



Collaborative Learning Theory in Overcoming Speaking Anxiety in Undergraduate Students

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ABSTRACT

Purpose of the study: This study aims to explore how female investors' cognitive activity, particularly as it relates to neurotransmitter function, contributes to the emergence of investment bias and influences their financial decision-making behavior. The background to this study is the growing participation of women in the investment world in Indonesia, demonstrating high enthusiasm despite the field being synonymous with numbers, risk, and rational thinking.

Methodology: This study focuses on analyzing the role of neurotransmitters as moderating variables in the relationship between cognitive activity and the tendency for investment bias in female investors. While the abstract does not explicitly mention the technical methods used, an interdisciplinary approach combining psychology, neuroscience, and behavioral finance forms the primary foundation of the analysis.

Main Findings: The main findings of this study indicate that cognitive activity influenced by neurotransmitter function plays a role in shaping investment bias in female investors. This bias then impacts decision-making patterns, which can differ from those of other investor groups, particularly in the context of risk management and perception of investment opportunities.

Novelty/Originality of this study: The uniqueness of this study lies in its approach, which integrates biological and psychological aspects into the study of investment behavior, particularly in women. By focusing on the role of neurotransmitters, this research makes an original contribution to a deeper understanding of the psychobiological basis of financial behavior, which has previously been rarely discussed specifically in a gender context.

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1. INTRODUCTION

Public speaking skills are essential competencies that university students need to develop. These skills are not only crucial in academic settings but also play a significant role in professional and social life. However, many students experience speech anxiety, which can hinder their ability to communicate effectively. Speech anxiety, often identified as glossophobia, can negatively impact students' academic performance and self-confidence. In Baubau City, this phenomenon is still prevalent among undergraduate (S-1) students. Based on initial observations and interviews with several lecturers and students, speech anxiety frequently arises during classroom presentations, group discussions, and when expressing opinions in forums. Several factors contribute

to speech anxiety, including a lack of public speaking experience, fear of negative evaluation, and insufficient learning strategies that support the development of speaking skills.

One approach considered effective in addressing speech anxiety is the application of Collaborative Learning Theory. Collaborative learning is a pedagogical approach in which students work together in small groups to achieve specific learning goals. In this method, students can support one another, share ideas, and learn from each other, ultimately boosting their confidence. Additionally, a positive collaborative environment reduces individual pressure and creates a more comfortable learning atmosphere. Previous research has shown that collaborative learning positively impacts speaking skills development and reduces speech anxiety. Six research studies published between 2022 and 2025 have demonstrated that Collaborative Learning emphasizes social interaction and teamwork in a learning environment. Through this approach, students are encouraged to participate actively, share ideas, and collaborate in problem-solving, ultimately improving their understanding and critical thinking skills [1]-[6].

However, research on the implementation of Collaborative Learning Theory in the context of undergraduate students in Baubau City remains scarce. Therefore, this study aims to explore the effectiveness of Collaborative Learning Theory in addressing speech anxiety among undergraduate students in Baubau City. This research is expected to contribute to the development of more effective learning strategies in higher education, particularly in enhancing students' speaking skills. Speech anxiety is often caused by various factors, such as fear of negative evaluation, lack of self-confidence, or past negative experiences with public speaking. This phenomenon is not only experienced by students with low confidence but also by those with strong academic potential who are still limited by anxiety in speaking. Thus, efforts are needed to help students overcome speech anxiety so they can communicate more effectively and optimally in both academic and professional settings.

One potential solution is implementing Collaborative Learning Theory. This study aims to explore the application of Collaborative Learning Theory in reducing speech anxiety among undergraduate students at several universities in Baubau City. The findings are expected to provide insights into the effectiveness of Collaborative Learning Theory in alleviating speech anxiety and offer recommendations for developing more supportive learning methods that enhance students' speaking skills.

Thus, conducting this study is crucial, considering the importance of speaking skills in supporting students' academic and professional success. Additionally, this research aims to contribute to the development of teaching methodologies that can improve students' confidence in public speaking.

2. LITERATURE REVIEW

2.1 Collaborative Learning Theory

According to Deutch [7], collaborative learning is a learning approach that utilizes small student groups working together to maximize their learning outcomes. More specifically, [8] defines collaborative learning as a method that places students from diverse backgrounds and abilities in small groups to achieve a shared academic goal. Each student in a group is responsible for their fellow members. In collaborative learning, students share roles, tasks, and responsibilities to achieve collective success.

