Research Methods in Teaching Listening Skills Utilizing Technology Media

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ABSTRACT: The language research method is an area of interest for many language researchers. Reviewing the latest research methods provides rich potential contributions for learning sources for a greater understanding and productivity to conduct novel and essential research, especially in teaching listening skills utilizing technology media. Therefore, this paper elaborates on the research methods used in teaching listening skills using technology media. The elaboration is formulated from the research methods used by journal article writers worldwide. Sixteen international journal articles and four national journal articles are taken as the corpus of the study are investigated using grounded theory analysis. Among the found research methods are case study, ethnography research, phenomenological study, grounded theory, narrative, content analysis study, document analysis, descriptive qualitative, pre-experimental research, quasi-experimental research, true experimental research, correlational research, ex-post-facto, survey research, classroom action research, collaborative action research, and mixed-methods. However, due to the limited space, the paper will only describe five popular methods in teaching listening skills utilizing technology media for the last ten years, including experimental research, classroom action research, survey research, case study, and descriptive qualitative research. The description of each method is supported by examples found in international and national journal articles published worldwide.

Keywords: listening skills, research method, social media, teaching English, technology media

ABSTRAK: *Metode penelitian bahasa merupakan bidang yang menarik bagi banyak peneliti bahasa. Meninjau metode penelitian terbaru memberikan kontribusi yang kaya akan potensi sebagai sumber belajar untuk memahami dan produktif melakukan penelitian baru juga penting, terutama dalam pengajaran keterampilan mendengarkan dengan memanfaatkan media teknologi. Oleh karena itu, artikel ini menguraikan metode penelitian yang digunakan dalam pengajaran keterampilan mendengarkan dengan menggunakan media teknologi. Elaborasi dirumuskan berdasarkan metode penelitian yang digunakan oleh para penulis artikel jurnal di seluruh dunia. Enam belas artikel jurnal internasional dan empat artikel jurnal nasional diambil sebagai korpus penelitian yang diteliti dengan menggunakan analisis grounded theory. Di antara metode penelitian yang ditemukan adalah studi kasus, penelitian etnografi, studi fenomenologis, grounded theory, narasi, studi analisis isi, analisis dokumen, deskriptif kualitatif, penelitian pra-eksperimen, penelitian eksperimen semu, penelitian eksperimen sejati, penelitian korelasional, ex-post-facto, penelitian survei, penelitian tindakan kelas, penelitian tindakan kolaboratif, dan metode campuran. Namun karena keterbatasan ruang, artikel ini hanya akan memaparkan lima metode populer dalam pengajaran keterampilan menyimak dengan memanfaatkan media teknologi selama sepuluh tahun terakhir, antara lain penelitian eksperimen, penelitian tindakan kelas, penelitian survei, studi*

kasus, dan penelitian kualitatif deskriptif. Deskripsi masing-masing metode didukung oleh contoh-contoh yang ditemukan dalam artikel jurnal internasional dan nasional yang diterbitkan di seluruh dunia.

Kata Kunci: *keterampilan mendengarkan, metode penelitian, media sosial, pengajaran Bahasa Inggris, media teknologi*

INTRODUCTION

Human beings have sought to acquire knowledge through experience, authority, deductive reasoning, inductive reasoning, and the scientific approach. The scientific approach is widely regarded as the single most reliable source of new knowledge. Educational research, as a science, employs investigative methodologies that are consistent with the basic principles and operating assumptions of scientific inquiry. A scientific study in education has been hampered by the complexity of educational variables and challenges in making trustworthy observations. However, since the movement's inception in the early twentieth century, scientific inquiry in education has gained recognition and success in theoretical and practical study.

Learning media is a material/tool deliberately used as a medium of messages between teachers and students in implementing instruction and facilitating students' attainment of teaching and learning educational purposes (Sulistyo, 2011; Indriana, 2011; Musfiqon, 2012; Maulina, 2015; Maulina, 2019; Maulina & Rusli, 2019; Maulina et al. 2019; Maulina et al. 2020; Maulina et al. 2021; Saputra et al., 2021; Rasyiid et al., 2021; Putra et al., 2021; & Lar et al., 2021; Zainal et al., 2022). While the role of media learning is a communication tool, it also serves as a motivator, a sense, equality of perception, and a function for uniqueness as it serves a variety of interests and learning (Sanjaya, 2012).

