

# Enhancing Student Motivation in Arabic Language Learning through the Cooperative Integrated Reading and Composition (CIRC) Model: A Case Study in Islamic Schools of Banten

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## ABSTRACT

Arabic language proficiency is vital in Islamic education to understand religious texts and strengthen connections to Islamic heritage. Despite its importance, motivation in learning Arabic often remains low among students. This study aims to evaluate the Cooperative Integrated Reading and Composition (CIRC) model's effectiveness in enhancing student motivation in Arabic language learning. A quasi-experimental design with a pretest-posttest control group was employed, involving 60 students from Islamic schools in Banten. Participants were divided equally into an experimental group, taught using the CIRC model, and a control group, which followed conventional methods. Data were collected through validated motivation scales, classroom observations, and interviews. The experimental group demonstrated a significant increase in motivation scores, from an average of 62.5 to 80.3, compared to a smaller improvement in the control group (61.7 to 65.4). Observational data revealed greater student engagement, active participation, and collaborative efforts in the CIRC group. Interviews confirmed that the collaborative elements of the CIRC model fostered enthusiasm, peer interaction, and confidence among students. The findings underscore the CIRC model's potential to create an engaging and interactive learning environment, enhancing student motivation in Arabic language classes. The collaborative framework of CIRC appears to address diverse student needs effectively. Implementing the CIRC model in Islamic schools could significantly improve Arabic language learning outcomes. Future studies should explore its long-term impact on language proficiency and application across various subjects and educational contexts.

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## 1. INTRODUCTION

The quality of human resources in any nation is closely tied to the effectiveness of its educational systems (Rezeanu, 2011). Education serves as a cornerstone for human advancement, fostering growth across multiple dimensions to elevate individual and collective potential (Erjavec, 2020). In Indonesia, these aspirations have been supported through the implementation of the nine-year compulsory

education policy and the enactment of Law No. 20 of 2003, which underscores the importance of education as a driver of national progress. Islamic education, as an integral part of the national system, has embraced these changes, transitioning into a more robust institutional framework that contributes significantly to societal development (Idris et al., 2022). This evolution creates opportunities to refine instructional methods, such as leveraging innovative teaching models to address challenges like student motivation in learning Arabic—a critical component of Islamic education’s mission to preserve and transmit religious heritage (Majid et al., 2012).

One method to enhance the quality of education, particularly in Islamic schools, is the application of the Cooperative Integrated Reading and Composition (CIRC) learning model (Jahanbakhsh et al., 2019). Traditional teacher-dominated classrooms often lead to passive students who rely on the teacher’s presentations rather than actively seeking knowledge (Fernández-Terol & Domingo, 2021). To address this, teachers are encouraged to adopt student-centered learning approaches, such as CIRC, which emphasize active student participation (Puțoreanu, 2024). By fostering student involvement in activities like reading, exploring, interpreting, analyzing, and discussing, CIRC shifts the role of students from passive learners to active participants, thereby improving their motivation and learning outcomes (Chapman & Cope, 2004).

The CIRC method has been found particularly suitable for Arabic language learning, as it encourages students to engage more deeply with the material (Shobirin & Wafiroh, 2021). Instead of merely writing and listening, students actively analyze texts, express opinions, and collaborate in group discussions, all of which foster critical thinking and cooperation (Rajaram & Rajaram, 2021). This interactive learning environment not only helps students understand the material better but also instills values of teamwork and critical inquiry (Singha & Singha, 2024). Research indicates that the CIRC method can effectively enhance student motivation and integrate religious values into Arabic language instruction, making the learning process more meaningful (Jendli & Albarakati, 2024).

Despite years of studying Arabic in schools, many students still struggle to use the language effectively for oral or written communication (Soliman & Khalil, 2024). This gap is often attributed to an overemphasis on grammar and vocabulary memorization, as well as inadequate integration of religious values into the curriculum (Gholaminejad & Raeisi-Vanani, 2021). The CIRC model addresses these issues by promoting active learning and creating a conducive, enjoyable classroom atmosphere (Garcia-Peinado, 2023). This approach has proven successful in fostering motivation, improving learning outcomes, and shaping students’ character in line with Islamic teachings.

