

The Influence of the Numbered Head Together Learning Model and the Talking Stick Model on Social Science Learning Motivation and Outcomes

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Abstract. The main problem in this study is the method of teaching which is still not optimal, the lack of student learning motivation and the low student learning outcomes. Purpose: The purpose of this study is to apply the Numbered Head Together model and the Talking Stick Model to increase social studies learning motivation and outcomes. The research design used in this experimental research is quasi-experimental, using the Pretest-Posttest, Nonequivalent Multiple Group Design. This research uses two experimental classes. The first experimental class (X1) was treated using the Numbered Head Together model and the second experimental class (X2) was treated using the Talking Stick model. The sampling technique in this study was to use Nonprobability Sampling with a saturated sample. Research data analysis using descriptive analysis and inferential analysis. The results of the research show that there is no significant influence between the simultaneous learning model on the motivation and learning outcomes of Social Sciences for class V students at Kaluku Bodoa State Primary School with a significant value of $0.822 > 0.05$, which means that H1 is rejected. H0 is accepted.

Keywords: *Numbered Head Together; Talking Stick; Motivation; Outcomes; Social Science*

INTRODUCTION

The background and formulation of the problem to be studied is that the current learning system requires students to be active, creative and innovative in responding to each lesson taught. So teachers are required not only to explain things in the book, but to master, urge, inspire and also guide students to be more enthusiastic in trying to achieve the goals they want to achieve (Siti et al., 2018).

One effort to improve the quality of education in schools is to improve the learning process. Various new concepts and understandings about learning in schools have been developed, especially in science and technology. Implementing learning requires the teacher's ability to manage teaching

materials and the ability to choose approaches, models, media, and even learning resources. A teacher can achieve optimal learning results if the teacher as an educator knows how to use methods and chooses the right learning model (Lidia, 2017).

In the 2013 curriculum learning is more student-centered. It is hoped that the role of students who were initially passive becomes active. The role of motivation in learning activities is very important because it can affect many aspects of student learning activities. Therefore, in the implementation of the 2013 Curriculum the evaluation system is more comprehensive, namely cognitive, affective and psychomotor aspects. Students are expected to be more motivated to learn,

because the evaluation of learning outcomes is not only dominant from a cognitive perspective. So to make students more active, high learning motivation is needed so that learning outcomes will also increase.

In the era of globalization, certain skills that every citizen must have will have an impact on the world of education. Of course, it is the responsibility of all subjects in the curriculum and school activities to require schools to be able to prepare students to participate actively. Social Science learning as part of school functions, plays an important role in various skills needed by students in the era of globalization, including social skills, including cooperation skills, communication skills, social and intercultural skills, personal and social interaction skills, responsibility, interaction, cultural knowledge and global awareness. Therefore, Social Sciences learning needs to be improved so that Social Sciences learning is not only focused on the cognitive domain, but Social Sciences learning can also improve students' social skills so that they can prepare themselves to face life in a more meaningful and practical way (Lidia, 2017).

In general, learning Social Sciences in elementary schools still uses lecture and rote methods, where the teacher explains while students listen, take notes, do exercises and if necessary memorize the material. Student participation here is passive participation. They only accept and learn what they get in

class. As a teacher, you must realize that elementary school students' understanding is more about concrete or real examples that can be implemented in everyday life depending on the level of development and students' thinking abilities (Siti et al., 2018).

Good student learning outcomes are the main goal of every learning process. Efforts to achieve satisfactory learning outcomes inevitably require good cooperation from the components of the teaching and learning process, namely: objectives, learning materials, teaching and learning activities, models, tools and resources, as well as assessment (Kholis, 2017). Students obtain good and maximum learning results through motivation.

Based on the results of initial observations in December 2022 in class V of SD Negeri Kaluku Bodoa Makassar City, found several problems allegedly because the way teachers teach using the cooperative learning model is still not optimal, so that in the implementation of ongoing learning activities there is a lack of student learning motivation, this is marked by not paying attention to lessons and students are not diligent in dealing with assignments, students do not dare to express opinions because they lack confidence, tend to be silent when they do not understand, are not appropriate in using learning methods that make students get bored quickly. From some of the facts above, it is suspected that the KKM (Minimum

Completeness Criteria), especially in social subjects imposed on students, has not been achieved..

