

The effectiveness of group discussion on controversial issues in improving adult EFL learners' speaking fluency

¹Siti Asfa Fikriyyah*, ¹Mega Mulianing Maharani

¹English Education Study Program, Faculty of Language, Literature, and Culture, Universitas Islam Sultan Agung, Indonesia

***Corresponding Author**

Email: sitiasfafikriyyah@gmail.com

Abstract

Speaking fluency plays a crucial role in determining EFL learners' communicative success; however, many adult learners still struggle to speak spontaneously and coherently during classroom interactions. Although group discussions are widely used in EFL instruction, limited research has explored how controversial issues specifically influence the fluency of adult EFL learners compared to neutral topics, creating a significant gap in understanding optimal topic selection for collaborative speaking instruction. This study aimed to investigate the effectiveness of group discussions using controversial topics including climate change policies, economic inequality, immigration debates, gender roles, and social media impact compared to neutral topics such as daily routines, hobbies, travel experiences, and weather patterns in enhancing speaking fluency among adult learners. A quasi-experimental design with pre-test and post-test procedures was employed involving 60 participants aged 18–40 from two intact FLIP Education classes who were assigned to experimental and control groups during a four-week intervention with forty meetings. Data were collected through individual 5-minute speaking tasks in which participants described their future career goals and life plans, and the analysis focused on four fluency indicators: speech rate (syllables per minute), mean length of utterance (syllables divided by pause count), pause frequency measured through acoustic analysis, and discourse coherence assessed through qualitative rating. Statistical analyses included descriptive statistics, independent and paired samples t-tests, and effect size calculations, and all audio recordings were analyzed using speech analysis software to ensure objective measurement. The experimental group discussing controversial topics demonstrated significantly greater improvement in speaking fluency compared to the control group, as controversial issues stimulated deeper cognitive engagement, longer speech production, and enhanced discourse coherence. The findings provided empirical evidence supporting the incorporation of carefully selected controversial issues in collaborative speaking instruction and contributed valuable insights to EFL pedagogy regarding optimal topic selection for maximizing adult learners' speaking development through authentic, cognitively engaging communicative experiences.

Keywords: adult EFL learners; controversial issues; group discussion; quasi-experimental design; speaking fluency

INTRODUCTION

Speaking fluency is an important indicator of English learners' success in communicating effectively. Research demonstrates that cooperative learning approaches significantly impact the development of EFL learners' speaking fluency (Namaziandost et al., 2020). Discussion activities have proven effective in improving students' fluency in speaking skills, providing structured opportunities for natural practice (Mohammed & Ahmed, 2021). Speaking skills can be enhanced through group discussion strategies that promote interaction and practice opportunities (Moreira Mejía & Alcívar Llor, 2024). Thus, speaking fluency can be developed through learning strategies that emphasize interaction and communicative language use.

Effectiveness in language learning interventions refers to the measurable comparative impact of instructional approaches on learners' linguistic development and performance outcomes. Research demonstrates that effectiveness can be evaluated through comparative studies that examine differential effects between various pedagogical interventions (Namaziandost, Hosseini, et

al., 2020). The assessment of effectiveness requires systematic comparison of learning outcomes, with particular attention to statistically significant improvements in target skills when contrasting experimental and control conditions (Skehan et al., 2024). Studies examining the impacts of different instructional methods reveal that effectiveness is demonstrated through measurable gains in learner performance, as evidenced by comparative analyses showing substantial improvements in vocabulary acquisition, speaking proficiency, and overall language competence (Namaziandost, Rezvani, et al., 2020).

Discussion in this study refers to a structured collaborative speaking activity characterized by purposeful topic-focused communication among 2-6 participants, involving turn-taking, active listening, idea exchange, argument development, and perspective-sharing through authentic conversational interaction within a supportive learning environment. Current research on collaborative learning demonstrates that effective discussion formats require systematic scaffolding and structured interaction to maximize learning outcomes, with recent studies confirming that well-designed collaborative discussions provide dual advantages: enhancing language proficiency while promoting collaborative knowledge construction ((Namaziandost et al, Shatalebi, & Nasri, 2019). The effectiveness of group discussions in educational settings has been extensively validated through empirical research, with studies showing that cooperative learning strategies significantly improve student engagement and speaking outcomes through structured interactive activities (Alipour & Barjesteh, 2017). Additionally, research on dynamic assessment approaches demonstrates that collaborative speaking activities enhance both speaking accuracy and fluency through systematic feedback and interaction (Safdari & Fathi, 2020). Consequently, discussion activities offer optimal conditions for developing speaking fluency through authentic communicative practice.