Collaborative learning is a method in which students work together to achieve common goals, share knowledge, and complete tasks as a team. This theory emphasizes that interactions among group members occur not only on a cognitive level but also socially and emotionally, with the goal of enhancing understanding and speaking skills through discussions and joint presentations. Recent studies (2023–2024) have shown that collaborative learning has a highly positive impact on increasing students' confidence in speaking. With clear role distribution and close social interaction, students are more likely to feel safe speaking without fear of negative judgment, as they feel supported by their group members [9].

Collaborative learning refers to a technique where tasks or problems are solved collectively, leading to faster and better results with minimal effort. According to [10], in collaborative learning, group members can learn from one another, and even teachers can learn from their students. If teachers assign different topics to student groups for study, they, too, can learn a great deal from them. Students will feel a sense of pride if, at times, teachers honestly admit, "Oh, I didn't know about that," in response to students' findings. According to [11], collaborative learning is a learning method that emphasizes cooperation as the key to a group's success in achieving shared goals. Working together, building together, learning together, progressing together, and succeeding together are core ideas in collaborative learning. This concept is gaining prominence as more people recognize that success requires effective collaboration among various parties. Internationally, countries collaborate to drive progress. Educational institutions also establish partnerships with industries to ensure graduates are better prepared for the job market. In society, cooperation is essential for creating a more harmonious and comfortable communal life. Clearly, teamwork and collaboration are necessities in all aspects of life.

The definition of collaborative learning is often equated with cooperative learning, though some scholars differentiate between the two. For instance, [12] defines cooperative learning as a set of processes designed by teachers to help students interact with one another to achieve specific goals. This approach positions the teacher

as a facilitator who directs and controls learning rather than allowing students to collaborate independently. However, in this discussion, the two terms will not be distinguished. Collaborative learning fosters various positive attitudes in students, such as respect for diversity and understanding of individual differences. In collaborative learning, students work with peers who have different characteristics and perspectives. Additionally, small-group discussions provide opportunities for every student to express their ideas, a practice that is often lacking in traditional classroom settings. Collaborative learning also enhances students' interpersonal communication skills, which are crucial in any social environment.

2.2 Characteristics of Collaborative Learning

According to [13], collaborative learning has several key characteristics: a) Positive Interdependence, Positive interdependence among students in a group is a prerequisite for effective cooperation. This occurs when each group member realizes that success is not possible without the success of others. To achieve this, the group's objectives must be clearly communicated to all members, ensuring that they understand they will "sink or swim" together. [14] outlines several indicators of positive interdependence within a group: (1) Each member strives to achieve collective success, (2) Each member contributes uniquely and plays a distinct role that supports the group's objectives. These roles may include: (a) reading and interpreting a material or problem (b) encouraging and motivating all members to participate in discussions, and (c) summarizing the group's findings or agreements (discussion outcomes); b) Interaction, Interaction among group members is crucial because meaningful cognitive activities and dynamic interpersonal skills only emerge through active engagement. These cognitive and interpersonal skills can be developed through activities such as presenting discussion results, sharing knowledge with other groups, and checking comprehension. Interaction fosters an academic support system, where each member commits to helping others within the group; c) Individual and Group Accountability, In collaborative learning, both group and individual success are emphasized. The approach ensures that students become strong as individuals while also contributing to their group's success. Each group is responsible for achieving its goals, and each member is accountable for their contribution. Individual accountability is established by assessing each student's performance and providing feedback to both the individual and the group. This process helps identify members who need additional support, reinforcement, or guidance; d) Development of Interpersonal Skills, Collaborative learning differs from individual learning or competitive group learning. Besides academic skills, it also aims to cultivate social skills. However, these skills do not develop automatically; they require continuous practice. Collaborative learning fosters essential interpersonal abilities, including leadership, decision-making, trust-building, communication, conflict management. These skills are crucial for students in any social or professional setting; e) Formation of Heterogeneous Groups, Group formation should be designed to encourage discussion and effective collaboration. Several principles should be considered in collaborative group formation, including the need to accommodate student diversity. This can be achieved by combining quiet students with those who are more communicative, students with low self-confidence with optimistic ones, and highly motivated students with those who are less confident. Group formation should also take into account work habits, ethnicity, and gender. There is no fixed rule regarding the ideal group size. Groups that are too large may limit students' opportunities for active participation, while groups that are too small may lack dynamic interactions.

