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This study is part of a broader project at the Population and Ecology Research Laboratory (PERL) in Nepal that examines the influence of changing social contexts on the timing of marriage, childbearing, and contraceptive use.

PERL was established in 1995 to conduct research on population, social change and the environment; to train scholars in social science research methods; and to create institutional and technical capacity for conducting social science and demographic research in Nepal. PERL works with the Institute for Agriculture and Animal Science at Tribhuvan University, Kathmandu University, the Institute for Social and Environmental Research, and the University of Michigan.

The Life History Calendar as a Data Collection Tool

What is the life history calendar?

The life history calendar (LHC) is a social science tool for collecting detailed retrospective information on the timing and sequencing of events in people's lives (such as schooling, marriage, and migration). This study describes innovations to the life history calendar method that make gathering this type of information more feasible among populations that are of widely varying ages, that do not use standardized time measures, and that exhibit a broad range of behaviors. The innovations include adding a detailed set of timing cues, reorganizing the calendar's visual cues, and using new recording strategies.

ADVANTAGES OF THE LHC AS A DATA COLLECTION TOOL?

For several reasons, LHC methods yield more accurate retrospective data than tools that do not make use of the calendar. First, the LHC offers a variety of visual cues that help respondents recall the *timing* of life events. These include standard cues, such as column headings marked with years and ages, which are the same for everyone. They also include respondent-provided variable cues, which are significant life events such

as a brother's marriage or the death of a parent. Second, the parallel topical timelines on the LHC allow respondents to visualize events relative to one another and thus to accurately report life event *sequencing*. Third, the calendar format and the visual cues help interviewers collect complex life history data by structuring questions within a timing and sequencing framework, while flexible recording techniques allow interviewers to adjust their questions in accordance with respondents' ability to recall events. Together, these characteristics and methods enhance respondents' accuracy in reporting the occurrence, the sequencing, the frequency, and the duration of complex and/or long-past events.

IMPROVING THE DESIGN AND IMPLEMENTATION OF THE LHC

The life history calendar improvements we describe stem from the Chitwan Valley Family Study (CVFS), a study focused on the timing and sequencing of first marriage, first childbearing, and first contraceptive use. As part of interviews with 5,271 men and women, ages 15 to 59, who resided in Chitwan, data were gathered via a life history calendar. A section of the full CVFS life history calendar is shown in Figure 1.

Using the LHC to study a broad age range of people.

The CVFS sampled respondents in a wide range of ages, which provided data over a broad historical time period. This inclusiveness, however, presented some potential data collection problems with the use of a standard calendar. The older adults would face a daunting memory burden in accurately recalling and sequencing events of the distant past. The young adults, who would begin recording life events near the middle of the calendar, could have difficulty putting them in the intended topical row, given the placement of topics in the far left-hand column. Therefore, the life history calendar was redesigned to include the multiple timing cues described below, which were intended to help all CVFS respondents more accurately place life events.

- The first line of timing cues in Figure 1 is historical time: research was conducted in Nepali year 2053, and 53 is the label at the top of the last year column.
- The second line of timing cues contains preprinted descriptions of important national “landmark” events that would be familiar to a wide range of respondents (e.g., first democratic election held in Nepal in 2015 and the earthquake of 2045).
- The third line of timing cues is reserved for local-level “landmark” events (e.g., construction of a new local road or school). This information, obtained from a previous data collection effort on neighborhoods, was added to relevant respondents’ life history calendars (see Axinn, Barber and Ghimire 1997).
- The fourth line of timing cues contains the names of the animal year associated with each calendar year because a number of ethnic groups use these designations in recalling important personal events.
- The final line of timing cues is reserved for entering in the respondent’s age in each calendar year. At the beginning of the LHC portion of the interview, respondents were asked their year of birth. Interviewers entered “0” in the year of birth, edited ages into the remainder of the age line, and checked current age in the current year with the respondent to make sure the respondent’s age was correctly recorded across the calendar.
- Substantive row headings are printed at three locations across the LHC because respondents begin the LHC at different places depending on their age.

Using the LHC with populations who do not use time records.

Some populations do not use standardized measures of historical time to mark personal events. For example, many Tharu in Chitwan Valley do not use any standardized type of calendar, especially elders without formal schooling. Several characteristics of the CVFS calendar make it appropriate for collecting retrospective life history data among such populations.

- The broad set of timing cues, particularly the national and local events, helped many of these study participants remember the relative timing of specific personal events.
- The order of interview questions was flexible, allowing respondents to begin talking about the topic for which they could best recall the timing. Although the CVFS calendar was designed to ask first about a respondent’s migration history, second about marital history, and third about childbearing history, some respondents were best able to recall childbearing. Beginning with the birth of their youngest child, many of these respondents were able to work backward to the timing of their first marriage and then add their migration history around these events.
- The highly visual nature of the life history calendar—written timing cues and visual representation of years before and after events—helped respondents put together the sequence of events in their lives.

Using the LHC to record a broad set of behaviors. In general, the life history calendar method has flexibility for collecting data on a broad set of behaviors and events. The CVFS calendar included three new graphic techniques to document a range of behaviors.

- A combination of symbols and lines connecting symbols was designed to show when an event took place, when a new status began, how long that status continued, and when that status ended. Multiple rows can be used in conjunction with the symbols to record the timing of events separately. For example, many spouses do not live together in the same household until a substantial time *after* the marriage. Separate rows for marriage and living together, along with the symbols and lines indicating timing and duration, allow for specific and independent measures of these two types of unions.

- The CVFS calendar also used symbols to record different behaviors on the same row. For example, the study collected information on children's entrances and exits from formal schooling. In this context, where a nontrivial fraction of the population has many children, adding a separate line for each child's schooling (in addition to all of the lines on the calendar for other topics) would make the format quite cumbersome. Instead, additional symbols were used to record children's schooling information on the same line that contained other childbearing information. One drawback to this approach is an increased possibility of recording errors, but one remedy is extra training of both interviewers and data-entry personnel.
- In studying a broad age-range population with the LHC, time units on the calendar must be sufficiently large to accommodate the life events of the oldest respondents and sufficiently small to obtain relevant data for all respondents. With the CVFS

calendar, we used years as the unit of time, but allowed greater precision by recording the month of a person's first marriage, first birth, and first use of a contraceptive method.

By improving LHC data-gathering and recording methods to accommodate the investigation of more heterogeneous populations, the innovations described here enhance research on the timing and sequencing of important events in people's lives.



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For a copy of the full report, send an email request for "The Life History Calendar as a Data Collection Tool" to iaas@perl.wlink.com.np.

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