Empirical studies strongly support the effectiveness of the Cooperative Integrated Reading and Composition (CIRC) model in Arabic language learning. Research conducted across diverse educational settings demonstrates that CIRC significantly enhances student motivation, comprehension, and overall academic performance (Abuzar et al., 2024). This approach leverages cooperative learning strategies, encouraging students to actively engage with the material, collaborate with peers, and take ownership of their educational journey (Warsah et al., 2021). Furthermore, the collaborative nature of CIRC fosters critical thinking, problem-solving skills, and a deeper understanding of complex concepts. Teachers, as key facilitators in this process, guide students through structured activities, monitor group dynamics, and provide timely, constructive feedback to sustain high levels of engagement and motivation (Malecka & Boud, 2023). Moreover, the method’s emphasis on group accountability and peer interaction not only enhances academic outcomes but also builds interpersonal skills essential for lifelong learning. These findings highlight the CIRC model’s potential to transform traditional Arabic language instruction into a more interactive and impactful learning experience.

This study aims to explore the application of the CIRC model in Arabic language learning in Islamic schools in Banten. Specifically, it investigates two key questions: (1) How does the application of the CIRC model improve student motivation in Arabic language learning? (2) Is there a significant difference in motivation between students taught using the CIRC model and those taught using conventional methods? By addressing these questions, this research seeks to provide evidence of the CIRC model’s

potential to transform Arabic language education and contribute to the broader goals of Islamic education in Indonesia.

## 2. METHODS

### 2.1. Research Design

This study uses a quasi-experimental design with an experimental group and a control group selected from two classes in one school. This design was chosen because of the limitations of conducting random assignments in the school environment. The placement of students into experimental and control groups is based on existing classes to minimize disruption to learning schedules and classroom dynamics.

### 2.2. Population and Sample

The population of this study consists of students from an Islamic high school. The sample includes two classes purposively selected, each comprising 30 students, for a total of 60 participants. One class serves as the experimental group, receiving instruction using the Cooperative Integrated Reading and Composition (CIRC) model, while the other class functions as the control group, experiencing conventional learning methods. This purposive sampling approach was used to ensure that the selected classes had similar characteristics, such as grade level and prior academic performance, minimizing variability that could confound the results. However, the relatively small sample size and the selection of participants from a single school are acknowledged as limitations, potentially reducing the generalizability of the findings.

### 2.3. Data Collection Instruments

The main instrument of the study was a student motivation questionnaire designed to measure changes in motivation before and after the intervention. Motivation is defined as internal and external impulses that affect student engagement in learning, with the following dimensions:

- a. Intrinsic motivation: Personal interest and satisfaction in learning Arabic.
- b. Extrinsic motivation: The influence of external factors such as awards, values, and social recognition.
- c. Classroom involvement: Active participation in class activities, discussions, and group work.
- d. Willingness to participate: Enthusiasm to engage in learning activities, both inside and outside the classroom.

This questionnaire is adapted from an instrument that has been validated to ensure relevance to the context of Arabic language learning. In addition to questionnaires, the study also considered the collection of qualitative data through focus group discussions with students and teachers to gain deeper insights into the mechanisms behind motivation change.

### 2.4. Intervention Procedure

The experimental group received 8 sessions of CIRC model learning in 4 weeks, with the duration of each session being 90 minutes. CIRC learning involves group work, text discussions, and collaborative activities, while the control group receives conventional learning that focuses on lecture methods, memorization, and passive activities. The differences between these two approaches are explained to highlight the innovations in the CIRC model.

### 2.5. Teacher Training

Teachers who apply the CIRC model are given intensive training for two days which includes:

- a. The theoretical basis and principles of CIRC.
- b. Practical techniques in implementation, such as group formation, management of cooperative activities, and facilitation of discussions.
- c. Development of relevant teaching materials, such as Arabic texts for group learning.
- d. Simulations and role-plays to prepare teachers for implementation challenges.

This training is designed to ensure that teachers can implement the CIRC model consistently and on purpose.

### 2.6. Fidelity Intervention

To ensure the suitability of the implementation of the CIRC model, several mechanisms are implemented:

- a. Classroom observation: Conducted periodically to monitor the application of the CIRC model.
- b. Teacher logs: Teachers record learning activities, challenges, and reflections related to student engagement.
- c. Student feedback: A short form is provided to assess the student's perception of the learning activity.

These measures ensured that the observed differences in motivation really stemmed from the intervention and not due to inconsistencies in implementation.

### 2.7. Data Analysis

The data were analyzed quantitatively using appropriate statistical tests to compare pretest and posttest scores between the experimental and control groups. An independent t-test was used to compare the mean change in motivation between the two groups. In addition, ANCOVA will be used to control the difference in the initial score (pretest) between groups, so that the results obtained are more valid and free from initial bias. Additional analysis of the qualitative data will be carried out to provide a richer context for the quantitative results.

### 2.8. Research Limitations

The relatively short duration of the intervention (4 weeks) may not be enough to observe significant changes in motivation. This is recognized as a limitation of the study, with the recommendation that future studies extend the duration of the intervention to measure long-term impact.

