

Short Research Article

A Review of the Soundness of a Study Based on the Understanding of a Good Research

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Abstract

Listening has played an increasingly important role in language learning and acquisition. The issue of the potential relationship between background knowledge and listening comprehension attracted more attentions among linguistics and language scholars over the past decade. The main focus of this paper is to concentrate on the soundness of an empirical study conducted by Sadighi and Zare in 2006, offering an in-depth analysis of this relationship mentioned above. To illustrate this, a brief summary of their research is given. The next session assesses the rationality of the study, presenting details of three areas which include subject selection, data collection and data analysis. Finally, a concluding conception of its beneficial and profound significance in conducting a further good study will be demonstrated.

Keywords

Soundness, Subject selection, Data collection, Data analysis

1. Introduction

As the role of listening comprehension has yielded more influences on language learning and acquisition, typically attention is given to it by linguistics and language researchers who attempt to generalize and explain the fact that there exists a potential relationship between background knowledge and listening comprehension. Specifically, Sadighi and Zare (2006) offer a well-structured, in-depth analysis of this relationship in an empirical study. This essay will mainly concentrate on its soundness which is considered most significant in guiding and carrying out a rigorous research. In order to evaluate and explore its reasonable features, this essay is structured as follows. Firstly, a brief summary of their research is given. The next session assesses the rationality of the study, presenting details of three areas which include subject selection, data collection and data analysis. Finally, a concluding conception of its beneficial and profound significance in conducting a further good study will be

demonstrated.

2. Summary of the Journal Article

Sadighi and Zare produced an empirical study to elicit that listening comprehension is influenced by background knowledge. In the study, two groups of EFL students in TOEFL preparation classes are selected as subjects, each for twelve. The experimental group (EG) receives treatment through a topic familiarity program while the control group (CG) follows a normal teaching routine which aims to provide a baseline for comparison. A TOEFL test constructed by the Educational Testing Service (ETC, 2001) is adopted as the instrument to measure the subject's performance in listening comprehension after the treatment has been completed. With the accomplishment of collecting and analyzing the data statistically by SPSS, two results emerge from the study, one of which can be assumed the performance of the experimental group has improved due to the treatment. The other indicates that the control group displays a somewhat lower mean scores ($M = 34.5$, $SD = 4.56$) than the treatment group ($M = 43.16$, $SD = 3.78$). In addition, it is proved that a significant difference in scores exists between the two groups (t -value = 5.06, $p < 0.05$). From the study, it can be concluded that topic familiarity and background-knowledge activation play a positive role in promoting student's listening comprehension.

3. Soundness of this Study

After reading the journal, three aspects of soundness can be found in the study. One is about the selection of subjects, and the others relates to the methods of data collection and analysis. This essay will emphasize these quarters concerned with details in the next paragraphs.

3.1 Review of the Participants in the Study

Denscombe (2003) points out that it is essential to control the variables in order to minimize impacts on the cause-effect chain by other factors and avoid unwanted interference in the results of the research.

It is obvious that attempts were made in the study to eliminate other types of variables such as student's level of language proficiency and comprehensive ability, which might also affect listening comprehension. In detail, the subjects underwent 400 hours of instruction and attended a TOEFL placement examination, which is commonly exercised to measure the potential proficiency and avoid unevenness before entering the class. It may be proposed that these participants have similar or equal proficiencies, judging by their exam scores. However, to further determine the homogeneity between subjects, a relevant pilot study which is frequently used to assess the feasibility of the data collection methods is carried out later. At the same time, an independent-samples t -test intending to identify whether any significant difference exists between the two conditions is implemented through computerizing statistics by SPSS (t -value = 0.184, $p < 0.05$, $df22$).

In addition, aiming to check the comprehension ability on listening section and further reduce other variables impacts on the results, the researcher exercises an independent-samples t -test which obtains a result (t -value = -0.06, $p > 0.05$, $df22$) that shows there is no significant difference on the listening

ability between CG and EG. This procedure is important according to the view that an additional measurement is needed if the research focuses on a specific skill or ability (Mackey & Gass, 2005). It is therefore necessary to analyze the differences in students from two groups in listening ability with another independent-samples t-test.