In general, an optimal group size consists of four to five students. The diverse experiences and backgrounds of students serve as valuable assets in enriching the learning process. In a collaborative classroom, students can learn from one another. It is essential to ensure that each student contributes to achieving the group's learning objectives.

a. Knowledge Sharing Between Teachers and Students

Traditional learning assumes that knowledge flows solely from teachers to students. However, in collaborative learning, teachers value and build upon students' existing knowledge, personal experiences, strategies, and cultural backgrounds. When students see that their experiences and problem-solving strategies are acknowledged and utilized, they become more motivated to engage in learning. This approach helps students connect their personal knowledge with academic knowledge, empowering them in the learning process.

b. Shared Authority Between Teachers and Students

In traditional learning, teachers predominantly set learning objectives, design assignments, and evaluate student performance. In contrast, collaborative learning involves shared authority, where teachers actively engage students in setting learning goals, designing tasks, and assessing progress.

c. Teacher as a Mediator

In collaborative learning, the teacher acts as a mediator. In this role, the teacher helps students connect new knowledge with their prior knowledge, guides them in understanding what needs to be done when they encounter challenges, and supports them in learning how to learn.

2.3 Prinsip-prinsip dan Penerapan Pembelajaran Kolaborasi

Collaborative learning emphasizes fundamental working principles. The key principles that need to be considered in collaborative learning include:

- a. Each member works together to achieve common goals and mutual interdependence.
- b. Individuals are responsible for their own learning and behavior.
- c. Cooperative skills are taught, practiced, and feedback is provided on how these skills should be applied.
- d. The class or group is encouraged to engage in cohesive group work activities.

According to [15], as well as [16] and [17], the implementation of collaborative learning requires creating a constructivist classroom environment, which includes:

- a. Students are not viewed as passive learners but as active participants who bring their own conceptions into the learning situation.
- b. Learning prioritizes an active process in which students construct meaning, often through interpersonal negotiation.
- c. Knowledge is not something external ("out there") but is personally and socially constructed.
- d. Teachers also bring their own conceptions into the learning situation not only in terms of their knowledge but also their views on teaching and learning, which influence how they interact with students in the classroom.
- e. Teaching is not merely about transmitting knowledge but involves organizing classroom situations and designing tasks that help students discover meaning.
- f. The curriculum is not something to be memorized but consists of learning tasks, materials, resources, and discourse from which students construct their own knowledge.

Thus, collaborative learning creates a conducive social environment that fosters interaction, integrating students' willingness and ability to learn. The learning environment is structured into small groups of four or five students per class, ensuring that the group members are as diverse as possible. Ideally, each group consists of both male and female students, active and less active students, as well as high-achieving and lower-achieving students. This composition allows for peer tutoring roles within each group, facilitating a dynamic and supportive learning experience.

2.4 Speaking Skills

Speaking skills refer to the ability to express ideas, information, or emotions clearly, effectively, and accurately through oral communication. These skills encompass various aspects, such as vocabulary mastery, voice intonation, body language, and the ability to communicate directly with an audience. Speaking is not only about verbal ability but also about how a message is conveyed, understood, and received by the listener. Speaking is a key component of delivering messages and conveying meaning orally. The speaker encodes the message using linguistic codes, which are then received and decoded by the listener, who interprets the message. This process involves continuous feedback, where the roles of speaker and listener interchange dynamically.

According to [18], speaking is the skill of delivering messages through spoken language to others. Speaking is synonymous with oral language use, which can be influenced by various factors. The factors that directly impact speaking include: (1) pronunciation, (2) intonation, (3) word choice, (4) Word and sentence structure, (5) speech organization, (6) content of the speech, (7) methods of starting and ending a speech, (8) appearance (gestures) and self-control. Speaking is an effective process that allows individuals to convey various types of information, including facts, events, ideas, opinions, and responses. It enables people to express their needs, desires, and emotions. The ability to speak skillfully is essential in various communication contexts, involving both speakers and listeners in an active and creative interaction. Additionally, speaking style is closely linked to an individual's personality and character [19].

According to [20], the teaching of speaking should be based on the fundamental concept of speaking as a means of communication, along with several other essential principles. The basic concept of speaking as a communication tool includes four key aspects: first, speaking and listening are reciprocal activities. Speaking and listening are two distinct yet inseparable activities, much like the two sides of a coin. One side represents speaking, while the other represents listening. Second, speaking is a tool for individuals to interact with their surroundings. In relation to the functions of language, speaking serves as a means to acquire knowledge, adapt to, learn about, and control one's environment. The heuristic function of language is often conveyed through questions that require answers. Third, speaking as a creative expression; through creative speaking, individuals do more than just express ideas they manifest their personality. Speaking is not merely about delivering words

but also about expressing oneself naturally, physically, joyfully, and spontaneously. The development of perception and sensitivity toward communication skills encourages individuals to reach their highest level of creativity and intellectual expression. Fourth, speaking as a behavior; speaking is an expression of the speaker's identity. Through speech, individuals reveal aspects of their personality, thoughts, and emotions.

Thus, speaking is more than just an oral activity; it is a fundamental means of communication that reflects one's character, cognitive abilities, and social interactions.

