

CHAPTER II

REVIEW OF RELATED LITERATURE

A. Theoretical Description

1. Cooperative Learning

Cooperative Learning is a method of coaching in which learners participate in small groups in accomplishing shared learning objectives. Compared to competitive and individual efforts, cooperation has beneficial impacts on an expanded range of outcomes, according to the results of numerous studies.¹

The discipline of language instruction has undergone significant change over the past fifty years. Despite global changes, foreign language instruction in China remains predominantly traditional. Thus, comparing cooperative language learning (Cooperative language learning is the application of cooperative learning techniques to the acquisition of a language, either the native or a foreign language) with conventional language instruction can help us comprehend its underlying principles and advantages. In this context, traditional language instruction refers to the teacher-centered method that incorporates many components of the Grammar-translation Method and the Audio-Lingual Method into the language teaching and learning process.

Historically, education has focused on making students aware of certain aspects of the code without providing sufficient practice. In order to comprehend and manipulate the morphology and syntax of a foreign language, it is believed that one must memorize rules and facts. The majority of interactions in the classroom are between teachers and students, as well as between students themselves. Interaction between students is minimal. Students are viewed as passively acquiring new language knowledge as opposed to actively developing their communicative skills.²

According to Zhang³ the following are the advantages of cooperative learning:

- a. That allows for both input and output means that learners have the opportunity to pick up input and outcome language. Cooperative language is thus excellent for oral practice and listening comprehension.

¹ Slavin, 'Cooperative Learning and Academic Achievement....', 786.

² Zhang, 'Cooperative Language Learning.....' 82.

³Zhang, 83–84.

- b. Creating an effective climate, the circumstances in the Cooperative Learning class can boost students' self-confidence and self-esteem, motivating them to achieve greater academic success.
- c. By improving a variety of linguistic functions, learners can participate in many sorts of conversations.
- d. Enhancing learner independence and responsibility, as cooperative work emphasizes individual responsibility and accountability.

Teachers need to evaluate how much effort each student is contributing to the group's work, provide feedback to groups and individual students, assist groups in avoiding redundant efforts by members, and guarantee that each member is responsible for the final outcome to ensure that each student is held to his or her own standards of accountability.

Common approaches of organizing personal responsibility include:

- a. Having a limited number of participants. When there are fewer people in a group, everyone has a greater chance of being held to account. Having each student take their own exam.
- b. Conduct ad hoc oral exams by selecting a student at random to present the results of a group project to the instructor in front of the other members of the group or the full class.
- c. Keeping a log of how often each group member contributes to the group's efforts.
- d. Designate one student from each group to serve as the group's checker. The checker polls group members for justifications of the collectively arrived at responses.
- e. Encouraging learners to pass on their knowledge to others. It's called "simultaneous explaining" when every pupil does it at once.

Classroom instruction follows a predictable format. At the outset, students work together to gain an understanding of a topic, concept, or technique. Second, to prove that they have mastered the content, students must demonstrate their own application of the information or their own performance of the skill, technique, or

process. Group instruction is followed by individual student performances.⁴

Several instances of cooperative learning techniques include:

- a. Jigsaw: Jigsaw is a collaborative learning approach that involves students to divide the lesson into smaller parts, then each group member will get one piece of the material and learn about it himself, then exchange material with other group members and learn together about the new part. Learners are split up between “home groups” and also “expert groups,” respectively. Each home group participant is given a unique component of a subject to study. They next join a professional group made up of people with the same element from different home groups. They deliberate and refine their component. After that, they go back to their original groupings and instruct them in their new perspective.⁵
- b. Think-pair-share: Think pair share (TPS) is a cooperative learning method that invites students to think individually first, then share thoughts with their group friends, and finally deliver the results of the discussion to the classroom. Learners are given a question or an issue to consider alone as part of the think-pair-share method. They immediately share their ideas in pairs with other students. They then present their thoughts to the class as an entire or to a broader group.⁶
- c. Numbered heads together: Learners are divided into four-person teams, throughout each of them is given a number between one and four. The class debates the question in groups after the teacher asks it. When a number is called out, the learners who have that number raised their fingers and respond to the question on behalf of their teams.⁷

⁴ Johnson, Roger T. “David Johnson: A Leading Teacher of Cooperative Learning.” *Teaching Education* 6, no. 2 (December 1994): 123–25. <https://doi.org/10.1080/1047621940060215>.