A problem-solving approach to overcome the problems above, an effective learning model that can increase motivation and learning outcomes is the Talking Stick and Numbered Heads Together learning model. Various research results show that Numbered Heads Together can increase learning motivation (Kasim, 2018) (Fadhilah & Nurahman, 2021) (Sudewiputri & Dharma, 2021), improve learning achievement (Widiani, 2021) (Iyus et al., 2021) (Allathifah et al., 2019) (Manafe et al., 2022) (Hidanurhayati et al., 2018) (Anwar et al., 2018), improve Communication Skills (Lagur et al., 2018), increase responsibility (Widyaningtyas et al., 2018), increase learning activity (Ertin et al., 2021) (Vhalery, 2019) (Simanungkalit, 2021), increase interest in learning (Nurwadani et al., 2021) (Azryasalam et al., 2020) (Arifin, 2020), improve understanding of the concept (Fadhilah & Nurahman, 2021) (Rahma & Fatimah, 2019), improve the learning process (Desvianti et al., 2020), improve collaboration skills (Devi et al., 2018), improve the ability to Identify Procedure Text (Ansar et al., 2022), improve transliteration skills (Adnyana & Juniawati, 2022), improve writing skills (Pardede & Herman, 2020), improve Critical Thinking abilities (Febrianti, 2020), Social skills (Nurfitria et al., 2019) and more specifically

improve learning outcomes (Utami et al., 2018) (Setyowati & Inah, 2020). *Numbered Heads Together can foster motivation for better behavior change in students* (Hasan Afini Maulaya et al., 2022b). While the results of research on the Talking Stick learning model show that it can increase learning activity (Sizi et al., 2021), improve understanding of concepts (Dani et al., 2019) (Hakim et al., 2018), increase learning motivation (Alfiyana et al., 2018) (Hasan Afini Maulaya et al., 2022b), increase positive character (Asri et al., 2019), and including improving learning outcomes (Mahardika et al., 2018) (Sizi et al., 2021) (Meganingtyas et al., 2019) (Trianti Lestari et al., 2018) (Lidia et al., 2018) (Nym et al., 2017) (Fajrin, 2018a) (Stick, 2018) (Huda, 2017) (Alfiyana et al., 2018) (Saihu, 2020) (Fajrin, 2018b) (Asri et al., 2019) (Faradita, 2018) (Lidia et al., 2018) (Hasan Afini Maulaya et al., 2022a) (Lidia, 2017).

Based on the relevant research results, the problem of low student learning outcomes, student learning motivation can be overcome through the Numbered Head Together Model and the Talking Stick Model, so that researchers are interested in conducting research with the title "The Effect of the Numbered Head Together Learning Model and the Talking Stick Model on Motivation and Learning Outcomes Social Sciences for Class V Students of Kaluku Bodoa State Elementary School, Makassar City.

RESEARCH METHODS

Jenis penelitian yang dilakukan dalam penelitian ini adalah penelitian ini menggunakan Quantitative research with experimental methods. The researcher chose this method because it is in accordance with the aim of this research, namely to determine the effect of the Numbered Head Together learning model with the Talking Stick learning model on class V students at Kaluku Bodoa Elementary School, Makassar City. The research design used in this experimental research is quasi-experimental, using the Pretest-Posttest, Nonequivalent Multiple Group Design. This research used three experimental classes. The first experimental class (X1) was treated using the Numbered Head Together model and the second experimental class (X2) was treated using the Talking Stick model. Each group was given an initial test and a final test with different treatments. The design used in this research is:

Table 1 Research Design

Kelas	Pretest	Treatment	Posttest
Experiment 1	O1	X1	O2
Experiment 2	O1	X2	O2

Information:

O1 = Pretest to determine motivation and learning outcomes

X1 = Treatment with the Numbered Head Together model

X2 = Treatment with the Talking Stick model

O2 = Posttest to determine motivation and learning outcomes

The population in this study were fifth grade students at SDN Kaluku Bodoa

Makassar City, with a total of 65 people. The sampling technique in this study was to use Nonprobability Sampling with a saturated sample. Saturated sample makes the entire existing population a sample in the study. The research sample for experimental class I, namely class students, was treated with the Numbered Head Together model, while the experimental research sample 2, namely class VB, was treated with the Talking Stick learning model. Research data analysis using descriptive analysis and inferential analysis.