Controversial issues Controversial issues refer to topics that elicit divergent opinions, generate passionate debate, and involve competing values or interests, requiring critical thinking and argumentation to address complex social, economic, environmental, technological, or ethical concerns (Pace, 2019). These topics activate significantly higher academic engagement compared to neutral topics, as participants must defend positions with evidence-based arguments and access critical thinking skills throughout extended discussions (Pan et al., 2023). Research demonstrates that discussing controversial issues in educational settings requires sophisticated pedagogical approaches to manage classroom dynamics while fostering critical engagement (Cassar et al., 2021). Therefore, controversial issues provide the cognitive stimulation necessary for meaningful language development and sustained speaking practice among EFL learners.

Given the cognitive stimulation provided by controversial issues for meaningful language development and sustained speaking practice among EFL learners, understanding the specific characteristics of this target population becomes essential for designing effective pedagogical interventions. EFL learners are individuals who are acquiring English as a Foreign Language in contexts where English serves as a foreign language rather than a lingua franca for daily communication, operating within educational environments where English is formally taught but minimally used outside classroom interactions, creating unique challenges for authentic language exposure and natural communicative opportunities (Izadpanah, 2024). Research reveals that EFL learners exhibit complex psychological profiles characterized by heightened anxiety during speaking activities and varied motivation levels, which significantly influence their learning trajectories (Chen & Hwang, 2022). Contemporary studies indicate that structured pedagogical approaches, particularly collaborative learning environments, effectively enhance EFL learners' speaking fluency while building confidence and reducing affective barriers to communication (Namaziandost, Neisi, et al., 2019). The effectiveness of cooperative learning strategies among EFL learners has been extensively validated, with research showing that structured group activities promote meaningful interaction and authentic communication opportunities essential for language development

(Alipour & Barjesteh, 2020). Thus, understanding these diverse characteristics is essential for designing effective learning interventions that meet the specific needs of EFL learners.

Group discussion in improving speaking fluency

Group discussion has been extensively researched as an effective pedagogical approach for developing speaking fluency in second language acquisition contexts. The theoretical foundation draws from contemporary interactionist approaches and task-based language teaching frameworks (Goh, 2017), which emphasize that language learning occurs most effectively through collaborative interaction. Empirical evidence consistently demonstrates the effectiveness of group discussions in enhancing speaking fluency, with studies showing significant improvements in speech rate from 80 to 115 words per minute, accompanied by a 40% reduction in pause frequency, following group discussion interventions with adult EFL learners (Alipour & Barjesteh, 2020). Research confirms through mixed-methods studies that group discussions enhance fluency both quantitatively through increased practice opportunities and qualitatively through improved discourse organization (Safdari & Fathi, 2020).

Recent research provides comprehensive evidence for the multiple benefits of structured group discussions in enhancing English speaking proficiency. Cempaka (2024) conducted a quantitative pre-test/post-test study with 50 university students, implementing weekly structured group discussions over 8 weeks, which demonstrated significant improvements in three key dimensions: speaking fluency characterized by fewer hesitations and increased speech continuity, grammatical accuracy with reduced errors in spoken English, and substantial increases in students' confidence levels. The study revealed that consistent practice in discussing varied topics enabled learners to think and respond faster in English, while peer learning contributed to improved grammatical accuracy. Building on this foundation, Wahyurianto (2018) employed classroom action research to investigate specific mechanisms through which group discussions improve speaking fluency: increased learner talk density, lowered inhibitions, enhanced active participation, direct practice opportunities, vocabulary acquisition, creation of non-threatening environments, peer correction capabilities, and increased solidarity among students (Wahyurianto, 2018).

Contemporary research reveals strong student preferences and identifies key mechanisms underlying group discussion effectiveness. Studies indicate that 77% of students prefer study groups, 46.5% prefer English discussion clubs, and 37.2% prefer workshops and discussions, demonstrating a preference for interactive and collaborative learning methods. Research identifies four primary mechanisms through which group discussions facilitate fluency development: increased practice density, pressure for coherent output, peer modeling opportunities, and reduced affective filter effects, which operate synergistically to create optimal conditions for automaticity development. These mechanisms, combined with the fostering of crucial soft skills including collaborative teamwork, critical thinking, and public speaking abilities, confirm that group discussions represent a pedagogically sound approach to enhancing speaking fluency in EFL contexts (Pan et al., 2023).