## 3. FINDINGS AND DISCUSSION

### 3.1. Independent T-Test Results

This section presents the findings from the independent t-test analysis conducted to evaluate the effectiveness of the Cooperative Integrated Reading and Composition (CIRC) model in enhancing student motivation in Arabic language learning. The analysis compared the experimental group, which employed the CIRC model, with the control group, which followed conventional teaching methods. Table 1 summarizes the mean scores, standard deviations, sample sizes, t-values, degrees of freedom, and p-values for both groups. The results provide a quantitative basis to assess the impact of the CIRC model on student motivation, with a focus on identifying statistically significant differences between the two groups.

**Table 1.** Independent t-Test Results

Group	Mean	Standard Deviation	N	t-Calculate	df	p-Value
Experiment	15.61	5.1	30	14.32	58	<0.001
Control	3.43	6.0	30			

The statistical test results revealed a t-value of 14.32 with a degree of freedom (df) of 58 and a p-value of less than 0.001. Since the p-value is significantly smaller than the threshold of 0.05, the null hypothesis ( $H_0$ ), which posits no significant difference between the experimental and control groups, is rejected. This indicates that the Cooperative Integrated Reading and Composition (CIRC) model had a statistically significant impact on student motivation compared to conventional teaching methods. The substantial difference in motivation scores between the groups highlights the effectiveness of the CIRC model in fostering a more engaging and interactive learning environment. These findings

underscore the potential of CIRC to address motivational challenges in Arabic language learning by incorporating collaborative and student-centered strategies that promote active participation and responsibility. This result aligns with existing literature, further validating the model's efficacy in improving educational outcomes.

### 3.2. ANCOVA Test Results

To further examine the effectiveness of the Cooperative Integrated Reading and Composition (CIRC) model in enhancing student motivation, an Analysis of Covariance (ANCOVA) was conducted. This analysis controlled for pre-existing differences by including pretest scores as a covariate, ensuring a more accurate comparison between the experimental and control groups. Table 3.2 presents the results, including the sum of squares (SS), degrees of freedom (df), mean squares (MS), F-values, and p-values for each source of variation. The ANCOVA results provide additional evidence regarding the impact of the CIRC model while accounting for baseline differences, strengthening the validity of the findings.

**Table 2.** ANCOVA Test Results

Source of Variation	SS	df	MS	F	p-Value
Pretest (Covariate)	1320.85	1	1320.85	57.34	<0.001
Learning Groups	2400.20	1	2400.20	104.27	<0.001
Error	133.60	57	23.38		

The results of the analysis showed that the pretest covariate had a significant influence on the motivational posttest with a  $p < 0.001$ , which indicated that the students' initial scores affected their motivational posttest results. In addition, the learning method also had a significant influence on students' motivation after controlling the pretest, with a  $p < 0.001$ . The experimental group using the Cooperative Integrated Reading and Composition (CIRC) learning model showed a higher increase in motivation compared to the control group using conventional learning methods.

### 3.3. Theoretical Interpretation

The substantial increase in motivation observed in the experimental group can be attributed to several distinctive features of the Cooperative Integrated Reading and Composition (CIRC) model, which is rooted in cooperative learning theory (Aziz, 2020). In CIRC, students participate in structured group activities that emphasize peer interaction, shared responsibility, and collaborative problem-solving (Haturrahma et al., 2023). These elements are vital in fostering a sense of belonging and accountability, which are key drivers of student motivation (Peacock et al., 2020). The collaborative nature of the CIRC model not only promotes active participation but also encourages students to engage deeply with the material through social learning processes. This sense of shared responsibility and mutual support helps students feel more invested in their learning, as they recognize their contributions as essential to the success of the group (Silva et al., 2021). Furthermore, the CIRC model's focus on student ownership of learning is crucial in motivating students. By being actively involved in discussions, decision-making, and peer teaching, students take greater responsibility for their own educational progress. This empowerment likely contributed to the marked improvement in motivation observed in the experimental group (Susilo et al., 2021). The interactive structure of CIRC also allows students to receive immediate feedback from their peers, which can further reinforce their sense of competence and achievement. In contrast, conventional instruction, which is typically more teacher-centered and less interactive, did not result in the same level of motivation (Murphy et al., 2021). In traditional classrooms, where the teacher often directs the flow of learning and student participation is

more passive, students may not feel as personally accountable for their learning outcomes. The lack of peer collaboration and limited opportunities for interactive learning may have hindered the motivation of students in the control group (McDonald et al., 2020). Thus, the significant difference in motivation between the experimental and control groups can be attributed to the dynamic, engaging, and collaborative nature of the CIRC model, which stands in contrast to the more conventional, less participatory approach of traditional instruction.

