

Model Numbered Heads Together (NHT) To Improve Student Confidence: Literature Studies

Fahrya Puspa Widya Kirana¹, Candra Utama²

¹University of Malang

²Primary School Teacher Education, University Negeri Malang, Malang, Indonesia

*Corresponding author, email: fahrya.puspa.2301516@studenst.um.ac.id, candra.utama.pasca@um.ac.id

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Abstract

Confidence is one of the psychological factors that plays an important role in supporting the effectiveness of the learning process and the achievement of students' learning outcomes. Low confidence can hinder students' active participation and courage in expressing opinions in class. This study aims to examine the application of the Numbered Heads Together (NHT) learning model as a strategy to increase students' confidence. The method used is a literature study with a qualitative descriptive approach, which analyzes a number of scientific articles on the implementation of the NHT model in the context of learning at various educational levels. The results of the study showed that the NHT model was able to increase student involvement in group discussions, train courage in expressing opinions, and foster a sense of responsibility for the results of joint work. In addition, this model also creates a conducive, interactive, and collaborative learning atmosphere, which in turn has a positive impact on students' increased confidence. NHT also facilitates the development of social skills and provides room for teachers to monitor the affective development of students. Based on these findings, the Numbered Heads Together model is recommended as an effective and relevant learning strategy to be implemented in efforts to strengthen students' confidence.

1. Introduction

Student confidence plays a critical role in supporting successful learning outcomes. It affects how learners engage in the classroom, express their ideas, and persist in overcoming academic challenges. Students with a strong sense of self-confidence are more likely to participate actively, take risks in problem-solving, and collaborate with peers effectively. Conversely, students with low confidence may withdraw, fear making mistakes, and struggle to achieve their full potential (Putri & Nurjanah, 2022). As such, building confidence is not only important for academic achievement but also for the development of key social and emotional skills.

Among the many approaches to fostering student confidence, cooperative learning models have shown promise, particularly those that promote shared responsibility and inclusive participation. One such model is Numbered Heads Together (NHT) a cooperative learning strategy where students work in groups, each member is assigned a number, and the teacher randomly selects one number to respond on behalf of the group. This structure ensures that all students are engaged in the group discussion and are equally accountable for the group's understanding. Previous studies suggest that NHT enhances not only cognitive outcomes but also social interaction, responsibility, and student confidence (Riska, 2024; Jati, 2018).

However, while research has highlighted the general benefits of the NHT model, there is a notable gap in the existing literature regarding its specific impact on students' self-confidence, particularly across different levels of education. Most existing studies focus primarily on academic performance and group dynamics, with relatively few addressing how NHT influences affective aspects such as confidence in depth. Moreover, research tends to center on short-term outcomes without longitudinal analysis, leaving the lasting effects of this model underexplored. This gap underscores the importance of further investigation into how NHT can support confidence-building as part of the holistic development of students.

To provide a stronger foundation for this inquiry, the current study also draws upon two key educational theories. Bandura's Self-Efficacy Theory (1997) emphasizes that an individual's belief in their own capabilities influences their motivation and performance. Applied to classroom learning, this theory suggests that students with higher self-efficacy are more likely to take initiative, persist through difficulty, and confidently engage in learning activities. Meanwhile, Vygotsky's Social

Development Theory highlights the critical role of social interaction in learning, where students develop cognitively and affectively through meaningful dialogue with peers and guidance from more knowledgeable others. These theoretical perspectives offer insight into how cooperative strategies like NHT can strengthen student confidence through structured social engagement and increased self-efficacy.

Therefore, this study aims to conduct a systematic literature review on the application of the Numbered Heads Together (NHT) model and its effects on students' confidence in classroom settings. By analyzing existing research through a qualitative descriptive lens, this paper seeks to illuminate how NHT supports affective development, bridge gaps in the current literature, and provide practical implications for educators looking to enhance student engagement and emotional growth.

Tabel 1. Study Literatur

Model	Fokus Aktivitas	Dampak pada Afeksi Siswa	Kelebihan	Kelemahan
NHT	Group discussion, individual responsibility	Increase self-confidence and participation	Evenly distributed participation, students are ready to answer	It took more time for a thorough discussion
TGT	Learn through the team between teams	Increase the motivation and enthusiasm of learning	Fun, competitive, building enthusiasm	Less focused on material deepening
TPS	Individual thinking → Discussion in pairs	Increase reflection and self-confidence	Encourage the courage to speak gradually	Do not train large group cooperation

2. Method

This part should contain sufficient detail that would enable all procedures to be repeated. It can be divided into subsections if several methods are described. Authors should be as concise as possible in experimental descriptions. The experimental section must contain all of the information necessary to guarantee reproducibility. Previously published methods should be indicated by a reference and only relevant modifications should be described. For statistical analysis, please state the appropriate test(s) in addition to a hypothesized p-value or significant level (for example 0.05).