2.5 Speech Anxiety

Here are several theories and perspectives related to speech anxiety from the fields of psychology, education, and communication. Speech anxiety is a complex phenomenon influenced by various psychological and social factors. Recent theories provide new insights or refine classical theories on speech anxiety.

a. Social Anxiety Theory

Social Anxiety Theory explains that speech anxiety is often a form of broader social anxiety, characterized by excessive fear or worry about negative evaluation from others in social situations. In public speaking, individuals may feel anxious about how the audience perceives their appearance and abilities. Research in 2023 highlights the connection between social anxiety and factors such as introverted personality traits, past negative experiences, and deficiencies in social skills. It suggests that socially anxious individuals tend to focus on potential failure or negative evaluation, exacerbating their anxiety [21].

b. Cognitive Theory of Speech Anxiety

Cognitive Theory of Speech Anxiety states that speech anxiety arises from individuals' misinterpretations of public speaking situations. Irrational thoughts or cognitive distortions such as "everyone will judge me negatively" or "I will definitely fail" can intensify anxiety. This theory emphasizes reducing speech anxiety by identifying and altering negative thought patterns. Recent studies stress the importance of cognitive-behavioral therapy (CBT) in helping individuals recognize and restructure irrational thoughts underlying their speech anxiety [22].

c. Information Processing Theory

Information Processing Theory focuses on how individuals process information while speaking. Speech anxiety can occur when individuals feel incapable of organizing information or responding appropriately in public speaking situations. Research in 2023 shows that excessive cognitive stress in public speaking can hinder an individual's ability to focus on their content or audience. Consequently, stress management and mindfulness techniques can help reduce anxiety by enhancing information processing control during speech [23].

d. Social Conditioning Theory

Social Conditioning Theory argues that speech anxiety results from learned experiences through social conditioning. For instance, individuals who have faced rejection or harsh criticism while speaking in public may associate public speaking with fear and anxiety. A 2023 study reveals that social conditioning significantly impacts self-confidence in public speaking, often without individuals realizing how past negative experiences shape their fears [24].

e. Social Engagement Theory

Social Engagement Theory suggests that speech anxiety can be alleviated by increasing engagement and social connection between the speaker and the audience. A 2023 study proposes that when individuals feel more connected with their audience through direct interaction or two-way communication they tend to feel more comfortable and less anxious. Speakers who actively engage in discussions with their audience are more likely to gain confidence in public speaking [25].

f. Social Practice Theory

Social Practice Theory views speech anxiety as a social practice issue, developing through social interactions and speaking experiences in different contexts. Recent research (2023) highlights that social reinforcement techniques—such as positive feedback or successful speaking experiences—can boost students' confidence and reduce speech anxiety. Repeated speaking practice within groups is also believed to decrease tension and enhance public speaking comfort [26].

g. Uncertainty Management Theory

Uncertainty Management Theory proposes that speech anxiety often stems from uncertainty about audience reactions or the overall speaking situation. Individuals who are unsure about how their message will be received tend to experience greater anxiety. Recent studies indicate that providing clearer information about

audience expectations or speaking conditions can help reduce uncertainty and, consequently, lower anxiety levels. This approach emphasizes that gaining control over uncertainty can significantly minimize speech anxiety [27].

2.6 Factors Contributing to Speech Anxiety

Explains anxiety as a manifestation of various mixed emotional processes that occur when a person is experiencing emotional pressure (frustration) and inner conflict [27]. There are several types of anxiety, namely anxiety caused by the awareness of impending danger, anxiety in the form of illness that can affect the entire individual, and anxiety due to feelings of guilt, which may later accompany mental disorders.

Speech anxiety is defined as the skill of conveying messages through spoken language that has been influenced by feelings of anxiety, such as worry, fear, and nervousness [28]. The manifestations of speech anxiety can be observed in the symptoms experienced by those who suffer from it, including: (1) rapid heartbeat, (2) sweaty palms or back, (3) shortness of breath, (4) dry mouth and difficulty swallowing, (5) muscle tension in the chest, arms, neck, and legs, (6) trembling hands or legs, (7) shaky and hoarse voice, (8) speaking rapidly and unclearly, (9) inability to hear or concentrate, and (10) forgetfulness or memory loss [29].

Language anxiety is the anxiety that arises when a person is learning English. According to [30], anxiety is a major factor that can hinder the learning process. Anxiety itself is a subjective feeling of tension, apprehension, nervousness, and worry, associated with the activation of the autonomic nervous system due to vague fears indirectly related to an object. Defines anxiety as an unpleasant emotion marked by varying levels of worry in different individuals [31]. According to [32], anxiety is an unpleasant emotional situation followed by physical sensations that warn a person of a looming danger.