⁵ Miftahul Huda, *Cooperative Learning: Metode, Teknik, Struktur, Dan Model Penerapan* (Yogyakarta: Pustaka Pelajar, 2011).

⁶ Huda.

⁷ Huda.

- d. Round robin: Learners are divided into four-person teams, with each participant assigned a specific task, like being a reporter, cheerleader, recorder, or checker. Learners in groups alternately offer their thoughts or responses to teacher's theme or question. The responses from the team are recorded by the recorder. The entire class or a bigger group hears the team's comments as reported by the reporter.⁸
- e. Numbered head is a co-operative learning method that invites students to form small groups with the same number of members (e.g. 4 or 5 people), then give a number to each member of the group, and each member must show that number when speaking.⁹
- f. Group work is a cooperative learning technique which invites the students to work together in large groups (usually more than 5 people) to complete a particular task or project.¹⁰
- g. Blended learning (BL) is a joint learning method which combines face-to-face learning and online or online learning. Students can learn independently at home or elsewhere, but also have to interact with teachers and classmates through digital media such as email, chat, video conference, etc.¹¹
- h. Cooperative integrated reading and composition (CIRC) is a cooperative learning method that integrates reading and writing activities into a group. Students will read the text together, make a summary or comment about the text, and then write an essay or story based on the text.¹²
- i. Group zone of proximal development (GZPD) is a concept developed by David Johnson to explain the difference between individual abilities and potential abilities of individuals in a group. Individual abilities are what one can do by one's own without the help of other people. Individual potential skills are what someone can do if helped by others.¹³

⁸ Huda.

⁹ Huda.

¹⁰ Huda.

¹¹ Huda.

¹² Zhang, 'Cooperative Language Learning.....'

¹³ Huda, *Cooperative Learning: Metode, Teknik, Struktur, Dan Model Penerapan*.

- j. Semantic mapping (SM) is a technique to visualize concepts or information using geometric shapes such as circles, squares, triangles, etc. Students can make SM to understand the relationship between concepts lesson more easily and enjoyably.¹⁴
- k. Student team achievement division (STAD) is a cooperative learning model that divides students into teams based on their achievements in a task or project. Each team has its own goal to a specific outcome. The teams will help each other and give feedback.¹⁵
- l. Drama collaboratively (STH) is the collaborative learning method that uses drama as a medium to enhance student social skills, creativity, and problem-solving. Students will be divided into several drama groups and given a scenario or theme to be discussed in a collaborative manner. Each drama group will create a dramatic action in accordance with the scenario.¹⁶
- m. Six thinking hats is a technique of conceptual or information visualization using a six-color hat that represents six thinking patterns: thinking facts, thinking emotions, thinking critically, thinking creatively, thinking strategically, and thinking systematically.¹⁷
- n. Problem based learning is a cooperative learning method that invites students to find solutions to a real or hypothetical problem using their knowledge and skills from a variety of subjects.¹⁸
- o. Differentiated instruction (DI) is a cooperative learning approach that adapts materials, processes, products, learning environments, and evaluations to students' individual needs and abilities.¹⁹

Many studies have shown that student and teacher motivation, self-esteem, empathy, critical thinking, and academic accomplishment all improve with cooperative learning. It has the potential to encourage pupils to work together, appreciates differences, and up hold democratic

¹⁴ Huda.

¹⁵ Huda.

¹⁶ Zhang, 'Cooperative Language Learning.....'

¹⁷ Slavin, 'Cooperative Learning and Academic Achievement....'

¹⁸ Syamsidah and Hamidah Suryani, 'Problem Based Learning (PBL) Mata Kuliah Pengetahuan Bahan Makanan', *DEEPUBLISH*, 2018.

¹⁹ Zhang, 'Cooperative Language Learning.....'

principles. It's a great tool for lowering classroom stress, monotony, and isolation.

