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The Effect of Numbered Heads Together Strategy on Students' Self-Actualization in English Speaking Skills

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Abstract
The Effect of Numbered Heads Together Strategy on Students' Self-Actualization in English Speaking Skills. This study aimed to examine the significant effect of the Numbered Heads Together (NHT) cooperative learning strategy on seventh-grade students' self-actualization in English speaking skills at MTs Nahdlatul Mujahidin NW in the academic year 2025/2026. A quantitative approach with a true experimental design, specifically the Pre-test and Post-test Control Group Design, was employed. The population consisted of 62 seventh-grade students distributed across three classes, from which two classes were selected through cluster random sampling: Class VII A (20 students) as the experimental group taught using the NHT strategy, and Class VII C (20 students) as the control group taught using the conventional teacher-centered method. Data were collected using a Self-Actualization Oral Assessment instrument developed based on Maslow's indicators of self-confidence, spontaneity, creativity, and self-expression, and were analyzed descriptively and inferentially using SPSS. The One-Sample Kolmogorov-Smirnov test confirmed that the pre-test and post-test data of both groups were normally distributed ($p > 0.05$). The Independent Sample t-test showed a significant difference between the two groups, with a Sig. (2-tailed) value of 0.030 ($p < 0.05$), leading to the rejection of the null hypothesis. The experimental group obtained a higher post-test mean score (87.25) than the control group (83.75). These findings indicate that the NHT strategy exerts a significant positive effect on students' self-actualization in English speaking skills by providing a safe, low-anxiety cooperative environment that fosters self-confidence and authentic self-expression.

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1. INTRODUCTION

Speaking serves as a vital psychological and communicative vehicle through which individuals convey, describe, and actualize their inner ideas, emotions, and opinions orally. In language pedagogy, speaking competence should not merely be viewed as a mechanical linguistic skill, but rather as a reflection of a student's capacity to reach self-actualization, that is, the realization of their inherent talents, communicative capacities, and authentic potential within a low-anxiety environment (Maslow, 1970). According to Maslow (1970), self-actualization is the process of achieving the inherent potential within every individual, and it requires a learning environment that supports psychological needs such as self-confidence in interaction. Maslow (1968) further explains that self-actualization represents the intrinsic growth of what is already within the organism, driven by a natural tendency

toward spontaneous expressiveness and full identity. Educational practice, therefore, needs to serve as a catalyst that allows this potential to unfold naturally by minimizing external restrictions and anxiety.

In practice, however, seventh-grade students commonly experience low self-confidence, limited vocabulary mastery, and considerable anxiety when required to speak English in front of the class, particularly when conventional teacher-centered methods are used. Teacher-centered instruction tends to position students as passive recipients of information with limited opportunities for peer interaction, so that their psychological needs, including the reduction of speech anxiety, are not adequately addressed. Cooperative learning strategies offer an alternative that can build a safe micro-community in the classroom. Among these, the Numbered Heads Together (NHT) strategy, which consists of four systematic stages, namely numbering, questioning, heads together, and answering, is considered to be effective because it combines positive interdependence with individual accountability, ensuring that passive or anxious students are not overshadowed by more dominant peers (Mahmudah & Rosyid, 2022).

Several previous studies support the effectiveness of NHT in the context of language learning. Rahmadani (2017) found that NHT significantly improved the speaking fluency of second-grade junior high school students because it provided equal opportunities for every student to be active during the teaching and learning process. Mahmudah and Rosyid (2022), although focusing on a reading course, reported that group coordination in NHT considerably increased students' attention, psychological comfort, and active engagement. Both studies, however, examined the effect of NHT on linguistic performance and engagement rather than on the deeper psychological construct of self-actualization. This gap indicates a scientific novelty for the present study, namely the application of Abraham Maslow's theory of self-actualization, measured through the indicators of self-confidence, spontaneity, creativity, and self-expression, as the dependent variable affected by the NHT strategy in the teaching of speaking skills.

Based on this background, the problem addressed in this study is formulated as follows: is there any significant effect of using the Numbered Heads Together (NHT) strategy on students' self-actualization in English speaking skills among seventh-grade students at MTs Nahdlatul Mujahidin NW in the academic year 2025/2026? In line with this problem, this study aims to determine the significant effect of using the Numbered Heads Together (NHT) strategy on students' self-actualization in English speaking skills among seventh-grade students at MTs Nahdlatul Mujahidin NW in the academic year 2025/2026.