Identifies the causes of speech anxiety in public speaking as follows: 1) Not knowing what will be said or presented in public, 2) Fear of hearing audience comments, 3) Fear of being laughed at, and 4) Fear of making mistakes [33]. Explains the causes of speech anxiety in public speaking as: 1) Not knowing what to do, 2) Not knowing how to begin the speech, 3) Inability to anticipate audience expectations, and 4) Lack of preparation to speak [34]. He further outlines the causes of speech anxiety as: 1) Not knowing what will be said or presented in public, 2) Fear of hearing audience comments, 3) Fear of being laughed at, and 4) Fear of making mistakes

Speech anxiety is the feeling of fear, nervousness, or anxiety that arises when a person must speak in front of others, especially in situations involving a larger audience. This anxiety often occurs in public speaking contexts, such as during presentations, speeches, interviews, or meetings. The symptoms that arise can vary, ranging from mild anxiety to more intense physical tension, such as rapid heartbeat, excessive sweating, trembling hands, dry mouth, and even stammering speech.

2.7 Ways to overcome anxiety when speaking

There are several ways to overcome anxiety when speaking, including: (1) Breathing and relaxation techniques: When feeling nervous, try taking deep and slow breaths. You can also try relaxation techniques such as meditation or visualization. (2) Practice: Continuous practice can help reduce speaking anxiety. You can practice with classmates. (3) Preparation: Get to know your audience and the topic you will be discussing. Prepare your presentation materials well and ensure you understand what you will be conveying. (4) Request accommodations: Ask for a podium, prepare a bottle of water, or bring audiovisual equipment. (5) Speak in your own style: Do not mimic the speaking style of others. (6) Face the situation: Confronting the anxious situation can help you learn how to handle anxiety. (7) Consult a psychologist or psychiatrist: If the anxiety persists and disrupts your life, you can consult a psychologist or psychiatrist. Public speaking anxiety is a feeling of discomfort and fear when speaking, giving a speech, or expressing opinions in front of others.

Public speaking anxiety is a common issue faced by many individuals, especially students, which can hinder their ability to communicate confidently. Various recent approaches and theories offer psychological, social, and practical solutions for overcoming speech anxiety.

a. Cognitive-Behavioral Therapy (CBT)

CBT is one of the most widely used psychological approaches for overcoming speech anxiety. This approach focuses on identifying and changing negative thought patterns (cognitive distortions) that cause anxiety. In the context of public speaking, anxious individuals often have irrational thoughts like "I will fail" or "Everyone will judge me badly." Through CBT, individuals are taught to recognize and challenge these thoughts and replace them with more realistic and positive ones. Studies in 2023-2024 have shown that CBT is effective in reducing speech anxiety through desensitization or gradual exposure to speaking situations. This therapy also teaches techniques such as relaxation and breathing to help calm the body and mind before speaking [35], [36].

b. Mindfulness and Stress Management

Mindfulness is an increasingly popular approach to addressing speech anxiety. In this context, mindfulness teaches individuals to focus on the present moment and accept anxiety without judgment. By becoming more aware of the feelings and thoughts that arise, individuals can reduce the impact of anxiety and avoid getting trapped in a cycle of excessive fear. Recent research (2023-2024) indicates that mindfulness exercises can help individuals stay calm and less affected by anxious feelings when speaking in public. Techniques such as meditation, focusing on breath, and progressive muscle relaxation can help reduce the physical tension that often accompanies speech anxiety [37], [38].

c. Systematic Desensitization

Systematic desensitization is a technique developed by Joseph Wolpe that involves gradual exposure to anxiety-inducing situations. In the context of speech anxiety, desensitization can be done by imagining speaking in front of an audience, starting with less frightening situations (such as speaking in front of a mirror) and moving to more stressful ones (like speaking in front of a large crowd). This gradual exposure helps reduce fear and anxiety over time. In 2023-2024, studies have shown that systematic desensitization, particularly when done with virtual reality (VR), has become increasingly effective in addressing speech anxiety. With VR, individuals can “practice” speaking in front of a simulated audience in a more realistic and safe environment [39], [40].

d. Social Anxiety Management Theory

This theory focuses on managing anxiety related to the fear of social judgment from an audience. One of the newest approaches in this theory is Exposure Therapy, which involves direct exposure to public speaking situations to reduce anxiety through firsthand experience. This experience helps individuals alter their perceptions of what was once a frightening situation. Recent studies in 2023-2024 show that social exposure approaches conducted in supportive environments, such as study groups or public speaking training, can be effective in reducing speech anxiety. Additionally, this theory emphasizes the importance of positive and constructive feedback from the audience, which can boost confidence [41], [42].