This study employed a qualitative descriptive literature review to analyze the implementation of the Numbered Heads Together (NHT) learning model and its impact on students' self-confidence. This method was selected because it allows for a comprehensive synthesis of various relevant studies to gain a deeper understanding of trends, patterns, and gaps within the existing literature. The data for this study consisted of secondary sources, including journal articles and academic conference papers that discussed the application of the NHT model in classroom settings. Literature searches were conducted systematically through multiple academic databases and search engines, including Google Scholar, SINTA, Garuda, and Publish or Perish. An initial total of 38 articles were identified using keywords such as *“Numbered Heads Together”*, *“cooperative learning”*, *“student confidence”*, and *“affective aspects of learning”*.

Tabel 2. A Strategy for the Selection of Articles

No	Kategori Pembahasan	Mesin Pencari	Hasil Penelusuran	Keterangan
1	2015-2019 article search	Publish or Perish	38 article	Based on keywords related to nht and student affection
2	Relevant article titles	Google Scholar	18 article	Title Contains the topic of self-confidence and cooperative learning

No	Kategori Pembahasan	Mesin Pencari	Hasil Penelusuran	Keterangan
3	Presenting solutions or different approaches	Garuda & SINTA	12 article	Focus on the NHT approach and its impact on affective aspects
	Articles discussed in studies	—	6 article	Articles that meet all criteria and analyzed in depth

3. Results and Discussion

They should be combined. The study results should be clear and concise. Restrict the use of tables and figures to depict data that is essential to the message and interpretation of the study. The results should be presented in a logical sequence in the text, tables and illustrations. The part of result exposes the findings obtained from research data which is related to the hypotheses. The results should summarize (scientific) findings rather than providing data in great detail. The discussion should explore the significance of the results of the work. Explains the findings obtained from research data along with theory and similar research comparison. Make the discussion corresponding to the results, but do not reiterate the results. The following components should be covered in discussion: How do your results relate to the original question or objectives outlined in the Introduction section (what/how)? Do you provide interpretation scientifically for each of your results or findings presented (why)? Are your results consistent with what other investigators have reported (what else)? Or are there any differences?. Include in the discussion the implications of the findings and their limitations, how the findings fit into the context of other relevant work, and directions for future research.

Based on the analysis of selected literature, the Numbered Heads Together (NHT) learning model has been shown to significantly support the development of students' self-confidence during classroom learning. The reviewed studies highlight that NHT promotes active participation, encourages students to speak up, fosters collaborative learning, and creates a safe environment for sharing ideas. These benefits contribute to students becoming more confident in expressing their thoughts and engaging with peers and teachers during learning activities.

The implementation of NHT ensures that every student in a group is held accountable for understanding the material. Since one group member is randomly chosen to respond, all students are encouraged to stay engaged and be prepared. This structure builds a sense of responsibility and reduces passive behavior, as each student has an equal chance of representing the group. The model also fosters a more inclusive and interactive classroom atmosphere, where students feel comfortable expressing opinions without fear of being judged or making mistakes. Such an environment directly contributes to improved self-confidence, especially among students who are usually hesitant to participate.

In addition, studies found that students become more collaborative and socially engaged when NHT is used. For example, Jelita & Setyaningsih (2024) observed that NHT made it easier for teachers to monitor students' affective development, including indicators of self-confidence. Other studies (e.g., Riska, 2024; Putri & Nurjanah, 2022) reported that students showed increased courage in answering questions, greater independence, and more frequent interaction with peers, all of which suggest improvements in self-confidence.

Tabel 3. Results of the Production of Articles

No	Penulis & Tahun	Jenjang Pendidikan	Temuan Utama	Dampak terhadap Kepercayaan Diri
1	Riska (2024)	SMP	NHT meningkatkan keberanian berbicara dan diskusi kelompok	Siswa lebih aktif menyampaikan pendapat di depan kelas