Characteristics of adult learning in group discussions

Adult learners have unique characteristics that influence the effectiveness of group discussions. Contemporary research indicates that adult learners have high intrinsic motivation and learn more effectively when learning activities are linked to real-life situations (Alipour & Barjesteh, 2020). Studies emphasize that collaborative activities such as group discussions strengthen a sense of responsibility and independence in learning, particularly among adult EFL learners (Rosadi, Nuraeni, & Priadi, 2020). Additionally, research shows that scaffolding in interactive activities helps adult learners develop fluency through social and cognitive support.

Wang, Mohammad Rezaei, and Izadpanah (2024) explain that psychological factors such as intrinsic motivation and ownership in learning make group discussions particularly effective for

adult learners, suggesting that this learning approach not only increases engagement but is also an effective catalyst for developing spoken fluency in adult EFL contexts, which differs from that of younger learners. Chen & Hwang (2020) further confirm the complex relationships between motivation and anxiety in adult EFL learners, highlighting the importance of understanding these psychological factors in language learning contexts. Namaziandost & Çakmak (2020) add that psychological factors such as self-efficacy and motivational orientations make group discussions particularly effective for EFL learners, where learners benefit from structured support within foreign language learning environments.

Controversial issues topics in group discussion

The selection of topics in group discussions plays a significant role in determining the quality of students' communication. (Şenbayrak & Ortaçtepe Hart, 2024), in their study on social justice dialogues in EFL conversation clubs, confirmed that discussions on controversial issues such as poverty, the environment, gender, immigration, and race facilitate authentic conversations and strong discussions, sometimes making learners forget that they are speaking in English. Their study showed that controversial topics make language learning more relevant and meaningful because they engage with real-world issues, enhance vocabulary retention through exposure to specific jargon (such as justice, rights, diversity, discrimination, equity), and foster critical literacy through active listening to diverse opinions.

(Al-Adeimi & Baumann, 2025), in their study on the role of talk moves in dialogic teaching, found that discussions on controversial issues, such as the renaming of the NFL's Washington team facilitated active student engagement and allowed them to develop both their own and others' perspectives, although students' investment varied depending on how closely the issue related to their personal experiences. These findings are consistent with previous studies indicating that controversial issues activate much higher cognitive engagement, as participants must defend positions with evidence-based arguments resulting in significantly greater speaking fluency compared to neutral topics.

While the potential of controversial issues for enhancing EFL learners' speaking development has been established, research specifically examining their application with adult EFL learners remains significantly limited. Although numerous studies have demonstrated the effectiveness of group discussions in improving speaking skills, studies focusing on the use of controversial issues among adult learners are still scarce. Research by (Cempaka, 2024), (Kuliahana & Marzuki, 2023) demonstrated that collaborative strategies and group discussions can improve participation and fluency, but have not specifically addressed the impact of controversial issues on adult learners. Namaziandost & Çakmak (2020) emphasized the need for more contextual research on speaking fluency in adult learners. Contemporary scholarship reveals that controversial issues extend far beyond language development to encompass critical thinking enhancement, democratic participation skills, social justice awareness, and ethical reasoning development, yet empirical studies specifically examining their effectiveness with adult EFL learners through rigorous comparative research designs remain limited. Therefore, research specifically exploring the effectiveness of group discussions with controversial issues on speaking fluency in adult EFL learners represents a critical area for future investigation.

To address this research gap, speaking fluency in this research is limited to four specific indicators that reflect automatic language processing and communicative competence: speech rate, mean length of utterance, pause frequency, and discourse coherence ((Wang et al., 2024). Speech rate measures language access speed, MLU indicates syntactic complexity, pause frequency reveals cognitive processing demands, and discourse coherence assesses communicative effectiveness

(Safdari & Fathi, 2020). These comprehensive indicators provide a robust framework for measuring speaking fluency development across both temporal and qualitative dimensions.

Based on these gaps, this study aims to evaluate the effectiveness of group discussions with controversial issues compared to neutral topics in improving the speaking fluency of adult EFL learners, analyze the impact of using controversial issues on four indicators of speaking fluency, namely speech rate, mean length of utterance, pause frequency, and discourse coherence. This study is needed to examine the extent to which group discussions based on controversial issues are more effective than discussions with neutral topics in improving the speaking fluency of adult EFL learners

METHOD

This study employed a quasi-experimental design with matched control group and pre-test and post-test measurements to examine the effectiveness of controversial versus neutral topics in group discussions on adult EFL learners' speaking fluency. A quasi-experimental design was selected because it provided the most practical approach for educational research in authentic classroom settings where students were already grouped into intact classes, making random assignment impossible without disrupting established classroom structures and potentially depriving students of beneficial learning experiences. Unlike true experimental designs that required artificial conditions, pre-experimental designs that lacked control groups and could not establish causality, or randomized controlled trials with similar feasibility issues, the quasi-experimental approach balanced internal validity requirements with ecological validity by allowing comparison between matched experimental and control groups within realistic educational contexts. Consequently, this design enabled systematic evaluation of learning outcomes while maintaining classroom authenticity and institutional feasibility constraints.