e. Self-Efficacy and Confidence Theory

The self-efficacy theory, proposed by Albert Bandura, focuses on an individual’s belief in their ability to perform specific tasks, such as public speaking. Enhancing self-confidence and belief in one’s speaking abilities can significantly reduce anxiety. According to this theory, speech anxiety can be overcome by building self-efficacy through consistent practice and positive experiences. Recent research shows that self-efficacy in public speaking can be improved through successful experiences in front of small audiences, positive feedback, and repeated practice. Furthermore, Bandura suggests that role models (e.g., speaking in front of a supportive small audience) can help improve confidence [43], [44].

f. Social Learning Theory

Social learning theory focuses on how individuals observe and imitate the behaviors of others. In the context of speech anxiety, a person can reduce anxiety by observing others who speak confidently and adapting their techniques. This often involves modeling or observing more experienced speakers who provide guidance and strategies for anxious individuals. Research from 2023-2024 shows that the influence of mentors or experienced speakers in study groups can have a positive impact on reducing speech anxiety, as individuals learn effective ways to overcome fear and speak confidently [45], [46].

g. Positive Reinforcement Theory

Positive reinforcement theory states that behaviors reinforced with rewards or praise are more likely to be repeated. In the context of speech anxiety, individuals who receive positive feedback for their efforts in public speaking are likely to feel more confident and motivated to continue practicing. Praise or recognition for small achievements in speaking can reduce fear and increase motivation to speak again in the future. Recent studies show that positive reinforcement from the audience or facilitator can help anxious individuals feel more valued and recognized, reducing their anxiety [47], [48]. The various theories and approaches developed in 2023-2024 provide effective ways to address speech anxiety. Approaches such as cognitive-behavioral therapy (CBT), mindfulness, systematic desensitization, self-efficacy, and social learning offer deeper insights into reducing speech anxiety by enhancing self-confidence and an individual’s ability to handle public speaking situations.

3. RESEARCH METHOD

The research method used is a descriptive qualitative method. This qualitative descriptive research method is an approach or procedure that generates descriptive data in the form of written or spoken words from students and behaviors observed during group learning sessions. Therefore, the purpose of this study is to

describe the facts obtained regarding the implementation of the Group Learning Method to overcome Speech Anxiety in undergraduate students in Baubau City. The population for this research consists of private higher education institutions in Baubau City, which include Muhammadiyah University of Buton (UM Buton), Dayanu Ikhsanuddin University (Unidayan), and Buton Raya Health and Technology Institute. The sampling technique used in this research is Random Sampling. The researcher collected data from several students from each study program in each university, with the aim of representing higher education institutions in Baubau City. The conditions of the population and research sample are clearly depicted in the table below.

Table 1. Population of Higher Education Institutions and Study Programs

Name of Private College	Name of Study Program	Number of Classes	Number of Samples
Muhammadiyah University of Buton	Early childhood education programs	2	
	Indonesian Language and Literature Education	2	4
	Accountancy	3	4
Dayanu Ikhsanuddin University	Mining	2	4
	Fishery	1	4
Buton Raya Health and Technology Institute	Health Administration	2	4
	Nutritional Science	1	
	Midwifery	1	
	Information Technology	1	4
Number of Classes		15	24

Creswell (2024) explains that research informants are individuals or groups who provide relevant and in-depth information related to the research topic. These informants are selected based on their deep understanding of the phenomenon being studied. Creswell emphasizes that informants are often chosen through purposive sampling techniques to ensure that they possess knowledge or experiences that can provide deeper. a) Students from the Accounting Study Program (Classes A, B, D), Early Childhood Education (PAUD) Study Program, Indonesian Language and Literature Education (PBSI) Study Program (5 classes/3 programs), Muhammadiyah University of Buton, Baubau City; b) Students from the Mining Study Program (Classes A, B), Fisheries Study Program (3 classes/2 programs), Dayanu Ikhsanuddin University, Baubau City; c) Students from the Midwifery Study Program, Nutrition Study Program (Classes A, B), Health Information Technology Study Program (4 classes/3 programs), Buton Raya Health and Technology Institute, Baubau City. Sampling was conducted using purposive sampling techniques to represent the three campuses. Therefore, each campus is represented by 2 classes, totaling 6 classes. Furthermore, each class is represented by 2 males and 2 females, resulting in a total sample of 24 students.

Explains that a research instrument is a tool used to measure natural or social phenomena being observed [49]. This instrument can take the form of a questionnaire, interview guide, test, or observation sheet, designed according to the research needs. States that a research instrument is the tool chosen and used by the researcher to collect data so that the activity becomes systematic and easier to carry out [50]. The selection of the instrument must align with the type of data and the objectives of the research.