DISCUSSION

After carrying out the normality test and homogeneity test on the three dependent variables, then Hypothesis testing was carried out to determine the effect of the learning model *Quantum Teaching* with the help of a slideshow on activities, motivation and social science learning outcomes simultaneously for class V students. Test this hypothesis to find out whether the independent variable has an influence on the dependent variable simultaneously. The hypotheses tested in the multivariate significance test are:

H₀ : There is no significant difference in the influence of the Numbered Head Together learning model and *Talking Stick* on the motivation and learning outcomes of Social Sciences in class V students of Kaluku Bodoa, Makassar City.

H₁ : There is a significant difference in the influence of the Numbered Head Together and Numbered Head Together learning models *Talking Stick* on the motivation and learning outcomes of

Social Sciences in class V students of Kaluku Bodoa, Makassar City.

Hypothesis Test Table

Multivariate Tests						
Effect	Value	F	Hypothesis	Error df	Say. df	Partial Eta Squared
Intercept	Pillai's Trace	.996	6503.088 ^b	2.000	47.000	.996
	Wilks' Lambda	.004	6503.088 ^b	2.000	47.000	.996
	Hotelling's Trace	276.727	6503.088 ^b	2.000	47.000	.996
	Roy's Largest Root	276.727	6503.088 ^b	2.000	47.000	.996
Learning model	Pillai's Trace	.008	.196 ^b	2.000	47.000	.822
	Wilks' Lambda	.992	.196 ^b	2.000	47.000	.822
	Hotelling's Trace	.008	.196 ^b	2.000	47.000	.822
	Roy's Largest Root	.008	.196 ^b	2.000	47.000	.822

a. Design: Intercept + Learning Model
 b. Exact statistic

Based on the test above which was carried out with the help of SPSS v.25, the decision was made that the value of the Numbered Head Together learning model was significant and *Talking Stick* on student motivation and learning outcomes is $0.822 > 0.05$ which means that H_1 is rejected, H_0 is accepted, that is, there is no significant difference in influence between the models *NHT* and models *Talking Stick* on the

Social Sciences learning outcomes of fifth grade students at Kaluku Bodoa State Elementary School, Makassar City.

Application of the Numbered Head Together learning model and *Talking Stick* on class V students at the Kaluku Bodoa State Elementary School to determine the differences in the influence of motivation and student learning outcomes. This research uses the Manova hypothesis test to determine the effect of the independent variable on the dependent variable. Before testing the hypothesis, a prerequisite test is first carried out. After it was declared normally distributed and homogeneous, we continued testing the MANOVA hypothesis to determine differences in the influence of learning models.

By implementing the Numbered Head Together learning model and *Talking Stick* make the learning atmosphere more enjoyable so that it has an impact on student motivation. High student learning motivation will of course have an impact on student learning outcomes.

Based on inferential analysis of the test hypothesis It was concluded that there was no significant difference in the Numbered Head Together learning model and *Talking Stick* on motivation and learning outcomes. Because both models increase motivation and learning outcomes with almost the same average value, only the value produced by the Numbered Head Together learning model at the Kaluku

Bodoa State Primary School is higher than the model *Talking Stick*

The Numbered Head Together learning model can increase student learning motivation (Kasim, 2018) (Fadhilah & Nurahman, 2021) because students have individual and group responsibilities (Sudewiputri & Dharma, 2021); (Nugroho & Wardani, 2019); (Ramadhani & Mandasari, 2019); (Zativalen & Humairah, 2021); (Nurfitriani et al., 2019). This responsibility can make students play an active role in the learning process, thereby creating a conducive classroom atmosphere (Erniwati, 2020); (Arifin, 2020); (Bahar & Afdholi, 2013); (Astutik & Wulandari, 2020); (Hidanurhayati et al., 2018). If a conducive classroom atmosphere has been created, student learning outcomes can also increase (Hidanurhayati et al., 2018); (Kanji et al., 2018).

