores nec. Active Activities 40. Organised team sports and training 41. Organised individual sport and training 42. Unstructured active play 43. Walking pets / playing with pets | 85. Online chatting / Instant messaging 86. Non-verbal interaction 87. Communication nec. Travel 90. By foot 91. By bike, scooter, skateboard etc. 92. By private motor vehicle/bike |
| 37. Taking care of siblings 38. Chores nec. Active Activities 40. Organised team sports and training 41. Organised individual sport and training 42. Unstructured active play 43. Walking pets / playing with pets 44. Active club activities | St. Texting, entail St. Online chatting / Instant messaging St. Online chatting St. Online chatting / Instant messaging St. Online chatting St. Online chatting / Instant messaging St. Online chatting St. Online chatting / Instant messaging St. Online chatters St. O |
| 37. Taking care of siblings 38. Chores nec. Active Activities 40. Organised team sports and training 41. Organised individual sport and training 42. Unstructured active play 43. Walking pets / playing with pets 44. Active club activities 45. Shopping | 85. Online chatting / Instant messaging 86. Non-verbal interaction 87. Communication nec. Travel 90. By foot 91. By bike, scooter, skateboard etc. 92. By private motor vehicle/bike 93. By public/chartered transport 94. Travel nec. |
| 37. Taking care of siblings 38. Chores nec. Active Activities 40. Organised team sports and training 41. Organised individual sport and training 42. Unstructured active play 43. Walking pets / playing with pets 44. Active club activities 45. Shopping 46. Going out | 85. Online chatting / Instant messaging 86. Non-verbal interaction 87. Communication nec. Travel 90. By foot 91. By bike, scooter, skateboard etc. 92. By private motor vehicle/bike 93. By public/chartered transport 94. Travel nec. |
| 37. Taking care of siblings 38. Chores nec. Active Activities 40. Organised team sports and training 41. Organised individual sport and training 42. Unstructured active play 43. Walking pets / playing with pets 44. Active club activities 45. Shopping 46. Going out 47. Religious activities / ritual ceremonies | 85. Online chatting / Instant messaging 86. Non-verbal interaction 87. Communication nec. Travel 90. By foot 91. By bike, scooter, skateboard etc. 92. By private motor vehicle/bike 93. By public/chartered transport 94. Travel nec. Other |
| 37. Taking care of siblings 38. Chores nec. Active Activities 40. Organised team sports and training 41. Organised individual sport and training 42. Unstructured active play 43. Walking pets / playing with pets 44. Active club activities 45. Shopping 46. Going out 47. Religious activities / ritual ceremonies 48. Attending live sporting events | 85. Online chatting / Instant messaging 86. Non-verbal interaction 87. Communication nec. Travel 90. By foot 91. By bike, scooter, skateboard etc. 92. By private motor vehicle/bike 93. By public/chartered transport 94. Travel nec. Other 99. Other |

Attachment 8: Wave 5 Dress Rehearsal and Main Wave Diary (8 pages)

This diary is for you to fill in <u>on the day before</u> the Interviewer comes to your house.

Vhatdid **YOU**do

Please write down everything that you do on that day and the time you started to do it.

To help you with this we have sent you:

- A pen with a digital clock.
- Stickers to put on the diary every time you have something to eat or drink. Make sure you write down the time too.

Some hints

- It's easier to remember what you did if you fill in the diary throughout the day, rather than halfway through the day or at the end of the day.
- We want to collect as much detail as possible. Sometimes you do more than one thing at a time, so make sure you write down everything you do.
- Remember to include things like getting dressed, getting ready, travelling, hanging out or doing nothing.
- If it's a school day, write down what you did at recess and lunchtime. You don't need to write down what you did in class.
- If you get stuck, ask Mum or Dad to help.

When the Interviewer visits you, they will have a look at your diary and enter the information into their computer - you can help them with this.

Thank you and have fun filling in your diary!

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| What time did you go to bed? | |
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| What time did you go to sleep? | : |
| | After 6:00pm What did you do ? What did you do ? What time did you go to bed? |