Smaldino, Lowther, and Russell (2012) classify media into six categories: text media, audio media, visual media, video, manipulative media, and people. Text media is an alphanumeric character displayed in various formats, including books, posters, chalkboards, and computer screens. Audio media includes anything that can be heard, such as the sound of people, music, mechanical sounds, noise, and other kind of media. Besides, diagrams on a poster, an image on a whiteboard, a photo, a picture on a book, a cartoon, and other forms of visual media are all examples of visual media. Video media, which includes DVDs and computer animation, is a form of media that exhibits movement. Finally, equipment media is a medium that students can touch and hold. In addition, Sadiman (2011) categorizes instructional media use into two patterns: media use in teaching and learning circumstances in the classroom. In this lesson, numerous actions must be taken when using media. For example, 1) teacher preparation, in this step, the teacher prepares the material to be taught next with his strategy; 2) class preparation, in this step, the instructor not only prepares the content but also prepares the students from the task side in order to follow, record, evaluate, and criticize; 3) media presentation; 4) advanced steps and applications, further follow-up activities such as conversations, reports, and other duties. Also, there

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is the usage of media outside of the classroom. The pattern of media use is classified as managed, uncontrolled, and individual, group, or mass.

In education, there are two broad research methodologies: quantitative and qualitative. Quantitative research addresses relationship, cause and effect, or current state questions that researchers can answer by collecting and statistically analyzing numerical data. It is further subdivided into experimental and non-experimental. Qualitative research aims to better understand social phenomena by offering detailed verbal descriptions of settings, scenarios, and participants. The qualitative approach employs a variety of approaches, including ethnography, case studies, naturalistic observation, concentrated interviews, and historical research. A mixed methods design, which integrates quantitative and qualitative approaches in a single study, is another option for researchers. In educational research, both qualitative and quantitative approaches are significant. The approach that will offer the data to address the study topic is chosen. The mix method process may occur in any or all research areas, including methodology, design logistics, defined techniques to be undertaken, procedures or data collecting, and analysis. However, mixed methods research entails more than combining quantitative and qualitative research: It combines and embraces a variety of paradigms, philosophical assumptions, and theoretical viewpoints that are directly motivated by the study's aim and intended audience. (Ary *et al.*, 2010).

The type of measures employed in most research is a significant component in the methodological field. Designing variables' measures are regarded as a critical phase in planning a study for quantitative researchers. Qualitative studies use a wide range of methodologies to collect data. In general, quantitative research begins with an abstract idea and ends with empirical data that represents thoughts. Although qualitative research begins with empirical data, it then moves on to abstract impressions, relates ideas and data, and concludes with a mixture of thoughts and data. Overall, the procedure is more participatory in both study styles. The quantitative research measurement method follows a conservative forward sequence, beginning with conception, then operationalization, and finally applying the operational definition or measuring to collect data. However, the conceptualization process in qualitative research differs from quantitative research. Conceptualization is defined as the process of establishing coherent theoretical meanings while attempting to make sense of or organize data and one's prior beliefs about it.

There are numerous books on research methodology in the library, online or offline. Many research articles can also be found through the search for scientific journals. For example, the writers can easily find an article on language lessons covering pragmatics, sociolinguistics, language acquisition, or psycholinguistics. It is also easy to find language education articles by searching for journals from language study research. This literature review study examines the research methods commonly used by today's researchers in language education in teaching listening skills utilizing technology media. The analysis results are addressed to reveal the current practice in research tradition in this

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field. From this, the readers will learn different types of representative research methods implemented by researchers worldwide.

This study is to answer two questions as follows: What research methods do the researchers commonly use in teaching listening skills utilizing technology media for the last ten years? And how do they practically use to achieve their defined research purposes?

METHODS

This study involves 20 research articles in teaching listening utilizing technology media published in scientific journals from 2011 to 2021. The articles were purposively chosen to formulate condensed descriptions about the types of research methods used and the procedures taken to achieve the intended research purposes.

The reviewed articles were analyzed inductively to describe research methods used in teaching listening skills utilizing technology media. The researchers adopt the qualitative research procedures suggested by Strauss et al. (1990), namely collecting data, analyzing the data, and repeating the process to investigate the comparative research methods used. To get the data analyzed, we followed three ways of conducting data analysis of open coding, axial coding, and selective coding as proposed by Strauss et al. (1990). First of all, we carefully read to identify the research method applied by open coding focusing on identifying the types of research methods, the objectives, the data collection procedure, and data analysis also an essential result of the articles. These focused points are necessary to describe what, why, and how the article writers conduct their studies to communicate their research findings through international scientific journals successfully. Secondly, under the open coding, we give labels to any description in the articles related to these focused points in the journal articles reviewed. Then, for the axial coding, we relate one conceptual mark to another. We give the highlight also provide subcategories of the articles reviewed. Finally, we do the selective coding to identify any phenomena related to the research questions to answer the research queries.