Teachers need to put time and effort into planning and preparing for cooperative learning, and students need to be given specific instructions and directions. Teachers have to plan the collaborative learning activity's goals, content, materials, team make-up, roles and responsibilities, assessment criteria, and feedback methods. They must monitor the team's progress, coordinate activities, offer suggestions for improvement, and evaluate the final product.

2. Learning-outcome

Learning outcomes are statements of what a learner knows, understands and is able to do after completion of learning. They are used to describe the specific knowledge, skills, or attitudes that learners will acquire and demonstrate as a result of a learning activity, such as a course, program, or training session.²⁰ Learning outcomes can be classified into different types depending on the domain of learning involved, such as cognitive, affective, or psychomotor. Learning outcomes can help instructors design and evaluate learning activities more effectively, and help students regulate their learning and develop effective study. Learning outcomes can also help ensure the quality and relevance of education and training in different contexts and sectors.²¹

Although there are other ways to classify learning outcomes, the following five categories are frequently used:²²

- a. Intellectual abilities are those that entail comprehending ideas, laws, or processes. One statement can read, "Students will be able to apply the Pythagorean Theorem to solve problems involving right triangles."
- b. Cognitive strategy: These results entail the application of individual thought, planning, learning, and behavior

²⁰ Roger Harris and Berwyn Clayton, 'The Current Emphasis on Learning Outcomes', *International Journal of Training Research* 17, no. 2 (4 May 2019): 93–97, <https://doi.org/10.1080/14480220.2019.1644777>.

²¹ Harold Goss, 'Student Learning Outcomes Assessment in Higher Education and in Academic Libraries: A Review of the Literature', *The Journal of Academic Librarianship* 48, no. 2 (March 2022): 102485, <https://doi.org/10.1016/j.acalib.2021.102485>.

²² 'Learning Outcomes - Types, And Examples of Learning Outcomes', accessed 26 June 2023, <https://www.academiaerp.com/blog/learning-outcomes-types-and-examples-of-learning-outcomes/>.

- methods. As an illustration, “Students will be able to use graphic organizers to plan and structure their writing.”
- c. Verbal information: These results include communicating what one has discovered after studying a well-organized body of knowledge. As in “Students will be able to summarize the main events and characters of a novel.”
 - d. Motor skills: These are the abilities required to carry out physical actions smoothly, fluidly, or with the appropriate timing. As an illustration, “Students will be able to perform CPR on a mannequin following the guidelines of the American Heart Association.”
 - e. Attitude: These results entail displaying an inner state that manifests in conduct. According to one statement, “Students will be able to demonstrate respect for cultural diversity in their interactions with others.”

Student learning outcomes describe what students know, can do, or value after completing a course or program in English teaching. They guide curriculum design, assessment strategies, and instructional methods. Student learning outcomes should be clear, measurable, and aligned with the standards and expectations of the discipline and the institution. Some examples of student learning outcomes for English teaching are:

- a. Students demonstrate knowledge of the linguistic, cultural, and social aspects of English language use in various contexts and genres.²³ For example, students can identify and analyze how language varies according to audience, purpose, and mode of communication.
- b. Students apply pedagogical principles and strategies to design, implement, and evaluate effective English language teaching and learning activities for diverse learners and settings.²⁴ For example, students can plan and deliver lessons that address the needs and interests of learners with different levels of proficiency, backgrounds, and goals.
- c. Students critically reflect on their own and others' teaching practices and professional development needs in relation to

²³ Jack C. Richards and Theodore S. Rodgers, *Approaches and Methods in Language Teaching*, Third edition (Stuttgart: Klett, 2014).

²⁴ H. Douglas Brown and Heekyeong Lee, *Teaching by Principles: An Interactive Approach to Language Pedagogy* (Pearson Education, 2015).