2. RESEARCH METHODS

This study employed a quantitative approach with a True Experimental Design, specifically the Pre-test and Post-test Control Group Design (Kothari, 2004), to examine the causal effect of the Numbered Heads Together (NHT) strategy on students' self-actualization in English speaking skills. The design involved two groups, an experimental group and a control group, both of which were given a pre-test and a post-test, while only the experimental group received the NHT treatment.

Table 1. Pre-test and Post-test Control Group Design

Group	Assignment	Pre-test	Treatment	Post-test
Experimental	R	O1	X (NHT Strategy)	O2
Control	R	O3	Y (Conventional Method)	O4

Note: R = random assignment; X = treatment using the Numbered Heads Together (NHT) strategy; Y = conventional, teacher-centered method; O1/O3 = pre-test scores; O2/O4 = post-test scores.

The population of this study consisted of all seventh-grade students of MTs Nahdlatul Mujahidin NW in the academic year 2025/2026, totaling 62 students distributed across three classes: VII A, VII B, and VII C. Using a cluster random sampling technique (Hossan et al., 2023), two classes were randomly selected as the sample: Class VII A (20 students) as the experimental group, taught using the NHT strategy, and Class VII C (20 students) as the control group, taught using the conventional method, resulting in a total sample of 40 students.

The research instrument used to collect the data was a Self-Actualization Oral Assessment, in which students were required to speak in front of the class based on a given topic designed to stimulate and evaluate their self-confidence, spontaneity, creativity, and self-expression, in line with Maslow's core indicators of self-actualization. The instrument's content validity was established through expert judgment to ensure alignment between the assessment items and the theoretical domain of self-actualization (Bui, 2024), while its reliability was tested using Cronbach's Alpha, with a coefficient greater than 0.70 considered to indicate an acceptable level of internal consistency (Kimberlin & Winterstein, 2008).

Data was collected through a pre-test, administered before the treatment to determine students' initial self-actualization and speaking readiness, and a post-test, administered after the treatment to measure the effect of the NHT strategy. The experimental group received NHT treatment across several meetings, following the stages of numbering, questioning, heads together, and answering, while the control group was taught using conventional, teacher-centered instruction. The collected data was analyzed using descriptive statistics (mean, mode, median, and standard deviation) and inferential statistics with the aid of SPSS. Prior to hypothesis testing, a normality test using the One-Sample Kolmogorov-Smirnov test was conducted as a prerequisite. The hypothesis was then tested using an Independent Sample t-test to determine whether there was a statistically significant difference between the post-test scores of the experimental and control groups.

3. RESULTS AND DISCUSSION

A. Research Results

This study was conducted at MTs Nahdlatul Mujahidin NW, involving 40 seventh-grade students consisting of the experimental group (Class VII A, 20 students) taught using the Numbered Heads Together (NHT) strategy and the control group (Class VII C, 20 students) taught using the conventional teacher-centered method. Both groups were given a pre-test and a post-test using the Self-Actualization Oral Assessment instrument. The descriptive results of both groups are presented in Table 2.

Table 2. Descriptive Statistics of Pre-test and Post-test Scores

Group	N	Pre-test Mean	Pre-test SD	Post-test Mean	Post-test SD
Experimental (VII A)	20	42.25	10.939	87.25	5.955
Control (VII C)	20	37.80	10.878	83.75	3.682

Table 2 shows that both groups experienced an increase in their mean scores from the pre-test to the post-test. The experimental group's mean score increased from 42.25 to 87.25, while the control group's mean score increased from 37.80 to 83.75, indicating that the post-test mean of the experimental group was higher than that of the control group.

Before testing the hypothesis, a normality test was conducted using the One-Sample Kolmogorov-Smirnov test to ensure that the data of both groups were normally distributed. The results are presented in Table 3.

Table 3. One-Sample Kolmogorov-Smirnov Normality Test

Group	Data	Asymp. Sig. (2-tailed)	Description

Experimental	Pre-test	0.880	Normal
Experimental	Post-test	0.250	Normal
Control	Pre-test	0.443	Normal
Control	Post-test	0.156	Normal

As shown in Table 3, all significance values are greater than the alpha level of 0.05 ($p > 0.05$), indicating that the pre-test and post-test data of both groups are normally distributed. Therefore, the data met the prerequisite requirement for parametric hypothesis testing using the Independent Sample t-test.