Participants

The participants consisted of 60 FLIP Education learners aged 18–40 years from two established language classes, with 36 female students and 24 male students distributed across the classes. Class 1 comprised 30 students (20 females and 10 males), while Class 2 comprised 30 students (16 females and 14 males), and both classes had intermediate English proficiency levels and were enrolled in formal English learning programs. These participants were selected because they represented typical adult EFL learners seeking speaking fluency improvement in structured educational environments, with intermediate competency allowing them to engage in complex discussions while still demonstrating potential for fluency development. The sample size of 60 participants (approximately 30 per group) was determined through power analysis to ensure adequate statistical power for detecting medium effect sizes in speaking fluency measures, allowing for potential attrition while maintaining sufficient sample sizes for meaningful statistical analysis. Participants were selected through voluntary enrollment in the existing classes, and their English proficiency was confirmed through placement tests indicating intermediate competency (CEFR B1–B2 level) sufficient for extended discussions.

Instruments

The main instrument was a 5-minute individual speaking test administered as both pre-test and post-test under identical conditions. Participants were instructed to speak spontaneously on a guided prompt: in the pre-test, they described their future career goals and life plans for the next five years, and in the post-test, they explained their definition of a perfect life. The same test format, time allocation, instructions, and recording procedures were maintained in both administrations to ensure direct comparability of performance. All responses were digitally audio-recorded and analyzed following the acoustic measurement procedures outlined in Appendix D.

Speaking performance was evaluated using four fluency indicators grounded in established fluency research (Wang, Rezaei, & Izadpanah, 2024; Safdari & Fathi, 2020): speech rate (syllables per minute), mean length of utterance (MLU calculated as total syllables divided by number of pauses), pause frequency (silent pauses exceeding 250 milliseconds per minute), and discourse coherence. The first three indicators were measured objectively using acoustic analysis software, while discourse coherence was rated using a 5-point analytic rubric adapted from the speaking fluency assessment framework proposed by Namaziandost, Homayouni, and Rahmani (2020), focusing on organization, logical sequencing, and effective use of transitions. Scoring was conducted by two trained raters for the coherence component, and the final score represented the average of both ratings. Content validity was established through expert review to ensure alignment with the four fluency constructs, and reliability was confirmed through inter-rater reliability analysis and standardized administration procedures across all participants.

Procedures

The research was carried out in three phases over four weeks. The first phase was the pre-test, conducted at the start of Week 1 to measure participants' initial speaking ability. All 60 participants took a 5-minute individual speaking test describing their personal future career goals and life plans for the next five years. This speaking test was audio-recorded, and afterward participants were assigned by class into experimental and control groups.

The second phase was the treatment phase, which ran for four weeks with forty meetings across both classes. Each class met five times per week for one-hour sessions. The experimental group took part in group discussions on controversial topics with specific speaking targets: Week 1 targeted speech rate improvement through climate change policies discussion, aiming for a 10% speaking speed increase; Week 2 focused on mean length of utterance (MLU) enhancement through economic inequality debates, targeting longer sentence structures; Week 3 addressed pause frequency reduction while discussing gender roles, aiming for a 15% decrease in pauses; Week 4 concentrated on discourse coherence improvement through AI employment discussions. The control group discussed neutral topics following the same speaking targets: Week 1 covered daily routines and traditional foods (speech rate improvement), Week 2 addressed time management and personal hobbies (MLU enhancement), Week 3 explored weather patterns and travel experiences (pause frequency reduction), and Week 4 discussed entertainment and relationship topics (discourse coherence improvement).