FINDINGS
Types of Research Methods in Teaching Listening Skills Utilizing Technology Media

As a part of the findings of this research, under this section, the writers describe briefly the kinds of research methods that may be beneficial in teaching listening skills utilizing technology media. The kinds of methods include the following: experimental design, classroom action research, survey research, case study, and descriptive qualitative research. These five types are amongst the popular methods employed by today's researchers in teaching listening skills using technology media. Thus, from the analysis of the journal articles, the writers generate an explanation of five research methods followed by examples of each.

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Experimental Research

Experimental research is a scientific approach where independent variables are manipulated and used to one or more dependent variables to measure their effectiveness. The experimental research method is commonly used in physical and social sciences, psychology, and education. Although many related to a laboratory test procedure, experimental research designs involve collecting quantitative data and performing statistical analysis. Therefore, making it an example of quantitative research methods.

Example of Experimental Research

The first example is Etemadfar *et al*. (2020). Their study formulated the question of the effects of flipped classrooms on improving Iranian EFL learners' listening comprehension. They used an experimental design applying three stages: 1) pre-testing, 2) using the flipped classroom, and 3) post-testing. In mini videos, all the information or skill points in each lecture were presented. Each video was10–15 minutes long, with a total of 50–60 minutes per lecture. Results show that delivering instruction through flipped classrooms led to better performance than traditional classrooms. In addition, participants in the flipped classrooms were highly motivated to learn because of the available facilities. One of the respondents claimed: "*I liked this teaching method; it improved my presentation-making abilities.*"

The second example is Hilmatunisa *et al*. (2018). In their study, formulate the questions: How do podcasts affect teaching listening skills?. Researchers conducted the research through true experimental design in a quantitative approach and used the random cluster sampling technique. They took control class and experimental class for gathering the data to be analyzed. It was usually distributed and homogeny based on the control and experimental classes based on the calculation. The pre-test consisted of 20 items of multiple-choice questions. After the pre-test, the researchers thought in both control and experimental classes. As a result, they found an influence of the use of podcasts in teaching selective listening skills in narrative text in the class SMAN 2.

The third example is Harsa *et al*. (2020). In their study, they formulate the question what the effect of audio-visual and audio teaching media on the students' listening achievement?. They applied experimental research employed descriptive quantitative methods. The students had to answer the questionnaire based on the audio/audio-visual media, which the researchers delivered as the teachers. Pretest and post-test were given to determine the effect of learning media on students' listening achievement. Students who take the pretest and post-test with both teaching media (audio-visual and audio) will show improved results. The results of students' listening learning were 82.16 taught with audio-visual media and 63.08 were taught with video-learning media.

The next example is conducted by Rebenko *et al.* (2019). This study is designed to answer the following: How does the implementation of listening comprehension proficiency to the development of information technology students in the ESP class? The research is used an experiment study*.* The average value in each ESP test increased by 10% compared to previous academic exam

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results. The average gradient score in three other activities had also increased but was not significant. Workplaces and practices of the questionnaire can explain little development in understanding performance. However, the fast test results are still stable and relatively high because the participants understand flexible information in the digit and have improved their rapid reading capability.

Another kind of experimental research is quasi-experimental design. A quasi-experiment is interventional research that uses non-random tasks to evaluate the effect of a causal intervention on the target population. Although quasi-experimental research is comparable to classic experimental design or randomized controlled trial, it lacks random assignment to treatment or control. Instead, experimental designs often allow researchers to control the condition of duty care by using criteria other than random tasks (for example, eligibility cutoff mark). Since the treatment and control groups may not be comparable at baseline, quasi-experiments raise questions about internal validity. In other words, it may be impractical to establish a convincing causal relationship between the treatment condition and the observed outcomes. It is especially true if there are impeding variables.