- ethical and professional standards in English language teaching.²⁵ For example, students can collect and use feedback from peers, mentors, and learners to improve their teaching performance and identify areas for further learning.
- d. Students use appropriate technologies and resources to enhance their own and their students' English language proficiency and intercultural competence.²⁶ For example, students can use online platforms and tools to create and share authentic materials, collaborate with other teachers and learners, and access relevant information and resources.
 - e. Students conduct and communicate research on issues and topics related to English language teaching and learning in an informed and scholarly manner.²⁷ For example, students can formulate research questions, review literature, collect and analyze data, report findings, and discuss implications for practice.
- 3. English-teaching**
- a. English as a foreign language

English as a Foreign Language is increasingly being used as a means of education in schools and universities. Several subjects such as information technology, management, and humanity use English specifically as a learning tool. Many published research papers in all subjects are in English. English is also commonly taught as a foreign language for students who wish to continue their studies.²⁸ The Indonesian government included English as the first foreign language used in Indonesia. English is included in the curriculum and is an important subject in elementary,

²⁵ Thomas S. C. Farrell, 'Reflective Practice for Language Teachers', in *The TESOL Encyclopedia of English Language Teaching*, ed. John I. Lontas, Tesol International Association, and Margo DelliCarpini (Hoboken, NJ, USA: John Wiley & Sons, Inc., 2018), 1–6, <https://doi.org/10.1002/9781118784235.eelt0873>.

²⁶ Carol A. Chapelle and Shannon Sauro, eds., *The Handbook of Technology and Second Language Teaching and Learning*, 1st ed. (Wiley, 2017), <https://doi.org/10.1002/9781118914069>.

²⁷ Anne Burns and Jack C Richards, 'The Cambridge Guide to Learning English as A Second Language', *Applied Linguistics* 41, no. 2 (2018): 320, https://www.academia.edu/45513292/Anne_Burns_and_Jack_C_Richards_eds_THE_CAMBRIDGE_GUIDE_TO_LEARNING_ENGLISH_AS_A_SECOND_LANGUAGE_Cambridge_University_Press_2018.

²⁸ Allan Lauder, "The Status and Function of English in Indonesia: A Review of Key Factors," *MAKARA, SOCIAL HUMAN IRA* 12, no. 1 (2008): 12, <https://doi.org/10.7454/mssh.v12i1.128>

junior high and high school so that it has a great opportunity to be used as the language of instruction in several schools in Indonesia.²⁹

Teaching English as a foreign language or TEFL as it is more commonly called, means teaching English as a foreign language, in countries where English is not their first language. Teaching English as a foreign language involves being able to express English in a clear and engaging way. English teachers encourage students to develop their English skills by listening, reading, writing and speaking. Teaching English as a foreign language is also supported by the use of textbooks, technology-based resources, and audio-visual aids.³⁰

4. Meta-analysis

Meta-analysis is a statistical technique for comparing the findings of multiple studies that have been conducted on the same topic. Quantitative data obtained from a database. Meta-analysis is the study of analyses and statistics performed on the results of multiple individual studies with the aim of integrating their findings.³¹

According to Chandra³², a meta-analysis is a type of quantitative research that uses the numbers and statistical methods from multiple studies to organize and analyze as much data as possible in order to get as close as possible to a comprehensive picture. Soekamto, cited in Chandra, explains that quantitative meta-analysis involves using statistical analysis to compile information from a large number of studies. The purpose of meta-analysis is to help researchers determine whether or not their interpretations of the research results are consistent.

Analyzing previously analyzed data is what “meta-analysis” studies are all about. Primary research results are used as a foundation for accepting or supporting hypotheses, rejecting or refuting hypotheses, and generating new hypotheses of one's

²⁹ Viona Chairina, 'Kedudukan Bahasa Inggris Sebagai Bahasa Pengantar Dalam Dunia Pendidikan', 2019, 354–64, <https://doi.org/10.31227/osf.io/xdqjg>.

³⁰ Ikhfi Imaniah and Yudhie Indra Gunawan, *Teaching English as a Foreign Language (Teaching and Learning Strategy)* (Tangerang: FKIP UMT Press, 2017).

³¹ Retnawati et al., *Pengantar Analisis Meta* 1-5.

³² Chandra, 'Efektivitas Media Pembelajaran dalam Pembelajaran Biologi (Meta Analisis Terhadap Penelitian Eksperimen Dalam Pembelajaran Biologi)', 1–22, accessed 31 May 2023, <https://www.syekhnurjati.ac.id/jurnal/index.php/holistik/article/view/79/81>.

own.³³ The purpose of meta-analysis, to put it another way, is to perform a secondary statistical analysis on the aggregated data from an initial study. Results from pilot studies are typically transformed into a standardized metric known as effect size (ES) before being combined with data from subsequent studies. This is done to investigate the increasing likelihood of inconsistent research results as a result of the increasing number of studies of the same kind.