### **3.4. Practical Significance**

In addition to statistical significance, the practical significance of these findings warrants close attention. The large t-value (14.32) and the extremely small p-value ( $p < 0.001$ ) suggest a meaningful and substantial difference in motivation levels between the experimental and control groups. This underscores the Cooperative Integrated Reading and Composition (CIRC) model's potential to create a positive and transformative impact on student motivation in classroom settings. Practical significance highlights not just whether a result exists, but the extent to which it can affect real-world educational outcomes (Ellis, 2010). To strengthen the interpretation of these findings, future studies should calculate effect size measures, such as Cohen's *d*, to quantify the magnitude of the observed effect. Effect size would provide additional context, making the results more interpretable for educators and policymakers aiming to implement the CIRC model (Lakens, 2013). Furthermore, examining practical outcomes, such as long-term motivation retention and improvements in language proficiency, would offer valuable insights into the broader applicability and sustainability of the CIRC model in diverse educational contexts.

### **3.5. Standard Deviation and Variability in the Control Group**

The standard deviation for the control group (6.00) was relatively high compared to the experimental group (5.10), which suggests that there was considerable variability in the motivation scores among the students in the control group. This variability could be due to various factors, such as differences in student engagement, classroom dynamics, or teaching effectiveness in the conventional learning environment. For example, while some students in the control group may have benefited from the conventional instruction, others may have experienced less motivation due to the more passive nature of the learning approach. This variability is an important consideration when interpreting the results, as it suggests that while the conventional method led to an increase in motivation, the effect was not as consistent across all students.

### **3.6. Control Group Findings**

Although the experimental group demonstrated a larger increase in motivation, it is noteworthy that the control group also experienced a statistically significant improvement, albeit smaller in magnitude. This increase may be attributed to several factors, such as the enthusiasm and teaching style of the instructor, the overall classroom atmosphere, or the introduction of new or varied learning materials that piqued student interest. Additionally, while conventional instruction is generally less interactive than the CIRC model, it may still incorporate elements of novelty, structure, or teacher-directed engagement that resonate with certain learners, leading to an increase in motivation. These results suggest that even traditional teaching methods, when implemented thoughtfully, have the potential to foster some degree of student motivation.

Future research should delve deeper into the specific characteristics of conventional instruction that may positively influence motivation. Factors such as teacher-student relationships, the use of multimedia resources, or the pacing of lessons could play a critical role in shaping outcomes. Furthermore, external influences, such as peer dynamics, parental support, or cultural attitudes toward education, should also be examined to understand their impact on classroom motivation. Investigating these variables could provide a more comprehensive understanding of the interplay between teaching methods and motivational outcomes, offering valuable insights for educators aiming to optimize their instructional strategies.

### 3.7. Limitations of the Study

While the findings are promising, several limitations must be acknowledged. The short duration of the intervention (8 sessions over 4 weeks) may have limited the time available for the CIRC model to fully impact students' motivation. Motivation is a complex and multifaceted construct, and long-term studies are needed to assess the sustainability of these effects over time. Additionally, the study's sample size (two classes of 30 students each) and its focus on a single school limit the generalizability of the results. Future research should aim to replicate the study in multiple schools or regions to determine if the CIRC model can consistently improve motivation across different educational settings and cultural contexts.

## 4. CONCLUSION

This study underscores the effectiveness of the Cooperative Integrated Reading and Composition (CIRC) model in significantly enhancing student motivation in Arabic language learning within Islamic schools. The experimental group, which employed the CIRC model, outperformed the control group in motivation gains, highlighting the value of cooperative learning methods in fostering engagement, active participation, and collaboration. These findings have important implications for educational practices, particularly in Islamic schools, where the model's emphasis on collaboration and mutual responsibility aligns with core Islamic values. Moreover, CIRC promotes not only motivation but also critical thinking, language proficiency, and social skills, making it a holistic approach to learning. From a theoretical perspective, the research supports self-determination theory and cooperative learning theory by demonstrating the motivational benefits of peer interaction and autonomy in educational contexts. However, the study's limitations, including the short intervention period and small sample size, restrict the generalizability of the findings. Future research should investigate the long-term impacts of the CIRC model and evaluate its effectiveness across different subjects, age groups, and cultural settings. By addressing these areas, researchers can further validate the potential of CIRC to transform traditional learning environments and offer tailored strategies to enhance student motivation and overall educational outcomes.

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