# EXPOSÉ FOR A LAB

# Do you speak English? Design and Evaluation of Screening Questions for Assessing English Language Proficiency in Online Questionnaires

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#### 1 PROBLEM STATEMENT

Questionnaires are mostly used for quantitative analyses and are often available only in the most common language, English, as they are easier to evaluate and more cost-effective than other evaluation methods. They can be conducted on an international level due to the English language. However, the English language skills of each individual vary, especially since English is not a common language in every country. Therefore, there are people who could potentially participate in the questionnaires and may not understand what is required of them. This is a particular problem for well-paid questionnaires because they set an incentive to answer the questions regardless of understanding. This skews the questionnaire results and, in the worst case, makes them useless if there is a high incidence of such participants. Although there are so-called *attention check* questions that check whether participants are actively answering the questionnaire or just providing random answers, these could be answered correctly by the participants, whether consciously or unconsciously. Moreover, not every questionnaire includes *attention check* questions, so this filter is not always applicable. In addition, participants are compensated for their effort without prior verification of language skills in both cases, resulting in high financial losses for unusable data.

While there are questionnaires, e.g., to determine the English language skills of students [4, 3] and toddlers [5], they require significant time. They are unsuitable for questionnaires whose main interest is not exclusively in identifying language skills. Danilova et al. [2] have already dealt with a comparable problem of assessing individual participants' abilities in questionnaires and developed screening questions for participants' programming skills. To our knowledge, no screening questions have been developed in the literature for use in questionnaires that effectively and efficiently select participants based on their English language skills without dominating the main part of the questionnaire.

# 2 OBJECTIVES AND RESEARCH INTEREST

This project group aims to formulate three to five screening questions (intended to be *closed questions*) for English language proficiency that can be used in questionnaires with high effectiveness and efficiency. Existing methods for checking English language skills, such as the Cambridge English Test [1] or methods for testing the language ability of children and toddlers [5], can be used as a basis. Individual questions can be evaluated and selected based on feasibility within a questionnaire, required time effort, and expected effectiveness in selecting English-speaking and insufficiently English-speaking participants.

The selection of these questions will be tested using a between-group study with respect to the criteria mentioned above, where it is known beforehand that one group has better English skills than the other. The purpose of the study is to decide whether and which screening questions can be used at the beginning of a questionnaire with as little time and effort as possible and a high degree of correct detection of participants with good English skills in order to select suitable participants. This may reduce the costs and the distortion of the results from the questionnaire, thus enhancing the relevance and validity of the insights gained.

The following questions will be answered in this paper:

- What screening questions exist to determine the English language proficiency of individuals?
- Are these screening questions suitable for questionnaires?
- Can participants with good or poor English language skills be detected and selected using the screening questions?

The following methodological steps will be implemented in this work:

- Summarizing existing screening questions for English language proficiency
- Based on this, formulating new screening questions for use in questionnaires
- Testing the screening questions using a between-groups study, where it is known that one group has better English skills than the other
- Evaluation followed by a recommendation for 3-5 screening questions that can be used to check English language proficiency

# 3 PRELIMINARY STRUCTURE

- 1. Introduction
- 2. Fundamentals (Describing existing methods for testing English language proficiency)
- 3. Methodology
  - a) Requirements for the instrument
  - b) Survey
  - c) Ethics
  - d) Participants
- 4. Results
  - a) Effectiveness
  - b) Efficiency

### 5. Discussion and Conclusion

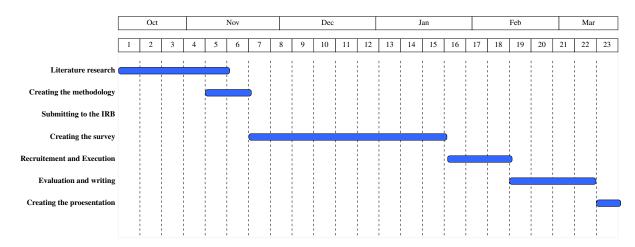


Figure 1: Zeitplan

## 4 REFERENCES

- [1] Cambridge University Press & Assessment. English language assessment. https://www.cambridgeenglish.org/, 2022. Accessed: 2022-09-03.
- [2] A. Danilova, A. Naiakshina, S. Horstmann, and M. Smith. Do you really code? designing and evaluating screening questions for online surveys with programmers. In 2021 IEEE/ACM 43rd International Conference on Software Engineering (ICSE), pages 537–548. IEEE, 2021.
- [3] C. Elder and J. von Randow. Exploring the utility of a web-based english language screening tool. *Language Assessment Quarterly*, 5(3):173–194, 2008.
- [4] L. Ganschow and R. Sparks. A screening instrument for the identification of foreign language learning problems. *Foreign Language Annals*, 24(5):383–398, 1991.
- [5] S.-M. Vehkavuori and S. Stolt. Screening language skills at 2; 0. *Infant Behavior and Development*, 50:174–179, 2018.