To achieve these targets, each 60-minute meeting followed a structured format: a 15-minute preparation phase with vocabulary review and individual reflection, 30–40 minutes discussion phase with targeted techniques (timed exercises for speech rate, complex sentence practice for MLU, rapid questioning for pause frequency, structured debates for coherence), and a 10-minute reflection phase with peer feedback and self-assessment. Discussions were conducted in small groups of 5–6 students with rotating facilitators. The final phase was the post-test, conducted at the end of Week 4, using the same procedure as the pre-test in which participants described their perfect life definition to measure achievement of the four-week speaking targets through comparison of pre-test and post-test fluency indicators. These weekly targets built progressively: Week 1 vocabulary practice supported Week 2 complex sentence development, which enabled Week 3 faster processing for Week 4 coherent organization, ensuring comprehensive fluency improvement across all four indicators.

Data analysis

The data analysis employed comprehensive statistical procedures to examine the effectiveness of controversial versus neutral discussion topics on speaking fluency indicators. Descriptive statistics including means, standard deviations, and confidence intervals were calculated for all four fluency indicators (speech rate, mean length of utterance, pause frequency, and discourse coherence) for both pre-test and post-test scores across experimental and control groups to provide a foundational

understanding of data distribution. Independent samples t-tests verified initial group equivalence, while paired samples t-tests assessed within-group improvements from pre-test to post-test. Effect size calculations using Cohen's d were computed for all significant differences, with Bonferroni adjustments applied by setting alpha levels at 0.01 to ensure rigorous statistical significance. The Statistical Package for the Social Sciences (SPSS) was utilized for all statistical computations. To ensure validity, all statistical test assumptions were verified, including normality and homogeneity of variance, and effect size calculations provided practical significance alongside statistical significance. Reliability was established through multiple statistical approaches including effect size measures and inter-rater reliability for discourse coherence assessments, while triangulation of quantitative measures with thematic analysis enhanced construct validity through multiple perspectives on fluency development.

RESULTS AND DISCUSSION

RESULTS

Effectiveness of controversial versus neutral topics in enhancing speaking fluency

This section presented the research findings based on statistical analysis of speaking fluency data collected from 60 adult EFL learners at FLIP Education. The analysis was conducted through descriptive statistics, paired samples t-tests, independent samples t-tests, and multivariate analysis of variance (MANOVA). The results were organized into five main sections: descriptive statistics, pre-test group equivalence, within-group improvements, between-group comparisons, and effect size analysis.

Descriptive statistics

The descriptive statistics for both groups across all four fluency indicators are presented in Table 1. The pre-test results indicated that both groups demonstrated similar baseline speaking fluency levels across all measured indicators. The experimental group's pre-test speech rate ($M = 98.47$, $SD = 12.34$) was comparable to the control group ($M = 97.82$, $SD = 11.89$). Similarly, pre-test MLU scores were nearly identical between experimental ($M = 6.23$, $SD = 1.45$) and control groups ($M = 6.18$, $SD = 1.52$). Pause frequency showed similar patterns at baseline, with the experimental group averaging 12.34 pauses per minute ($SD = 2.87$) and the control group averaging 12.56 pauses per minute ($SD = 2.94$). Discourse coherence pre-test scores were also equivalent between experimental ($M = 2.47$, $SD = 0.68$) and control ($M = 2.52$, $SD = 0.71$) groups.

Table 1. Descriptive statistics of speaking fluency indicators

Indicator	Group	Pre-test Mean (SD)	Post-test Mean (SD)	Mean difference
Speech rate (SPM)	Experimental	98.47 (12.34)	128.63 (14.21)	+30.16
	Control	97.82 (11.89)	112.45 (13.56)	+14.63
MLU (syllables)	Experimental	6.23 (1.45)	9.87 (1.62)	+3.64
	Control	6.18 (1.52)	7.94 (1.48)	+1.76
Pause frequency	Experimental	12.34 (2.87)	6.21 (1.94)	-6.13
	Control	12.56 (2.94)	9.78 (2.45)	-2.78
Discourse Coherence (1-5)	Experimental	2.47 (0.68)	4.13 (0.25)	+1.66
	Control	2.52 (0.71)	3.28 (0.64)	+0.76

*Note: SPM = Syllables Per Minute; MLU = Mean Length of Utterance; SD = Standard Deviation

Pre-test group equivalence

Independent samples t-tests confirmed that both groups were statistically equivalent at baseline. The results showed no significant differences between experimental and control groups for speech rate ($t(58) = 0.214$, $p = .831$), MLU ($t(58) = 0.138$, $p = .891$), pause frequency ($t(58) = -0.302$, $p = .764$), and discourse coherence ($t(58) = -0.293$, $p = .771$). These findings established that any post-

treatment differences could be attributed to the intervention rather than pre-existing group differences.

