Supplementary materials B | Interview script

The following pages contain the English version of the template created to obtain data from a series of individual in-depth interviews with 22 older adults (see §2.1 'Data collection', in the paper). The template contained mostly open-ended questions grouped into numbered sets of related questions and was structured in five sections, described below.

1. *Biographic questions.* The first section aimed at collecting biographical information in order to capture the participant's profile. Apart from answering to basic demographic questions (sets 1.1 – 1.4), the participants were asked to describe a typical week of their lives (set 1.5), which helped us to understand the use of their time according to their priorities. An additional set of questions elicited general information on the participants' everyday usage of devices/gadgets and online/digital services (set 1.6). A further set of questions was related to the participant's language background (set 1.7).

2. *Current attempts of learning / improving a foreign language.* The second section focused on the participant's attempts to learn or refresh a foreign language within the last years, preferably after their retirement. Participants were asked to indicate their motivations to learn a second language, their achieved level, their goals, the methods they adopted and the difficulties they faced during the learning process (sets 2.1 – 2.4 and 2.6 – 2.8). They were also asked to describe situations where they actively used that language (set 2.5), as well as in case of dropping out the reasons for not continuing to learn (set 2.9). For participants who did not report current nor recent attempts of language learning, we carefully tried to detect the reasons behind the person's unwillingness to learn a second language.

3. *Experience with digital services / apps for language learning.* The third section inquired about the participants' experience with digital language tools and services, including commercial stand-alone language-learning apps, and aimed at tapping deeper into potential challenges in terms of usage, accessibility or interface (sets 3.1 and 3.2). If a participant did not use any digital services, we tried to find out more about the person's awareness of digital tools for language learning and the reasons for not using them (set 3.3).

4. *No experience with language learning.* This section was included for participants who had not learnt any foreign language in the course of their lives. We tried to find out the reasons for it and their feelings about not having knowledge of a second language (sets 4.1 and 4.4). Further questions in this section aimed at uncovering perceived or objective obstacles as well as potential motivators for language learning (sets 4.2 and 4.3).

5. *Current attempts to learn something new.* The final section (sets 5.1 – 5.7) aimed at providing a general overview on the participant's learning strategies and ways to overcome possible obstacles in the process of learning a new skill (e.g., painting, a music instrument, gardening, etc.).

In what follows, the English script is shown. The version presented here was a direct translation of the original German version. The questions are displayed on the right, accompanied on the left by brief explanations for their purpose and instructions for the researchers leading the interview.

1. Biographic questions

1.1	How old are you? (also note the sex)	*Age*
1.2	Where were you born? Where did you grow up?	*Place of birth and growing up*
1.3	What is your highest educational degree? Speciality? Study programme?	*Education level*
1.4	What's your occupation?	*Occupation*
1.5	How does your everyday life look like? / How's your typical week?	*Other interests / social life / lifestyle*
1.6	Do you have or do you use any gadgets such as computer / laptop, tablet, smartphone, radio, smart-TV, etc.? How often? What for? Do you use online services / applications? Do you use e-mail, Facebook, Instagram, Snapchat, Twitter, Tinder, WhatsApp or any other? How often? What for? Do you use voice dial / voice messaging or the keyboard? Why? How did learn to use these services? If you don't use any online services / apps, why not?	*Digital person?* *What gadgets / digital services does the person have / use?* *How often and what for does he/she use them?(e.g., job, communication, dating, etc.)* *Is the person familiar with digital / computer concepts?* *If the person is not digital, why not?*
1.7	Which language(s) have you learnt / do you speak? Where did you learn that language(s)? (Context of acquisition) From which age? For how long? Why? Which level did you reach? For what did you need the language(s)? Have you ever tried to learn a foreign language?	*Language background* *Categorization:* *school* *profession* *hobby / personal interests* *living abroad* ***If the person didn't / doesn't learn any foreign languages, go straight to § 4 and § 5.***