Identification, collection, reanalysis, coding, and interpretation of research findings are all part of a meta-analysis's purview. outlines the goals of meta-analysis, which include obtaining estimates of effect size—that is, the strength of associations between variables or the magnitude of differences between them—making inferences from sample data to the general population via hypothesis tests or estimations, and performing quality assurance checks on variables that could potentially serve as confounding factors.³⁴

According to the above, quantitative research methods known as meta-analysis can be defined as a way to compile information from previous studies using predetermined criteria.

There are a number of benefits to doing meta-analysis including the following:

- a. There is less room for subjectivity and evaluation.
- b. Since it is a quantitative approach, several samples are collected to provide a reliable result, with the final result being referred to as the effect size.
- c. Meta-analysis permits combining different types of research results that have already been obtained.
- d. This method concentrates on aggregating the effects of insignificant results in order to produce a meaningful one.
- e. This method can also answer questions about inconsistent findings across studies.

Meta-analysis has several benefits, but it also has a few drawbacks including the following:

- a. A large number of samples means there is a greater chance of erroneous samples and unnecessary data being collected.
- b. The results of a meta-analysis are typically only those that hold significance, while those that do not are not published.

³³ Chandra, 1–23.

³⁴ Anadhiroh, 'Meta Analisis Dengan Effect Size Odds Ratio Pada Kasus Pengaruh Terapi B-Blocker Untuk Pasien Gagal Jantung' (2011), 1–24.

- c. Capable of effectively grouping and comparing data. This method can be used to make seemingly disparate things look the same.
- d. The sample size of the data is too small for this method to be appropriate.
- e. It's possible there was a methodological error in.

Data utilization via statistical analysis is a key component of meta-analysis. Because of this, meta-analysis makes use of a number of different statistical models to glean results and interpret them. Here are two types of statistical models used in meta-analysis: those that focus just on effects studies, and those that include effects studies as well as supplementary data and analysis.³⁵

Statistical models that focus solely on effect studies can be classified into two types: fixed effects models and random effects models. The average effects across all studies included in the meta-analysis can be visualized with a fixed effects model. However, the random effect model shows the average variance across studies in the impact size of a meta-analysis without revealing individual study variance. Calculating the quality effect model statistically requires more data and calculations. The Quality Effect Model is a Statistical Procedure for Harmonizing the Results of Multiple Studies Using a Meta-Analysis, Accounting for Study-by-Study Variation and Quality.³⁶

Borenstein et al., as cited by Heri Retnawati, et al., state that the fixed effect model is employed when the analyzed research population satisfies two specific conditions: 1) Researcher posits that all the studies under analysis are functionally equivalent. 2) The aim of the analysis is to draw an impact size inference solely based on the identified population, without generalizing on a broader scope. The fixed effect model offers a comprehensive summary of the weighted averages pertaining to weight-related factors across the numerous studies included in the conducted meta-analyses. The random effect model is used when there is heterogeneity among the observed research. Borenstein et.al. As cited by Retnawati in his book, explains that the random effect model is employed when there is a functional disparity in the population of examined studies resulting from various treatments administered by multiple individuals. The random effects model

³⁵ Retnawati et al., *Pengantar Analisis Meta*, 1–9.