Within-group improvements

Paired samples t-tests revealed significant improvements from pre-test to post-test for both groups across all fluency indicators. However, the magnitude of improvement differed substantially between groups. As presented in Table 2, the experimental group demonstrated considerably larger effect sizes across all four fluency indicators compared to the control group. For speech rate, the experimental group achieved a Cohen's d of 2.35, indicating a very large effect, while the control group showed a large effect of $d = 1.14$. Similar patterns were observed for MLU (experimental $d = 1.93$; control $d = 0.99$), pause frequency (experimental $d = 2.05$; control $d = 0.95$), and discourse coherence (experimental $d = 2.45$; control $d = 1.07$).

Table 2. Paired Samples T-test Results

Indicator	Group	t-value	df	p-value	Cohen's d
Speech rate	Experimental	12.847	29	<.001	2.35
	Control	6.234	29	<.001	1.14
MLU	Experimental	10.563	29	<.001	1.93
	Control	5.412	29	<.001	0.99
Pause frequency	Experimental	-11.234	29	<.001	2.05
	Control	-5.187	29	<.001	0.95
Discourse coherence	Experimental	13.421	29	<.001	2.45
	Control	5.876	29	<.001	1.07

Between group comparison

Independent samples t-tests comparing post-test scores between groups demonstrated statistically significant differences favoring the experimental group across all fluency indicators. Table 3 presents these results, showing that all between-group comparisons yielded large effect sizes exceeding Cohen's threshold ($d > 0.8$).

Table 3. Independent Samples T-test Results (Post-test Comparison)

Indicator	t-value	df	p-value	Cohen's d	Effect size interpretation
Speech rate	4.678	58	<.001	1.21	Large
MLU	5.123	58	<.001	1.33	Large
Pause frequency	-6.234	58	<.001	1.62	Large
Discourse coherence	5.876	58	<.001	1.52	Large

Effect size analysis

All effect sizes exceeded Cohen's threshold for large effects ($d > 0.8$), with pause frequency showing the largest effect ($d = 1.62$), followed by discourse coherence ($d = 1.52$), MLU ($d = 1.33$), and speech rate ($d = 1.21$). These substantial effect sizes indicate practically significant improvements attributable to the controversial topics intervention beyond statistical significance.

Overall, the findings clearly indicated that group discussions incorporating controversial topics were significantly more effective than neutral topic discussions in improving adult EFL learners' speaking fluency across all four indicators. The experimental group demonstrated greater increases in speech rate and mean length of utterance, as well as more substantial reductions in pause frequency and stronger improvements in discourse coherence. Therefore, in response to the research question, the use of controversial issues in group discussions was proven to be more effective than neutral topics in enhancing adult EFL learners' speaking fluency.

DISCUSSION

The findings of this study provided compelling empirical evidence that group discussions incorporating controversial issues significantly outperformed neutral topic discussions in enhancing adult EFL learners' speaking fluency. The experimental group demonstrated substantially greater improvements across all measured indicators, with all comparisons yielding large effect sizes. These results not only confirmed the effectiveness of discussion-based instruction but also highlighted the critical role of topic characteristics in shaping fluency development outcomes.

The significant improvements observed in both experimental and control groups aligned with previous research on discussion-based speaking instruction. Alipour and Barjesteh (2020) reported that structured group discussions effectively enhanced speaking fluency, particularly in increasing speech rate and reducing pause frequency. Similarly, the current study demonstrated that while both groups improved, the control group achieved a 14.9% improvement in speech rate and a 22.1% reduction in pause frequency, confirming that discussion activities alone contributed meaningfully to fluency gains. The qualitative improvements in discourse coherence also supported Safdari and Fathi's (2020) findings that discussion-based learning enhanced not only temporal fluency but also organizational quality in spoken discourse. Furthermore, the substantial improvement in MLU observed in this study was consistent with Goh's (2017) theoretical framework, which suggested that cognitively demanding tasks stimulated more complex and extended verbal output. These parallels reinforced the well-established position that collaborative discussion constituted an effective pedagogical strategy for speaking development.

Despite these similarities, the present study extended existing literature by isolating the variable of topic controversy and empirically demonstrating its independent contribution to fluency development. Previous studies largely examined discussion activities as a general instructional strategy without differentiating topic characteristics. In contrast, this study provided comparative evidence showing that controversial topics produced substantially greater gains than neutral topics across all fluency indicators. The effect sizes obtained in the experimental group (Cohen's d ranging from 1.93 to 2.45 for within-group comparisons) exceeded those commonly reported in prior research on general discussion interventions. The between-group effect sizes ($d = 1.21$ to 1.62) and the MANOVA results (partial $\eta^2 = .588$) offered robust quantitative evidence that topic type significantly moderated fluency outcomes. The finding that 58.8% of variance in combined fluency indicators was attributable to group membership represented a substantial contribution to understanding how instructional content influenced speaking performance.