2. Current attempts of learning / improving a foreign language

2.1	What languages did you start to learn / improve (in the last years / since your retirement)? If none, why not?	*Does the person learn a language or try to improve it? If not, why not?* **If not, go directly to § 3 and § 5.**
2.2	Why? What for? What's interesting for you in the language learning process? What motivation did / do you have?	*Categorization of motivation:* *profession* *hobby/personal interest* *travel/vacation* *brain training* *family abroad* *…*
2.3	What level did you reach (in reading, speaking, writing, listening? Scale: 1-7[i] What (level) do you want to reach? What do you want to do with the language? What do you need the language for?	*1 - very poor (>A1)* *2 - poor (A1)* *3 - fair (A2)* *4 - functional (B1)* *5 - good (B2)* *6 - very good (C1)* *7 – native-like (C2)* *Is the person satisfied with his/her knowledge / does he/she want to improve it? What does it mean for the person "to reach a certain level"?*
2.4	How did you learn the language? (e.g., language course, books, computer software, travel, digital apps, etc.)	*Learning methods?* *Does the person make use of additional resources? (e.g., dictionaries, travel guides, exercises, language exchange, digital / online resources, etc.)*
2.5	Have you used this language actively? In which situations? Were you satisfied with the results / with your performance? Why?	*Does the person try to use the language in real-life situations?* *Were the results positive or negative?*
2.6	What was the most difficult to learn / in the use of the language? Why? How has the way you learn languages changed with years? How has the learning process changed all in all?	*Were there some language elements or aspects that were hard to learn / use? Is it more difficult to learn a language now than earlier? Why? How has the learning process changed?*
2.7	How did you try to overcome the difficulties? If you didn't, then why not?	*Has the person stopped learning or has he/she tried to overcome the barriers?*
2.8	Do you have the feeling that these measures have helped you? Why yes / not?	*Were these tries successful? Is the person glad with the results? Can this solution be better? How?*
2.9	If you don't learn this language anymore, why have you stopped?	*If the attempts were unsuccessful, try to find out the reasons.*

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3. Experience with digital services / apps for language learning

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3.1	Have you already used any digital service or app to learn the language or to look for words, expressions, or translations? (e.g., Google Translate; *Duolingo / Babbel / Rosetta Stone*; online / digital dictionaries, etc.)	*Does the person use digital services for learning the language?*

3.2	If yes, which service or app have you used or are currently using? In which situations?	*What kind of digital resources does the person use?*
	Could you tell me about the last time that you searched for / used / downloaded / installed a new app for learning languages (in the mobile / tablet / computer)? (e.g., dictionary, translator, grammar, audios, exercises, etc.)	*Find out more! Is the person happy with the app? What are the weak points? What kind of features are missing? Are there problems with the usage / accessibility / interface?*
	What app was that? Did you experience any problems or difficulties with the installation or use? How often do you use the app? Are you satisfied with it? What kind of features are missing? How did you learn to use the app?	*Focus on the challenges.*

3.3	If not, have you heard from any app (e.g., from family / friends, from advertisement…)? From which one have you heard?	*If the person does not use any digital service, find out whether at least knows of their existence.*
	Could you tell me about the last time that you heard something from any app to learn languages?	*Find out more about what the person knows about digital services and why he/she is not using them.*
	What app was that? What did you hear or see? Where? From whom? What do you think about the app? Why don't you use it?	

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4. No experience with language learning

4.1	Why haven't you learned a foreign language?	*Find out the reasons why the person did not try to learn a second language*
4.2	Would you be interested in learning or improving a foreign language? Why?	*Is the person really interested? Are there serious obstacles?*
4.3	What do you think it could motivate you to learn a new language? (e.g., games, quizzes, audiobooks…)	*Could the person become a potential language learner?*
4.4	Could you tell me whether there was a situation when you felt limited or isolated because of not knowing the language? (e.g., in a conversation in a group in which you couldn't participate; not being able to read signs on the street, posters, indications, etc.; not being able to understand a song, etc.) What was the most difficult thing? Why? What did you do? Did you regret not knowing the language in that moment? Why?	*How the person feels and reacts in those situations? Does she/he regret not having learned the language?*

5. Current attempts to learn something new

5.1	Are you currently learning something new or have you started learning something new (in the last years / since you retired)? (e.g., painting, new recipes or cooking, gardening, etc.)	*Is the person still learning new skills?*
5.2	Why? For what? What was your motivation? What do you find attractive or appealing of learning in general?	*What's the motivation?*
5.3	How do / did you learn that new thing? (e.g., YouTube video tutorials; apps; online instructions; (online) courses, books, etc.)	*Learning methods / resources? Also digital / online?*
5.4	What was the most difficult aspect to learn? Why? How has learning / the learning process changed for you over the years?	*How has age influenced the learning process?*
5.5	How did you try to solve these difficulties? If not, why not?	*Did the person try to find a solution for the problems?*
5.6	Do you have the feeling that these measures have helped you? Why yes / not?	*Were the attempts successful? Is the person satisfied with the outcome? Could the solution be improved? How?*
5.7	If you don't learn that anymore, why did you stop?	*If the attempts failed, find out why.*

i   The proficiency scale was taken from the language history questionnaire (LHQ 2.0) reported in Li, P., Zhang, F., Tsai, E. & Puls, B. (2014) Language history questionnaire (LHQ 2.0): A new dynamic web-based research tool. *Bilingualism: Language and Cognition*, 17(3), 673–680. https://doi.org/10.1017/S1366728913000606