From the study of 20 articles published in various journals in language teaching, the writers find out several kinds of quasi-experimental design. The first example is Fluente (2014). In his study, he formulated some questions (1) Do learners exposed to a focus on form MALL task demonstrate a higher level of reported noticing of target forms than learners exposed to a focus on form, IMLL task? (2) Do learners exposed to a focus on form MALL task show a higher level of comprehension of target forms than learners exposed to a focus on form, IMLL task? (3) Do learners exposed to a focus on form MALL task show a higher level of top-down input comprehension than learners exposed to a focus on form, IMLL task? (4) For each group, is there a significant relationship between reported noticing of target forms and learners' comprehension of such forms? (5) For each group. is there a significant relationship between reported noticing of target forms and learner's top-down input comprehension? The research applies *a quasi-experimental design*. Participants in the MALL group performed the task in a regular classroom. The test containing the written responses (bottom-up comprehension question) of the participants was collected; the iPods that participants used to answer the top-down questions and record their thoughts were also collected. The results of research question 1) students in the MALL group showed a significantly higher level of attention to the shape of the target, (2) Students in the MALL group showed a significant increase in the level of bottom-up understanding of the target form compared with students in the IMLL group. (3) Showed that students in the MALL group also showed a significantly better overall understanding than students in the IMLL group. Also, the answer to research questions (4) and (5) show a significant correlation between paying attention and bottom-up and top-down levels of understanding. The results show that the MALL group is higher than the IMLL group.

The second example is Rorimpandey (2019). The study is designed to answer the following: Are there any differences in student achievement between

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those who use YouTube videos and those who do not?. Also, whether YouTube videos are more effective in teaching basic listening? He applied quantitative research using the *quasi-experiment or pseudo experiment* method. In this study, experimental classes were given the learning treatment using animated video media and control classes using conventional media. The research design used is a pre-test, post-test control group design. The average value of the experimental class of basic listening increased from 69.032 then to 80.403. The control group at pre-test was 69.141, and at the post-test, it was 73.828. Although both classes experienced an average increase, the average increase was more significant in the Experimental class. The weight of effectiveness was 9.5%.

The next example is by Tasya *et al*. (2018). The study is designed to answer the following 1) How is using VOA news video on students' listening ability? 2) How is the students' perception of the use of VOA news video on their listening ability? This research aimed to investigate whether using news video can effectively teach listening or not. The research design was Quasi-Experimental research supported by Sugiyono (2016), who states that quasi-experimental design is the best way to get the data that contains cause and effect relationships among variables that occurred in the research. The students' listening scores who used VOA news video as the media were compared to the students who did not use VOA video. The significant score (Sig) is 0.359, higher than the significant score because the significant score is lower than 0.05 and the t count higher than the t table (1.99495). They revealed that there is a significant difference between the results of the experiment and control classes.

Other example is conducted by Dirjal *et al*. (2020). The study is designed to answer the following: (1) Is the designed motivation questionnaire valid and reliable? (2) Is there any significant difference statistically between the listening pretest and post-test mean scores of males and females in the experimental group who were subjected to social media applications? (3) Is there any statistically significant difference between the listening post-test mean scores of control and experimental groups who were subjected to social media applications?. The research applies a quasi-experimental study. Findings of the study revealed that male and female participants were highly motivated after receiving their Instruction via Skype device. Grounded on these findings, educators can seriously take social media applications into account in learning a language. The pretest and post-test were conducted on research participants based on the curriculum assigned to them to be taught throughout their academic year.

Classroom Action Research

Classroom Action Research is the kind of reflective process in which teachers collect empirical data to enhance their teaching techniques. It is more systematic and data-driven than teacher reflection and less formal than traditional educational research. It is the merging of teaching and scholarship in which instructors use data from their classes.

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Example of Classroom Action Research

From the study of 20 articles published in various journals in language teaching, the writers find out several samples of classroom action research in teaching listening skills utilizing social media or other technology tools or platforms. The first example is Syafii *et al*. (2020). In their study, formulate the question What are the most appropriate games for enhancing listening skills to students of the Faculty of the Economic Muhammadiyah Universities of Ponorogo? This research issued classroom action research. This research was issued to develop a strategy to solve the classroom problems and find the most suitable technique in listening. Games can be very useful in improving students' listening skills. For example, in Cycle 1.74 % of the total students could get a score of more than 60, and 90% had a solid response to the application of games. It means that games are beneficial to improve listening skills among students.

The second example is research conducted by Putri *et al*. (2019). The study is designed to answer the following: How to improve students listening skills using English stories with audio applications on Health vocational high school in west Bandung regency? Researchers applied a Classroom Action research using an audiobook in the smartphone app. The result of pretest, posttest I and posttest II. In the pretest before the treatment, the average score of the students is 4.56. Meanwhile, at posttest I, their average score are 6.68. Finally, at posttest II their average score touched the point 7.55. The result indicates that teaching English listening skills using the mobile application is effective for students.