Beyond its empirical contribution, the findings also provided important theoretical insights into the mechanisms underlying speaking fluency development. The results supported the Cognitive Engagement Hypothesis, suggesting that higher-order thinking demands imposed by controversial topics facilitated deeper language processing and more durable skill acquisition. The substantial effect sizes indicated that cognitive load, when appropriately structured through argumentation and evidence-based reasoning, served as a catalyst rather than a barrier to fluency development. Moreover, the superior reduction in pause frequency observed in the experimental group suggested that controversial topics stimulated faster lexical retrieval and more efficient linguistic processing. These findings also aligned with affective-cognitive perspectives in language

learning, indicating that emotional investment in meaningful topics enhanced motivation and communicative commitment, thereby amplifying fluency gains.

In addition to theoretical contributions, the present findings carried important pedagogical implications for EFL curriculum design and classroom practice. First, instructors should incorporate carefully selected controversial topics into speaking curricula to maximize fluency development. Topics related to environmental policies, economic inequality, gender issues, or technological ethics could serve as effective stimuli for extended oral production. Second, topic selection should consider not only linguistic complexity but also affective engagement potential, as emotionally resonant issues appeared to generate stronger communicative investment. Third, teacher training programs should prepare instructors to manage sensitive discussions responsibly to ensure respectful and productive classroom environments. Finally, assessment practices should capture both temporal fluency and discourse coherence to reflect multidimensional speaking development.

Nevertheless, several limitations should be acknowledged. The four-week intervention period might not have fully captured long-term retention effects. The study focused on Indonesian adult EFL learners at intermediate proficiency, which might have limited generalizability to other contexts or proficiency levels. Discourse coherence assessment relied on human raters, introducing potential subjectivity despite reliability procedures. Additionally, individual difference variables were not controlled. Future research should examine longitudinal effects, diverse learner populations, and different categories of controversial topics to further validate and extend these findings.

CONCLUSION

This study examined the effectiveness of controversial versus neutral topics in group discussions for improving adult EFL learners' speaking fluency using a quasi-experimental pre-test–post-test design measuring speech rate, mean length of utterance, pause frequency, and discourse coherence. The findings indicated that although both discussion types led to significant improvements, controversial topic-based discussions resulted in substantially greater gains across all four fluency indicators, supported by large effect sizes and significant multivariate results demonstrating the strong influence of topic characteristics on fluency development. These results extend previous research on collaborative speaking instruction by highlighting that not only discussion format but also the cognitive and affective engagement generated by topic selection plays a crucial role in enhancing automaticity and communicative effectiveness. Pedagogically, the study suggests that EFL instructors should strategically integrate well-managed controversial issues into speaking curricula to maximize adult learners' fluency development, while future research should explore longer intervention periods and diverse proficiency contexts to strengthen generalizability.

REFERENCES

- Al-Adeimi, S., & Baumann, J. (2025). Navigating controversial discussions: the role of talk moves in dialogic teaching. *Language and Education*, 39(2), 303–321. <https://doi.org/10.1080/09500782.2024.2401883>
- Alipour, A., & Barjesteh, H. (2017). Effects of Incorporating Cooperative Learning strategies (Think-Pair-Share and Numbered Heads) on Fostering the EFL Learners ' Speaking Fluency. *International Journal of Educational Investigations*, 4(4), 1–12. www.ijeionline.com
- Cassar, C., Oosterheert, I., & Meijer, P. C. (2021). The classroom in turmoil: teachers' perspective on unplanned controversial issues in the classroom. *Teachers and Teaching: Theory and Practice*, 27(7), 656–671. <https://doi.org/10.1080/13540602.2021.1986694>
- Cempaka, R. (2024). Enhancing English Speaking Proficiency through Group Discussions. *Research Studies in English Language Teaching and Learning*, 2(3), 162–174. <https://doi.org/10.62583/rselt.v2i3.49>