Table 4. Independent Sample t-test of Post-test Scores

t	df	Sig. (2-tailed)	Mean Difference
2.252	38	0.030	3.50

Based on Table 4, the Independent Sample t-test yielded a Sig. (2-tailed) value of 0.030, which is smaller than the significance level of 0.05 ($0.030 < 0.05$). In accordance with the statistical decision rule, since the significance value is smaller than 0.05, the null hypothesis (Ho) is rejected, and the alternative hypothesis (Ha) is accepted. It can therefore be concluded that there is a statistically significant difference in the post-test self-actualization scores between the group taught using the Numbered Heads Together (NHT) strategy and the group taught using the conventional method, confirming that the NHT strategy has a significant effect on students' self-actualization in English speaking skills.

B. Discussion

The findings of this study demonstrate that the implementation of the Numbered Heads Together (NHT) strategy exerts a significant effect on seventh-grade students' self-actualization in English speaking skills. This is evidenced by the higher post-test mean score of the experimental group (87.25) compared to the control group (83.75) and further confirmed by the Independent Sample t-test result of Sig. (2-tailed) = 0.030 ($p < 0.05$). These statistical findings directly answer the research question, showing that the NHT strategy provides a safe psychological bridge that helps students reduce speech anxiety and improves their courage to express their authentic inner potential.

Seventh-grade students often feel hesitant and anxious when speaking English due to their limited mastery of vocabulary, grammar, and pronunciation, which frequently leads them to make a regression choice driven by fear rather than a progression choice driven by growth (Maslow, 1965). The structural design of the NHT strategy addresses this psychological barrier by establishing a supportive micro-community in the classroom. During the 'Heads Together' stage, students discuss their oral tasks, share ideas, and validate their responses safely with peers before performing individually, which provides a non-intimidating and engaging learning experience for passive or anxious students.

The four systematic stages of NHT, namely numbering, questioning, heads together, and answering, create a structural balance between positive interdependence and individual accountability (Mahmudah & Rosyid, 2022). When their assigned numbers are called at random, students feel motivated to demonstrate their best performance because they have already built mental readiness and self-confidence through prior group discussion. This process allows students' communicative potential

to unfold without being hindered by self-doubt or social pressure, which is consistent with Maslow's (1968, 1970) view that self-actualization reflects the intrinsic growth of what is already present within the individual, driven by spontaneous expressiveness and a fully integrated identity.

These findings are in line with Rahmadani (2017), who found that the NHT strategy is effective in providing equal opportunities for every student to be active, thereby reducing speech anxiety and improving oral communication skills, as well as with Mahmudah and Rosyid (2022), who reported that group coordination in NHT increases students' attention, psychological comfort, and active engagement. The results of this study extend these previous findings by showing that the benefits of NHT are not limited to linguistic performance or engagement alone, but also extend to a deeper psychological construct, namely students' self-actualization, as conceptualized by Maslow (1970). Overall, it can be concluded that the relationship between the Numbered Heads Together strategy and students' self-actualization is close and mutually reinforcing, making NHT an inclusive and recommended strategy for English speaking instruction.

4. CONCLUSION

Based on the data analysis and discussion presented above, it can be concluded that the implementation of the Numbered Heads Together (NHT) strategy has a significant positive effect on seventh-grade students' self-actualization in English speaking skills at MTs Nahdlatul Mujahidin NW in the academic year 2025/2026. This conclusion is supported by the Independent Sample t-test result, which yielded a Sig. (2-tailed) value of 0.030 ($p < 0.05$), leading to the rejection of the null hypothesis (Ho) and the acceptance of the alternative hypothesis (Ha). The experimental group, taught using the NHT strategy, obtained a higher post-test mean score (87.25) than the control group taught using the conventional method (83.75). Psychologically, the structured cooperative mechanism of NHT, comprising numbering, questioning, heads together, and answering, functions as a low-anxiety catalyst that bridges the gap between fear-driven and growth-driven choices, minimizes speaking anxiety, reinforces individual accountability, and empowers students to express their inherent potential confidently.

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