In this study, the researcher used an instrument in the form of an interview guide containing questions about the 7 (seven) indicators of speaking anxiety causes, according to [52];[53] which are: (1) Not knowing what will be said or delivered in public, (2) Not knowing how to start the conversation, (3) Unable to predict what the audience expects, (4) Fear of hearing comments from the audience, (5) Fear of being laughed at, (6) Not being prepared to speak, (7) Fear of making mistakes. This interview guide was completed by the researcher as the key instrument based on the data and information provided or obtained from the 24 student samples as informants.

According to [54], data analysis techniques in qualitative research are carried out through several systematic stages. Below are the stages of data analysis for the study of Collaborative Learning Theory to address speaking anxiety in undergraduate students in Baubau: The first stage is data collection, which is carried out through an interview guide. This means that the researcher uses the interview guide to obtain data on speaking anxiety from the 24 student samples. In other words, this data serves as an initial picture of the role of Collaborative Learning Theory in reducing speaking anxiety in public. Once the data is collected, the next step is to organize and categorize the data to make the collected information more structured. Huberman (2024) explains that at this stage, the researcher must filter out irrelevant data and discard information that is not directly related to the research objective, which is the effect of Collaborative Learning Theory on reducing public speaking anxiety. The researcher must discard data that does not align with the research goal, known as Data Reduction. In this stage, the researcher organizes the collected data based on the seven categories of speaking anxiety causes, according to Dinka's (2010:8) and Olii's (2010) theories.

The next stage is coding, where labels or codes are assigned to each indicator of speaking anxiety. This means the researcher assigns a code to the indicators that were achieved and not achieved by each student sample. The purpose of coding is to facilitate the description of the results of data distribution found during the analysis. After coding, the next step is to organize the data in a display format. Huberman (2024) suggests that data display can be in the form of a table. The table contains quantitative data obtained from the interview guide, which shows the relationship between the indicators of speaking anxiety and the *Collaborative Learning* method. At this stage, the researcher will draw conclusions from the organized and displayed data. The researcher will summarize the findings on speaking anxiety among students during discussions using the *Collaborative Learning* method in the classroom context. These conclusions will reflect individual competencies and class competencies. The final stage is to write a research report summarizing the findings of the data analysis. The researcher will report the data on the effect of the *Collaborative Learning* method on reducing speaking anxiety in students, as well as provide explanations related to the practical implications of the results, such as recommendations to improve the effectiveness of *Collaborative Learning* in an academic context.

4. RESULTS AND DISCUSSION

Based on the objectives of this study, it was established from the outset that the researcher would apply Collaborative Learning Theory to address public speaking anxiety, specifically in front of classmates in a classroom setting. This aligns with the teaching method used by the lecturer, who is also the researcher, namely the group discussion method in each class. In other words, classroom learning that uses the discussion method is framed within the context of Collaborative Learning Theory. Internal group collaboration, such as the preparation of each member, is crucial to successfully presenting their paper in front of the class. Assessment naturally focuses on the individual competencies of the students and the class competencies as a whole.

Collaborative learning is a method where students work together to achieve shared goals, exchange knowledge, and complete tasks as a team. In this theory, interaction among group members occurs not only at the cognitive level but also socially and emotionally, with the aim of improving understanding and speaking skills through joint discussions and presentations. Therefore, the philosophy of collaborative learning through the discussion method in lectures will enable, or even help reduce, public speaking anxiety among students.

To measure the quality of speaking anxiety in the class or individually for each of the 24 students, the researcher uses seven indicators of speaking anxiety, according to Dinka (2010:8) and Olii (2010), which are: (1) Not knowing what will be said or delivered in public, (2) Not knowing how to start the conversation, (3) Not being able to anticipate what the listeners expect, (4) Fear of hearing audience comments, (5) Fear of being laughed at, (6) Not being prepared to speak, (7) Fear of making mistakes. In reality, the challenge for students is the demand to be able to speak (present) in front of their classmates. Exploring the various possible indicators of speaking anxiety in this study uses the theories of Dinka (2010:8) and Olii (2010:31). As a result, the various indicators of speaking anxiety listed above can be addressed or reduced, as shown in the table below.