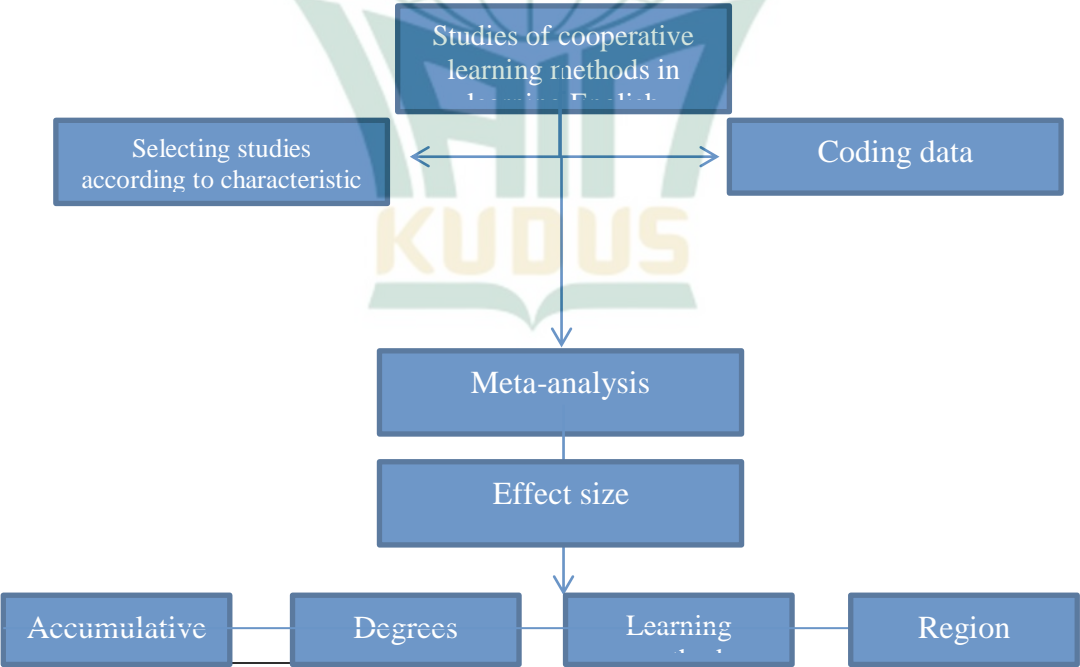
³⁶ Retnawati et al., 105.

calculates the overall average weight of the impact of a meta-analysis research on a set of studies, without considering the individual weights of each study. The two models are differentiated based on their heterogeneity test. Specifically, if the heterogeneity test indicates homogeneity, then the fixed effect model should be employed.³⁷

B. Theoretical Framework

The researcher builds a domain based on the independent variable and the dependent variable. The independent variable is cooperative learning, and the dependent variable is the student English learning achievement, and then determine the limitations of the research which are summarized including the form of publication in the form of the thesis or journal articles that are published or that can be accessed via google scholar as the main search engine in the range of 2019 – 2022 as well as the definition of the dependent variable namely the achievement of learning English is the level of mastery of student English subject matter which has been obtained from the result of learning tests expressed in the form of scores.

Figure.2. 1 theoretical framework



³⁷ Retnawati et al., *Pengantar Analisis Meta*.

C. Review of Previous Study

Previous studies that support and are relevant to this research are as follows:

Table.2. 1 previous study

Studies	Similarities	Differences	Major Findings
Krisma Nurmaya (2020)	Using Meta-Analysis in Cooperative Learning on English language teaching	Meta-analysis technique of 21 theses as sample (2015-2019) from research that can be accessed from institutional repository UIN Syarif Hidayatullah Jakarta.	This research was found that the average of effect size was 1.2 and was categorized as a big effect score. The findings also showed that Cooperative Learning has a big effect size score based on school levels, English skills, and applied method types
Mushawwir Akbar (2022)	Using Meta-Analytic Techniques in Cooperative Learning	This study analyzed 56 cooperative learning articles found in GARUDA journal database and undergraduate theses by the issue date of 2013-2022	There were only 20 studies remaining to be analyzed furthermore. The result showed that the effectiveness of cooperative learning was 1.15 which is categorized as a strong effect. LT (Learning Together) method got the highest effect-size score than the other method of cooperative learning with 1.86 and also categorized as having a strong effect. Listening skill is a dependent variable