No	Penulis & Tahun	Jenjang Pendidikan	Temuan Utama	Dampak terhadap Kepercayaan Diri
2	Putri & Nurjanah (2022)	SD	NHT mendorong kolaborasi dan partisipasi aktif	Meningkatkan rasa percaya diri dalam bertanya dan menjawab
3	Jati (2018)	SMP	NHT menciptakan suasana aman dan interaktif dalam belajar	Siswa lebih nyaman berekspresi dan tidak takut salah
4	Jelita & Setyaningsih (2024)	SD	Guru lebih mudah memantau perkembangan afeksi siswa dengan NHT	Siswa jadi lebih terbuka, percaya diri, dan mandiri
5	Maulida & Rahmadani (2024)	SMA	NHT mengembangkan tanggung jawab dan inisiatif dalam diskusi kelompok	Kepercayaan diri meningkat karena keterlibatan merata
6	Laksana et al. (2023)	SMK	NHT lebih efektif dibanding TGT dalam memunculkan interaksi antar siswa	Siswa lebih termotivasi untuk aktif berbicara dan berpendapat

From the articles that have been analyzed, it can be inferred that the NHT method is one effective way to help students become more confident. This model encourages students to be active in class, courageous to speak, responsible and cooperate well in groups. With confidence, students can develop their ability to learn more easily and become better prepared to face lessons at school. In addition to helping students be more confident, the Numbered Heads Together (NHT) model also makes students more confident in learning. When students study with the NHT model, they not only listen to teachers, but are also invited to think, discuss, and share answers with friends in the group. With this atmosphere, students feel more appreciated because their opinions are listened to by friends and teachers. This model also helps students train good teamwork in groups. When students discuss, they learn to listen, respect, take friends' opinions, and put the most appropriate answers together. This attitude makes students not only brave, but also more polite and trusting when expressing opinions in front of the group and in front of the class.

In addition, the NHT model also provides a fair opportunity for all students to be active, because anyone can be chosen to represent the group. This makes all students more motivated to learn and prepare well, so that their confidence continues to grow. With NHT, students learn to be sure of their own answers and not to be embarrassed when speaking in front of their friends.

However, despite these advantages, the literature review also revealed practical challenges in implementing the NHT model, particularly in diverse classroom settings. One commonly noted

issue is the time-consuming nature of group discussions, especially in large classes with limited instructional time. Teachers must allocate sufficient time for each group to discuss thoroughly, which may not always be feasible within standard class periods. Additionally, classroom management becomes more complex, as effective NHT implementation requires well-structured group dynamics, student discipline, and active facilitation. Furthermore, teacher training plays a critical role; educators unfamiliar with cooperative learning strategies may find it difficult to manage the process effectively. Therefore, schools must consider teacher readiness and training as key factors in ensuring the success of NHT in practice.

Teachers can find out which students have started to have confidence and which ones are still hesitant. Thus, although NHT has many advantages in terms of self-confidence formation, external factors such as teacher readiness, group dynamics, and more in-depth evaluation design should be considered. From here, teachers can provide more encouragement or guidance so that students are more courageous in expressing their opinions and not afraid to make mistakes. So, the Numbered Heads Together (NHT) learning model not only makes students braver in front of friends, but also makes the class atmosphere more exciting, fun, and full of enthusiasm. All students learn to be more confident, respectful, and responsible in every assignment.

In conclusion, while NHT has proven effective in promoting student confidence in the short term and offers many pedagogical benefits, its implementation must be approached thoughtfully, taking

into account potential constraints and the diverse needs of learners. Further studies that incorporate quantitative, comparative, and long-term analysis will provide a more robust understanding of NHT's role in shaping students' affective development.

3.1 Conclusion

Based on the results of studies from several articles, the Numbered Heads Together (NHT) learning model has been proven to help improve students' confidence in the learning process. This model teaches students to be active in discussing, to be brave in expressing opinions and to be responsible for the answers produced with the group.

NHT not only fosters cognitive development but also supports affective growth by giving all students equal opportunities to participate. The model helps reduce fear of making mistakes and promotes a culture of mutual respect and responsibility. As such, NHT is recommended as an effective cooperative learning strategy, particularly at the elementary and junior high school levels, to improve both academic performance and student confidence. Nevertheless, since most of the studies studied were short-term and qualitative, further studies with quantitative and longitudinal designs were suggested to measure the long-term impact of NHT on students' affective aspects more objectively. With this system, all students get the same opportunity to talk and answer questions in class. NHT helps students who are initially shy to be bolder and not afraid of being wrong. In addition, the learning atmosphere becomes more enjoyable and all students are more active in attending lessons.

To strengthen the findings of this study, future research should explore the application of NHT across different subject areas, such as mathematics, science, and language arts, to determine its adaptability and effectiveness in various content domains. In addition, studies should investigate how NHT performs in diverse educational contexts, including rural vs. urban schools, culturally diverse classrooms, or inclusive education settings. There is also a need for quantitative and longitudinal research to evaluate the sustained impact of NHT on student confidence over time, using validated measurement instruments and follow-up assessments.

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