AAAL 2023 Colloquium Information The Experience Sampling Method in SLA research: Opportunities and challenges

The *Experience Sampling Method* (ESM; also *Ecological Momentary Assessment* or *Diary Methods*) is an intensive data collection approach which involves repeatedly prompting research participants to answer short, easy-to-complete questionnaires about their current or recent experiences, at fixed or random intervals. ESM yields exceptionally rich, highly contextualised data which can be analysed in a variety of ways, both qualitatively and quantitatively. Although the method has primarily been used in clinical psychology and medicine, it holds great potential for strengthening studies in the field of SLA, by helping researchers to closely study learners' behaviour, mood, thoughts, and feelings and the physical and social context in which they occur. Because ESM data are collected repeatedly over a period of time, in various everyday situations, they are suitable both for providing a broad picture of a person's 'typical' behaviour, and for facilitating the study of dynamic changes across time and contexts. Furthermore, the immediacy and high ecological validity of the ESM contribute to increased reliability and accuracy of the collected data.

This colloquium opens with a general introduction to the Experience Sampling Method, including its origins, a discussion of its strengths and limitations compared to other approaches, and an overview of practical considerations for the implementation of the ESM in SLA studies. Subsequently, three research projects will be presented which have used variations of the ESM to study different aspects of language acquisition. The studies have been selected to illustrate different approaches that fall under the umbrella of Experience Sampling Methods and to demonstrate the great variety of topics within SLA that can benefit from using this method. The colloquium closes with reflections on the ESM by an invited discussant, followed by an open discussion between the invited speakers and colloquium participants.

Schedule

| Welcome & housekeeping | 8:00 - 8:05 | 5 min |
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| Introduction: The foundations of ESM Ali Al-Hoorie, Saudi TESOL Association Phil Hiver, Florida State University | 8:05 – 8:20 | 15 min |
| Current insights and personal tricks for running an Experience Sampling study Joran Jongerling & Leonie Vogelsmeier, Tilburg Experience Sampling Center | 8:20 – 8:35 | 15 min |
| The LANG-TRACK-APP: Open-source tools for implementing the ESM in applied linguistics Henriette Arndt, Jonas Granfeldt, Marianne Gullberg, Lund University | 8:35 – 8:50 | 15 min |
| Break | 8:50 - 9:00 | 10 min |
| Documenting L2 Spanish use before, during, and after COVID-19 quarantine: Data from the Daily Linguistic Questionnaire 3 Lorenzo García-Amaya, University of Michigan | 9:00 – 9:15 | 15 min |
| Diaries as a data source for language use Liss Kerstin Sylvén, University of Gothenburg | 9:15 – 9:30 | 15 min |
| Reflections from discussant Heath Rose, University of Oxford | 9:30 – 9:45 | 15 min |

Introduction: The Foundations of ESM

Ali H. Al-Hoorie Saudi TESOL Association

Phil Hiver

Florida State University

Recent methodological advances in the field of applied linguistics have emphasized the importance of studying individual learning and development in ways that showcase its complex and often dynamic nature. The Experience Sampling Method (ESM) was designed to collect such in-situ and time-dense data and is particularly well-suited to applied linguistics research in intact settings (e.g., at work, in a classroom, within social institutions, at home with one's family). In this talk we provide an accessible introduction to ESM, including its origins, give an overview of the theoretical grounding of ESM that relates to existing methods in applied linguistics research, and discuss its strengths and limitations compared to other approaches. We first trace its origins as a mixed, multi-method approach to psychological research, emphasizing its utility as a means for collecting information about both the context and the content of human and social phenomena. Beyond simply cataloging which activities people engage in, where, and with whom, it is the finely-grained information accompanying such samples of experience that provides a window into the quality of individuals' experience. We describe how time is the primary axis that makes ESM data meaningful and coherent and relate this to other established methods in applied linguistics used to explore language learning and language use more generally. Importantly, we highlight how ESM bridges the long-existing tension between subjective and objective approaches—often framed as qualitative and quantitative methods—for researching the topics and questions that interest most applied linguists. We then review some of the advantages and limitations of ESM. We discuss the ways that ESM combines the ecological validity of naturalistic observations of behavior with non-intrusive self-report that provides insightful elaboration, and the rigor and precision of advanced psychometric techniques.

Current Insights and Personal Tricks for Running an Experience Sampling Study

Joran Jongerling & Leonie Vogelsmeier

Tilburg Experience Sampling Center

The Experience Sampling Method (and related methods such as Ambulatory Assessment) for gathering intensive longitudinal data have tremendous potential to uncover individual dynamics as they unfold over time. For example, how exactly are different individuals exposed to second languages during their everyday lives? Is it just that they have more L2 exposure on some days than on others (e.g., they talk with international colleagues during the week, while only being exposed to their native language during the weekend)? Or is the exposure also more variable on certain days (e.g., they have 4 hours of L2 exposure on both Monday and Tuesday, but on Monday those 4 hours are all in the morning, while on Tuesday it is more spread out across the day)? In addition, Experience Sampling can shed light on how (individual differences in) these different characteristics of L2 exposure (e.g., frequency and/or variability) uniquely influence things such as language learning in different contexts.