			<p>that is most affected by the implementation of cooperative learning with effect-size of 1.90 Cooperative learning model also gives a measure of higher effectiveness in junior high school than in senior high school.</p>
<p>David W. Johnson et all (2000)</p>	<p>Using Meta-Analytic Techniques in Cooperative Learning</p>	<p>There were 164 research found after a thorough search that looked into eight different forms of cooperative learning. There were a total of 194 unique effect sizes for academic performance that were derived from the research.</p>	<p>The academic performance of students was significantly improved by using any of the eight cooperative learning strategies. Academic Controversy (AC), Student Team Achievement Divisions (STAD), Teams Games and Tournaments (TGT), Group Investigation (GI), Jigsaw, Teams-Assisted Methods of Cooperative Learning Individualization (TAI), and Cooperative Integrated Reading and Composition (CIRC) all promoted greater effects when comparing Cooperative learning to competitive</p>

		<p>learning. Most cooperative lesson formats (LT, AC, GI, TGT, TAI, STAD, Jigsaw, and CIRC) have a greater impact than individualistic instruction formats. Strong evidence for the efficacy of cooperative learning is provided by the consistency of findings and the variety of approaches taken by participants.</p>
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The following conclusions can be drawn from the research shown in the table. Research by Krisma Nurmaya (2020) this thesis were conducted in junior high school by experimental research design with Cooperative Learning as the independent variable, while English skills are the dependent variable. Based on the analysis of effect sizes, it was found that the average of effect size was 1.2 and was categorized as a big effect score. The findings also showed that Cooperative Learning has a big effect size score based on school levels, English skills, and applied method types. However, this result is only based on the including sample, the theses in English Education Department of UIN Syarif Hidayatullah Jakarta at 2015-2019 period.³⁸

Research by Mushawwir Akbar (2022), shows that cooperative learning has a beneficial effect on ELT outcome performance. Research demonstrates that the results of implementing a cooperative learning model might vary depending on the type of instruction, the level of education, the learning outcomes targeted by the program, and the subject matter being taught. The result showed that the effectiveness of cooperative

³⁸ Krisma Nurmaya, 'Cooperative Learning Application in English Language Learning: A Meta-Analysis (A Statistical Synthesis of Students' Theses in English Education Department of UIN Syarif Hidayatullah Jakarta at 2015-2019 Period)' (bachelorThesis, Jakarta: FITK UIN Syarif Hidayatullah Jakarta, 2020), <https://repository.uinjkt.ac.id/dspace/handle/123456789/54349>.

learning was 1.15 which is categorized as a strong effect. LT (Learning Together) method got the highest effect-size score than the other method of cooperative learning with 1.86 and also categorized as having a strong effect. Listening skill is a dependent variable that is most affected by the implementation of cooperative learning with effect-size of 1.90 Cooperative learning model also gives a measure of higher effectiveness in junior high school than in senior high school.³⁹

David W. Johnson et al.⁴⁰ (2000) conducted a study that included numerous types of cooperative learning and found that all of them significantly improved students' academic performance. Cooperative learning has been shown to be more effective than individualistic learning.

Overall, the studies provide strong support for the efficacy of cooperative learning in improving students' learning and performance across a wide range of contexts, from biology and mathematics to English and the social sciences. These findings may provide a foundation for the development of more effective educational strategies in the future.

The research will concentrate on the impact of cooperative learning models on students' English language development. Synthesize findings from multiple studies by employing a meta-analysis approach. The study reveals important insights into the efficacy of cooperative learning in enhancing academic performance in the context of English language instruction. This study will provide teachers and practitioners of English language instruction with more targeted and timely data. Thus, this study contributes to filling the knowledge gap and offering helpful guidelines for enhancing English language instruction using cooperative methods.

D. Hypothesis

Hypothesis is a provisional answer to a problem that is still speculative and has to be proven for its accuracy. Based on this framework of thinking, the hypothesis in this study is that there is a significant positive influence on students' mathematical abilities

³⁹ 'Meta-Analysis : The Use of Cooperative Learning Model in English Language Teaching and Learning - Walisongo Repository', accessed 29 February 2024, <https://eprints.walisongo.ac.id/id/eprint/19980/>.

⁴⁰ David W Johnson, Roger T Johnson, and Mary Beth Stanne, 'Cooperative Learning Methods: A Meta-Analysis', n.d.

while using the cooperative learning approach. In this study, these hypotheses will be tested using the meta-analysis method to collect and analyze data from various relevant studies with the aim of identifying and understanding in more depth the effect of cooperative learning in learning English.