The Numbered Head Together model is a learning that aims to give students the opportunity to share ideas with each other and consider the most appropriate answer (Astutik & Wulandari, 2020); (Febrianti, 2020); (Yuliana et al., 2018); (Artha et al., 2021); (Nurwadani et al., 2021). When the implementation of learning takes place researchers are assisted by using Student Discussion Sheets (LDS), so that in the discussion process students learn how to work together (Zativalen & Humairah, 2021); (Mahardin et al., 2022); (Anwar et al., 2018); (Triwindi et al., 2021), respect each other's

opinions (Na'im & Oktiningrum, 2019); (Vivi Muliandari, 2019); (Astutik & Wulandari, 2020); (Hidanurhayati et al., 2018); (Sutriningsih et al., 2018) and dare to voice your opinion (Wiji Hastuti et al., 2019); (Vivi Muliandari, 2019); (Febrianti, 2020); (Erfan et al., 2020); (Zativalen & Humairah, 2021).

Students are grouped into 6 groups consisting of 6 people. The Talking Stick model is learning that can increase students' activity responses (Hakim et al., 2018); (Alfiyana et al., 2018); (Huda, 2017); (Ritonga et al., 2021), motivasi belajar siswa (Hasan Afini Maulaya et al., 2022b); (Hasan Afini Maulaya et al., 2022a); (Trianti Lestari et al., 2018), understanding of students' thinking concepts (Dani et al., 2019) and student memory (Trianti Lestari et al., 2018).

Researchers appoint students spontaneously so that students must master the material being taught (Alfiyana et al., 2018); (Fajrin, 2018b). Because no one knows when each student will be appointed to answer the questions given by the researcher (Faradita, 2018); (Dani et al., 2019); (Trianti Lestari et al., 2018); (Lidia et al., 2018). This is because the nature of the Talking Stick learning model is useful in testing students' learning readiness (Trianti Lestari et al., 2018); (Lidia et al., 2018); (Faradita, 2018); (Ika Lestari, 2014) and students' mastery of the material (Trianti Lestari et al., 2018); (Ritonga et al., 2021).

Learning to use a stick as a turn guide to students (Lidia et al., 2018); (Faradita, 2018);

(Pai, 2019). Students holding sticks are required to answer questions given by researchers (Nym et al., 2017); (Trianti Lestari et al., 2018); (Lidia et al., 2018). Although the Talking Stick model is less effective for students who are not emotionally trained to speak in front of teachers and students, students will prefer to avoid the stick when it is their turn. This is one of the reasons why the final test score for experimental class I which uses the Numbered Head Together model is higher than experimental class II which uses the Talking Stick model. Apart from that, experimental class I has more structured steps using the Numbered Head Together model compared to experimental class II which uses the Talking Stick model. This is because in experimental class I (Numbered Head Together model) students already know their responsibilities for the numbers given to students (Zativalen & Humairah, 2021); (Harum & Puspasari, 2021); (Simanungkalit, 2021); (Nugroho & Wardani, 2019), so that students already know the assignment and when students will answer the questions given by the teacher, which is very different from the Talking Stick model, students do not know when students will answer. The Numbered Head Together and Talking Stick models have their own characteristics which have similarities and differences, thus making them learning models that can be used in Social Sciences subjects. (Mahardika et al., 2018) (Fadhilah & Nurahman, 2021) (Azryasalam et

al., 2020) (Surya, 2018) (Febrianti, 2020) (Nurfitriya et al., 2019) (Lidia, 2017) (Siti et al., 2018) (Suparyono, 2018) (Triwindi et al., 2021) (Lidia, 2017) (Siti et al., 2018) or other subjects such as subjects PKn (Sari et al., 2022) (Sakban & Wahyudin, 2019), natural science subjects (Rahma & Fatimah, 2019) (Haniyah et al., 2014) (Murwanto, 2020) (Simanungkalit, 2021) (Ertin et al., 2021) (Bahar & Afdholi, 2013) (Wiji Hastuti et al., 2019) (Handayani et al., 2018) (Sudewiputri & Dharma, 2021) with the aim of increasing student motivation and learning outcomes (Siti et al., 2018) , although there are still student learning outcomes that are below the KKM, the student learning outcomes have increased from the previous value.

CONCLUSION

Based on the problem formulation, research objectives, research hypothesis, data analysis and discussion presented in the previous chapter, the researcher's conclusions are as follows. There is no significant influence between the simultaneous learning model on the motivation and learning outcomes of Social Sciences for fifth grade students at Kaluku State Elementary School. Bodoa with a significant value of $0.822 > 0.05$ which means that H_1 is rejected, H_0 is accepted.

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