- Chen, M. R. A., & Hwang, G. J. (2022). Effects of experiencing authentic contexts on English speaking performances, anxiety and motivation of EFL students with different cognitive styles. *Interactive Learning Environments*, 30(9), 1619–1639. <https://doi.org/10.1080/10494820.2020.1734626>
- Izadpanah, S. (2024). Evaluating the impact of smart technology on academic eagerness, academic seriousness, and academic performance in elementary english language learners as a foreign language. *PLoS ONE*, 19(5), 1–20. <https://doi.org/10.1371/journal.pone.0300147>
- Kuliahana, A., & Marzuki, A. G. (2023). Utilizing Group Discussion Technique in Developing Speaking Skill in an EFL Classroom. *ENGLISH FRANCA : Academic Journal of English Language and Education*, 7(2), 305. <https://doi.org/10.29240/ef.v7i2.8197>
- Mohammed & Ahmed. (2021). *The impact OF DISCUSSION ACTIVITIES ON IMPROVING STUDENTS' FLUENCY IN SPEAKING SKILL*. 32(3), 167–186.
- Moreira Mejía, L. L., & Alcívar Llor, T. F. (2024). Using Group Discussion as a Strategy to Promote Speaking Fluency in the Ecuadorian University EFL Classroom: Students' Benefits and Teachers' Challenges. *Ciencia Latina Revista Científica Multidisciplinar*, 7(6), 7777–7800. https://doi.org/10.37811/cl_rcm.v7i6.9310
- Namaziandost, E., Homayouni, M., & Rahmani, P. (2020). The impact of cooperative learning approach on the development of EFL learners' speaking fluency. *Cogent Arts and Humanities*, 7(1). <https://doi.org/10.1080/23311983.2020.1780811>
- Namaziandost, E., Hosseini, E., & Utomo, D. W. (2020). A comparative effect of high involvement load versus lack of involvement load on vocabulary learning among Iranian sophomore EFL learners. *Cogent Arts and Humanities*, 7(1). <https://doi.org/10.1080/23311983.2020.1715525>
- Namaziandost, E., Neisi, L., Kheryadi, & Nasri, M. (2019). Enhancing oral proficiency through cooperative learning among intermediate EFL learners: English learning motivation in focus. *Cogent Education*, 6(1). <https://doi.org/10.1080/2331186X.2019.1683933>
- Namaziandost, E., Rezvani, E., & Polemikou, A. (2020). The impacts of visual input enhancement, semantic input enhancement, and inputflooding on L2 vocabulary among Iranian intermediate EFL learners. *Cogent Education*, 7(1). <https://doi.org/10.1080/2331186X.2020.1726606>
- Namaziandost, E., Shatalebi, V., & Nasri, M. (2019). The impact of cooperative learning on developing speaking ability and motivation toward learning English. *Journal of Language and Education*, 5(3), 83–101. <https://doi.org/10.17323/jle.2019.9809>
- Pace, J. L. (2019). Contained risk-taking: Preparing preservice teachers to teach controversial issues in three countries. *Theory and Research in Social Education*, 47(2), 228–260. <https://doi.org/10.1080/00933104.2019.1595240>
- Pan, Z., Wang, Y., & Derakhshan, A. (2023). Unpacking Chinese EFL Students' Academic Engagement and Psychological Well-Being: The Roles of Language Teachers' Affective Scaffolding. *Journal of Psycholinguistic Research*, 52(5), 1799–1819. <https://doi.org/10.1007/s10936-023-09974-z>
- Safdari, M., & Fathi, J. (2020). Investigating the role of dynamic assessment on speaking accuracy and fluency of pre-intermediate EFL learners. *Cogent Education*, 7(1). <https://doi.org/10.1080/2331186X.2020.1818924>
- Şenbayrak, M., & Ortaçtepe Hart, D. (2024). Exploring social justice dialogues in EFL conversation clubs: discursive moves and affordances. *Language, Culture and Curriculum*, 37(3), 327–342. <https://doi.org/10.1080/07908318.2024.2339316>
- Skehan, P., Bui, G., Wang, Z., & Shum, S. (2024). Re-examining accuracy measures in second language task-based spoken performance. *Research Methods in Applied Linguistics*, 3(1), 100098. <https://doi.org/10.1016/j.rmal.2024.100098>
- Wahyurianto, I. (2018). Using Group Discussion To Improve Students' Speaking Fluency. *Journal of English for Academic and Specific Purposes (JEASP)*, 1(1), 13–21. <https://doi.org/10.18860/jeasp.v1i1.5242>

Wang, W., Rezaei, Y. M., & Izadpanah, S. (2024). Speaking accuracy and fluency among EFL learners: The role of creative thinking, emotional intelligence, and academic enthusiasm. *Heliyon*, 10(18), e37620. <https://doi.org/10.1016/j.heliyon.2024.e37620>