3.2 Review of the Data Collection Procedures

Before discussing the analysis of data, it is necessary to address a few basic research methods that have a bearing on high quality data collection. In general, there are at least 5 methods of data collection which are as follows:

- Survey: a method to gather attitudinal and viewpoint data from a wide range of participants.
- Questionnaire: an economical and useful method to collect information by asking the participants to answer a series of questions in the form of writing down their own ideas or choosing the optional answers.
- Observation: a method to record actions using checklist and notes in classrooms.
- Interview: a form to conduct face-to-face or telephone surveys.
- Case Study: a study concentrating on the individual (Mackey & Gass, 2005).

Besides these methods above, it may be needed to mention another method named as test or experimental design, a method to determine the proficiency of the participants.

It is reported that the researcher might well decide to plan data collection strategies, which are vital to obtain reliable and useful information for the research result (Mackey & Gass, 2005). Take this study, for example, it is appropriate to apply the test to collect data as the objective of the research is to measure the level of two groups. Moreover, testing is the most practical and reliable method to gather data in a short time in this program based on the conception and usage of these methods above.

3.3 Review of Appropriate Data-analyzing Methods

T-test is now recognized as the best way to compare two groups, which has two main types, namely independent-samples t-tests and paired-samples t-tests (also known as matched t-tests). The former procedure is designed to compare the outcomes of separate groups while the later one is used to examine two suites of scores achieved from the same group or measure the same attendance more than once. That is, distinct results generated by the same group are compared during this procedure (Dornyei, 2007).

Densombe (2003) emphasizes that T-test corresponds perfectly with small sample sizes (fewer than 30) for small-scale research. On the other hand, some experts have expressed a similar view that the most frequent statistical method used in linguistic research is comparing different categories of people we wish to analyze (Lazaraton, 2005; Dornyei, 2007). Concerning the number of subjects, it is reasonable to apply t-tests in explicating data collected in the study whose sample size belongs to small-scale category (df22).

Independent-samples t-tests are employed twice in this study to examine the difference between students of the EG and CG in their comprehensive English language proficiency and listening ability.

Independent-samples t-test is available in the research based on the argument that independent-samples t-tests occur when the results of groups, which are independent of each other, are compared (Dornyei, 2007).

It is an optimal adoption of the data-analyzing method that contributes to the reliable experiment conclusion. As Denscombe (2003, p. 236) puts, “the computer will undertake the analysis, but it is the researcher who needs to choose which test to apply”. Hence, it is important for the researchers who want to use quantitative data need to be clear about the data-analyzing methods.

4. Conclusion

By describing this study’s main procedure and exploring its soundness from three perspectives such as subject selection, data collection and data analysis, I feel that it is crucial to be a bit more specific about its profound significance. On the one hand, the strategies and methodology used in this study to measure the homogeneity between the two groups and analyze the data about the participant’s English language performance and their listening ability, which are collected in the test, are practical and appropriate. On the other hand, it provides a good guideline to carry out a research which must be precise and practical. It is thus possible to conclude that this research may have a beneficial and profound function in guiding to conduct a good further study.

References

- Denscombe, M. (2003). *The Good Research Guide: for small-scale social research projects*. Maidenhead: Open University Press.
- Dornyei, Z. (2007). *Research Methods in Applied Linguistics*. Oxford: Oxford University Press.
- Hedge, H. (2000). *Teaching and Learning in the Language Classroom*. Oxford: Oxford University Press.
- Lazaraton, A. (2005). Quantitative research methods. In E. Hinkel (Ed.), *Handbook of Research in Second Language Teaching and Learning*. Mahwah, N.J.: Lawrence Erlbaum.
- Lightbown, P. (2000). Anniversary article: Classroom SLA research and second language teaching. *Applied linguistics*, 21(4), 431-462. <https://doi.org/10.1093/applin/21.4.431>
- Mackey, A., & Gass, S. M. (2005). *Second Language Research: Methodology and Design*. Mahwah, N.J.: Lawrence Erlbaum Associates.
- Sadighi, F., & Zare, S. (2006). Is Listening Comprehension Influenced by the Background Knowledge of the Learners? *The Linguistic Journal*, 1(3), 110-126.