The third example is research done by Kuswoyo and Wahyudin (2017). The study is designed to answer the following question: What is the students' perception of task-based learning and whether listening skills increase with task-based learning? This research aims to examine weaknesses and strengths and make changes that improve the situation. In order to collect data for this *Classroom Action Research*, multiple methods will be used, including observation, recording, and questionnaires. Data was collected from the hearing functional class STBA Technocrat. They suggest that functional class listening abilities have significantly improved, and students' perceptions of task-based learning also their listening skills.

Survey Research

A *survey* is a research approach that collects data from a preset group of respondents to gather information and insights on various topics of interest. They can serve numerous purposes, and researchers can carry them out in various ways depending on the methodology used and the goal of the study. The data is typically collected using standardized techniques to guarantee that each respondent can answer the questions on an equal playing field, avoiding biased perspectives that could impact the conclusion of the research or study. The procedure entails asking people for information using a questionnaire, which can be administered online or offline.

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Examples of Survey Research

From the study of 20 articles published in various journals in language teaching, the writer finds out several titles developed from survey research. The first example is (Reinikainen & Luoma-Aho, 2020). The study is designed to answer the following: How do young people consider listening to social media organizations and whether their perceptions are related to their trust in the information shared by brands and other organizations on social media?. As in Finland and England to know the influence and study the social media in young people aged 15-30 years. The total of these online surveys is about 2,674 responses, but because research is focused on the generation of Z Cohort respondents are limited at the age of 15-24 years to reduce the data. This research is used **survey research.** The post hoc analysis of social media survey results show that social media use is highly perceived to the benefits of organizational listening skills. The results also highlight the role of competent listening on social media, bolstering the previous literature connecting both organizational listening and trust with higher participation and engagement online.

The second is Metruk (2018). His study is designed to answer the following questions: Do EFL university students at the CEFR B2 and C1 levels agree that extensive listening practice provided through watching authentic English videos improves their listening skills?. This research is used a survey design. The Slovak language was the native tongue of all the subjects. The subjects were asked to fill in a questionnaire anonymously to gather data on the exposure of subjects to original English videos. They were 22 years of age on average, and they were at the C1 level—besides, the majority of Bachelor of Arts and Master of Arts students watch videos on video-sharing websites and social networking websites reasonably frequently. Therefore, it indicates that watching authentic English videos should place EFL learning. Furthermore, the findings suggest that both subjects reported viewing videos every day or every other day.

Case Study

Case studies are research methodologies commonly seen in social sciences and life. There is no one definition of the case study. However, 'case studies may be defined as intensive studies of a person, a group of persons or units, intended to generalize some units.' A case study is also described as an intensive and systematic investigation of one individual, group, community, or another unit in which researchers study depth data relating to multiple variables. In addition, a case study focuses on a particular unit to produce an in-depth description that is rich and holistic.

Example of Case Study

Browne and Millar (2019) researched to enhance digital student practice to explore students' experience, use, and wish to work in a technology-rich environment. They focus on innovative practices, discovered by serendipity, which went beyond the tenets usually described in the literature on student's voice. Using a case study, their article is on work underway in one FE institution

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where students have been assigned as 'Digi-Pals' and given a pivotal role to embed the use of digital technologies into students?. They found two theoretical lenses, one focused on technology and the other on student's voice, are applied to explore the innovative practice. Finally, the community of Digi-Pal practice is described, and recommendations are made for further adoption across the FE and skills sector.

Another example is Deaner (2021), who researched the use of music as a dynamic and practical learning platform to enhance listening skills acquisition for counselors-in-training. First is, he provides rationale regarding using contemporary songs to facilitate students' skills development in the classroom. He integrates creatively engaging learners, neuroscience, enriching self-awareness, and embracing diverse expression within the rationale. Next, a user-friendly 5-Step practical guide outlining specific strategies for using songs in the classroom to develop counseling skills is offered. Concrete examples depicting the acquisition of *micro-skills* for counselors-in-training are presented within this guide. Lastly, a playlist of diverse contemporary songs is supplied for instructors to apply these practical strategies meaningfully and creatively in the classroom.