Table 2. Exploration of Speaking Anxiety Among Undergraduate Students in Baubau

Number	Causes of Anxiety							Score	Information
	1	2	3	4	5	6	7		
1	0	1	0	1	1	1	1	5	ADMKes
2	0	0	0	0	1	0	1	2	ADMKes
3	1	1	0	1	1	1	0	5	ADMKes
4	0	0	1	1	1	0	1	4	ADMKes
5	1	1	0	1	0	1	1	5	TIKes
6	1	1	0	0	1	1	0	4	TIKes
7	0	1	0	1	1	0	1	4	TIKes
8	0	0	1	1	1	1	1	5	TIKes
9	1	0	0	1	1	1	0	4	AKUMB
10	1	1	0	0	1	1	0	4	AKUMB
11	0	1	0	1	0	0	1	3	AKUMB
12	0	1	1	1	1	1	0	5	AKUMB
13	0	0	0	1	1	1	1	4	PBSIUMB
14	1	1	0	1	1	0	0	4	PBSIUMB
15	1	1	1	1	1	1	1	7	PBSIUMB
16	1	1	0	1	1	0	1	5	PBSIUMB
17	0	0	0	1	1	1	0	3	TAMBANGUD
18	0	1	1	1	0	1	1	5	TAMBANGUD
19	1	1	0	0	0	0	1	3	TAMBANGUD
20	0	0	0	1	1	1	0	3	TAMBANGUD

Number	Causes of Anxiety							Score	Information
	1	2	3	4	5	6	7		
21	0	1	0	1	1	1	1	5	IADNMUD
22	1	0	0	1	1	1	1	5	IADNMUD
23	0	1	1	1	1	1	1	6	IADNMUD
24	0	1	0	0	1	1	0	3	IADNMUD
Number of students safe from anxiety per aspect	10	16	6	19	20	17	15	103	% Anxiety safe class
Percentage	42	67	25	79	83	71	63	4.3	61.3

The data from the research above presents the findings of a study using the Group Work Method with Collaborative Learning Theory. This method and theory were applied to address speech anxiety among university students in Baubau, as represented by the sample in this study. The choice of method and theory was appropriate because the instructor, who also acted as the researcher, employed the group discussion method. In each class, students were divided into several groups, with each group taking turns presenting. Within each presenting group, roles such as moderator, speaker, and group member were assigned. All participants were encouraged to speak without experiencing speech anxiety, which facilitated discussions between presenters and audience members.

The indicators for assessing speech anxiety in the student sample were based on Dinka's (2010:8) and Olii's (2010:31) theory, which includes seven types of speech anxiety triggers: (1) Not knowing what will be said in public, (2) Not knowing how to start the conversation, (3) Unable to predict what the audience expects, (4) Fear of hearing audience comments, (5) Fear of being laughed at, (6) Not prepared to speak, (7) Fear of making mistakes. These seven indicators were used to measure speech anxiety levels among the 24 student participants in this study.

The condition of speech anxiety levels among the student sample, as shown in Table 2, can be explained as follows: For the first indicator, "Not knowing what will be said in public," 14 students experienced speech anxiety, while 10 students did not. This means that the level of speech anxiety for this indicator was 42% of the total 24 students in the sample. For the second indicator, "Not knowing how to start the conversation," 8 students experienced speech anxiety, and 16 students did not. Therefore, the level of speech anxiety for this indicator reached 67%. Regarding the third indicator, "Unable to predict what the audience expects," 18 students experienced speech anxiety, while 6 students did not, resulting in a 25% anxiety rate for this indicator. In the case of the fourth indicator, "Fear of hearing audience comments," 5 students experienced anxiety, while 19 did not, bringing the level to 79%. Similarly, for the fifth indicator, "Fear of being laughed at," 4 students experienced anxiety, and 20 did not, indicating an anxiety rate of 83%. For the sixth indicator, "Fear of being laughed at," 7 students experienced anxiety, while 17 did not, giving a 71% anxiety level. Finally, for the seventh indicator, "Fear of making mistakes," 9 students experienced anxiety, and 15 did not, leading to a 63% anxiety rate for this indicator.

5. CONCLUSION

Based on the data of speech anxiety indicator achievements, the highest cause of speech anxiety for students in Baubau is the third indicator, "Unable to predict what the audience expects." This was experienced by 18 students in the sample, with 6 students not experiencing speech anxiety in public. This means that the level of speech anxiety for the third indicator reached 25% of the total 24 students in the sample. In other words, nearly every person who experiences speech anxiety in public does so due to the third indicator. Meanwhile, the lowest cause of speech anxiety among the students in Baubau is the fifth indicator, "Fear of being laughed at." This was experienced by 4 students in the sample, with 20 students not experiencing speech anxiety in public. Therefore, the level of speech anxiety for the fifth indicator reached 83% of the 24 students in the sample. In other words, only a few students experienced public speaking anxiety caused by the fifth indicator. Among the 24 students in the sample, the average achievement score was 4.3 out of 7, which means 61.3% of the total 24 students, or about 15 students, were considered to not experience speech anxiety in public.

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