Like all other good things in life, however, good things do not come for free! To truly unlock the potential of Experience Sampling and related methods, researchers must carefully design the intensive longitudinal data collection, which at the very least means not overburdening individuals so that participants do not drop out, or give inaccurate responses due to, for example, high cognitive load. In addition, researchers face methodological challenges that are not present with cross-sectional data like stronger memory effects, initial elevation in item-responses, and the absence of validated questionnaires.

In this presentation, we will present the latest insights into designing Experience Sampling studies as well as some practical tips and tricks (e.g., using planned missingness designs to lowering participant burden). We might not be able to make the data collection a breeze, but we can definitely make it a lot more doable!

The LANG-TRACK-APP: Open-source tools for implementing the ESM in applied linguistics

Henriette Arndt, Jonas Granfeldt, Marianne Gullberg

Lund University

In this presentation, we introduce the LANG-TRACK-APP, a set of open-source tools (iOs and Android apps and back-end system) for signalling participants and collecting survey responses, which we designed to help researchers in applied linguistics to implement the Experience Sampling Method (ESM). The ESM hold considerable promise for applied linguistics because it offers a convenient way to collect rich, longitudinal quantitative and qualitative data that can be analysed in various ways, for example to investigate patterns and changes in variables related to language use and acquisition, both within and across individuals. Since smartphones are now widespread and most people constantly carry their phones with them, the LANG-TRACK-APP is ideal for collecting ESM data frequently, at different moments and in different settings in participants' everyday lives.

We open with an explanation of the different LANG-TRACK-APP components and a description of the workflow for both researchers and participants. The step-by-step implementation of the ESM in the LANG-TRACK-APP will be demonstrated using two recent studies of language use in study abroad and among new arrivals in Sweden. Participants in both studies were prompted via the LANG-TRACK-APP to complete brief self-report surveys multiple times per day over three week-long periods across three months. They reported the activities in which they had been engaged just prior to receiving each survey and for how long; who, if anyone, they were with; and whether and how they had used different languages (the community language, English, their native language, or another language). A selection of findings from these studies will be used to illustrate the richness of the ESM data, which provide insight into both individual instances and broader patterns of language use. We conclude with a discussion of possible approaches to analysing ESM data in relation to typical research questions in the field of language acquisition.

Documenting L2 Spanish use before, during, and after COVID-19 quarantine: Data from the Daily Linguistics Questionnaire 3

Lorenzo García-Amaya

University of Michigan

Interest in learners' language use in the study-abroad (SA) context has increased considerably in the past years. While many instruments are not fine-grained enough to provide detailed information about the quantity and quality of language use during an SA (Freed et al., 2004), newer publications present richer data patterns gathered through mobile devices (Arndt et al., 2021). These online methods expand knowledge of L2 language use by pinpointing subtle longitudinal differences over the course of an SA, casting new light on individual differences, and correlating the findings on L2 use with measures of L2 proficiency.

We report the results of the Daily Linguistic Questionnaire (DLQ) 3, adapted from García-Amaya (2022). The participants were 33 L2-learners of Spanish (L1=English) who enrolled in a 15-week SA in Granada, Spain between January and May 2020. A novel aspect of this project is that the learners returned to the United States in March 2020 due to COVID-19. All participants nonetheless completed the DLQ daily during the four months of their intended stay abroad. During the first two months, the results replicate the patterns of L2 use reported in García-Amaya (2022), namely, the learners reported high levels of L2 use after arrival in Spain but substantially diminished L2 use by mid-February. Upon returning to the United States in mid-March, however, the data reveal two distinct groups: (i) one group of participants whose mean L2 use values upon returning to the United States resembled their high values of L2 use from the start of the SA but gradually decreased over time; and (ii) a second group of learners who nearly abandoned the L2 upon returning to the United States. We conclude with qualitative information provided by the participants (through an exit survey) that explains why these two groups engaged with the L2 in different ways.

Diaries as a data source for language use

Liss Kerstin Sylvén

University of Gothenburg

This paper will discuss diaries as a method of gathering data about informants' language use and behavior. Diaries as a means of eliciting such data have been used in a number of studies with informants of various ages. Studies using diaries among young adolescents (author, 2012; 2014) and children (author, in press) are in focus in this presentation.

Accessing the true nature of individuals' language use, addressing questions such as what language is used with whom, when and for what purpose, is in general a challenge for researchers. Doing so among young people is even more complicated. In the paper, advantages and drawbacks of the diary as a scientific tool are investigated. For instance, one advantage is that informants can fill in the diary in the privacy of their own home, allowing for reflection and precision. Another is that the information comes from the informants themselves, allowing for a truly emic perspective of the data. However, when the informants are young, assistance from others may be needed which may compromise the veracity of the accounts. A drawback is that filling out the diary might be forgotten, which not seldom is the case among young informants. Another that the information given is what informants believe is expected, not what actually reflects reality. Possible ethical dilemmas with diaries containing private information will also be addressed.

Another aspect of interest is the apparent advantage of diaries in mixed-methods studies. Examples will be given of diaries having been used to gather quantitative data among larger groups of informants and subsequently serving as the starting point for qualitative data in the form of interviews.

The paper will conclude with a brief discussion about reliability and validity in connection with using diaries as a tool in scientific studies.