Descriptive Qualitative Research

A qualitative descriptive design is another name for the design of this research. It can answer such questions as who, where, and when. The answers to these questions could not have been a first-hand trial or observation. Hence, the researcher posed these questions to those familiar with the phenomenon. Alternatively, collect information from secondary sources such as books and periodicals. As names suggest, this type of research describes the phenomenon that does not ask questions such as "how" and "why. " Meanwhile, these questions are answered in a causal study, an explanation, or an inquiry. According to Kumar (2011), "a study in which the main focus is on description, not checking relationships or associations, is classified as a descriptive study. A descriptive study tries systematically to describe situations, problems, phenomena, services or programs, or to provide information about, say, people's living conditions, or to describe attitudes toward problems."

Examples of Descriptive Qualitative Research

From the study of 20 articles published in various journals in language teaching, the writer finds out several titles developed from classroom descriptive qualitative research. The first example is Wardhana *et al.* (2021). The study is designed to answer the following: several problems often arise when learning to listen, one of them is the listener have difficulty when they want to grasp the meaning of what they hear, as we know that the spelling of English is different from the pronunciation, and sometimes they got the material monotonously it reduces motivation in learning listening skill. Their search was done at Pongneeb School Tires in the academic field. The selected instrument is observation, questionnaires, and interviews. Seven students are male, and three students are women. This research was used descriptive qualitative research*.* They found that *s*tudents are motivated extrinsically in learning listening skills. Learning is a fun

activity. Even though they agree that learning listening is difficult, they will work hard. They have great motivation while learning to listen because it is fascinating. The conclusion obtained from the findings is that almost all students agree on learning.

The second example is Loreng *et al*. (2017). The study is designed to answer the following: how to use learning media on listening skills in TESOL at Integrated Language Service Unit Universities Sebelas Maret? This research is a qualitative design; descriptive research. The sampling technique used was purposive sampling. This study's data sources are informants, events, students' results of relevant assignments, and studies. Research data were analyzed using an interactive analysis model for the first time. The findings in the field use two patterns, such as the use of learning media in the classroom and learning media outside the classroom. Based on the use pattern in the classroom, the audio media used involved the sense of hearing so that listening occurred.

DISCUSSION

Having explained in the results that five popular research methods used in the research of teaching listening skills utilizing technology media for the last ten years represent each method in each primary research approach. Commonly, there are two primary research approaches, i.e., qualitative and quantitative. Qualitative studies focus mainly on words and meanings and aim to capture the richness and complexity of human experience. In contrast, quantitative studies involve recording information obtained from participants in numerical form to enable statistical analysis and generalize those findings to the broader population. Behind these two main approaches, there are essential theoretical differences and philosophical assumptions about knowledge nature, how this should be recorded, truth and reality, what kinds of methods should be used, and the role of researchers in the research process.

As part of the finding, the writers describe briefly the kinds of research methods that may be beneficial in teaching listening skills utilizing technology media. First of all, experimental research is conducted with a scientific approach using two sets of variables. Those representative samples of experimental studies hinge on researchers confirming the change of a variable based solely on manipulating the constant variable that differs between two essential conditions: exposure or non-exposure to the independent variable treatment condition. Secondly, classroom action research helps researchers research teaching listening skills utilizing technology media. This kind of research method is a reflective process in which teachers gather empirical data to improve their teaching practices in teaching listening skills. Besides employing this research method, researchers begin with a question about classroom experiences, issues, or challenges they have faced. Therefore, it is a reflective process that helps teachers explore and examine aspects of teaching and learning and take action to change and improve. Another research method used in teaching listening skills using technology media is a survey study. The survey study, for example, conducted by Reinikainen and Luoma-Aho (2020), employed significant

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responses to know the role of competent listening on social media and the participant's engagement in the online learning listening skills. Under the quantitative research approach, the survey method was used to obtain information describing a large sample's characteristics quickly.

Despite the experimental research, classroom action research, and survey research, a case study as one of the methods under the qualitative approach is conducted by two representative samples by Browne and Millar (2019) and Deaner (2021). These cases studies allow the exploration and understanding of complex issues, and the researchers go beyond the quantitative statistical results and understand the behavioral conditions through the students' perspective in enhancing their listening skills.

CONCLUSION

The study of research methods in listening skills utilizing technology media discusses five popular methods used by researchers in the last ten years: experimental research, classroom action research, survey research, case study, and descriptive qualitative research. These five research methods are practically used to achieve their defined research purposes in teaching listening skills using technology media. Therefore, writers highly expect that explaining these five methods is beneficial as references for undergraduate or graduate students preparing research for their thesis or dissertation.

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