



The role of Small Group Discussion (SGD) in enhancing midwifery students' learning outcomes

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ABSTRACT

Active learning methods such as Small Group Discussion (SGD) have been identified as an effective approach in midwifery education. This study aims to evaluate the role of SGD in enhancing midwifery students' learning outcomes, particularly in the development of cognitive aspects, critical thinking, communication, and collaboration skills. Therefore, this study uses a systematic approach to assess the existing literature on the application of SGD in midwifery education. Using the Systematic Literature Review (SLR) method and following the PRISMA guidelines, articles were selected from four main databases: Scopus, PubMed, Google Scholar, and ScienceDirect, with publications from 2020 to 2025. The analysis results show that SGD has a positive impact on concept understanding, student engagement, and the strengthening of their soft skills, including communication and teamwork abilities. SGD also fosters an interactive and reflective learning environment, making the learning process more engaging and meaningful. Additionally, SGD enhances students' ability to work in teams, which is essential in the healthcare field. Given the importance of effective teamwork in healthcare professions, developing soft skills is crucial for students. Therefore, integrating SGD into the midwifery curriculum is highly recommended to prepare students for professional challenges and the increasingly complex dynamics of the workforce.

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ABSTRAK

Metode pembelajaran aktif seperti Small Group Discussion (SGD) telah diidentifikasi sebagai pendekatan yang efektif dalam pendidikan kebidanan. Penelitian ini bertujuan untuk mengevaluasi peran SGD dalam meningkatkan hasil belajar mahasiswa kebidanan, khususnya dalam pengembangan aspek kognitif, kemampuan berpikir kritis, komunikasi, dan kolaborasi. Untuk itu, penelitian ini menggunakan pendekatan yang sistematis untuk menilai literatur yang ada mengenai penerapan SGD dalam pendidikan kebidanan. Dengan menggunakan metode Systematic Literature Review (SLR) dan panduan PRISMA, artikel-artikel dipilih dari empat basis data utama: Scopus, PubMed, Google Scholar, dan ScienceDirect, dengan publikasi yang diterbitkan antara 2020 hingga 2025. Hasil analisis menunjukkan bahwa SGD memiliki pengaruh positif terhadap pemahaman konsep, keterlibatan aktif mahasiswa, dan penguatan soft skills mereka, termasuk kemampuan komunikasi dan kerja sama. SGD juga menciptakan lingkungan pembelajaran yang interaktif dan reflektif, yang membuat proses pembelajaran lebih bermakna. Selain itu, SGD memperkuat kemampuan mahasiswa dalam bekerja dalam tim, yang sangat penting di dunia kesehatan. Mengingat pentingnya kerja tim yang efektif dalam profesi kesehatan, pengembangan soft skills menjadi krusial bagi mahasiswa. Oleh karena itu, integrasi SGD dalam kurikulum pendidikan kebidanan sangat dianjurkan untuk mempersiapkan mahasiswa menghadapi tantangan profesional dan dinamika dunia kerja yang semakin kompleks.

Kata Kunci: diskusi kelompok kecil; hasil belajar; mahasiswa kebidanan

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INTRODUCTION

The current state of midwifery education suggests that the teaching practices implemented have not yet fully reflected the objectives of a competency-based curriculum. Although the midwifery curriculum emphasizes the importance of competency-based learning and the development of critical clinical skills, many institutions are still dominated by traditional lecture-based teaching methods. Approximately 68% of midwifery programs in Indonesia continue to prioritize passive instructional strategies such as one-way lectures, thereby limiting students' opportunities to actively engage, ask questions, and develop essential problem-solving skills required in clinical practice. Therefore, a shift toward more active, student-centered learning approaches is necessary to prepare midwifery graduates better to meet the challenges of the modern healthcare environment ([Imanipour et al., 2022](#)).

In line with these concerns, midwifery education also presents its specific challenges, as it requires the integration of cognitive, psychomotor, and affective aspects within the learning process. Midwifery students are expected not only to understand theoretical knowledge but also to think critically, make quick decisions, and collaborate effectively in complex clinical environments. Despite these demands, many educational institutions continue to rely on traditional teacher-centered learning models, which often fail to promote active engagement and critical thinking skills among students. This conventional approach limits students' opportunities to develop the essential competencies needed for clinical practice, emphasizing the need for more innovative and student-centered learning strategies ([Masnunah, 2020](#)).

Responding to these challenges, one promising alternative to replace conventional learning approaches is the SGD method. SGD encourages active participation, critical analysis, and collaborative problem-solving among students, skills essential in clinical environments. Through structured discussions in small groups, students can gain a deeper understanding of concepts, articulate their reasoning more effectively, and engage more deeply with the learning material. This method not only enhances conceptual understanding and critical thinking skills but also develops teamwork and communication abilities that are vital for future midwifery practice ([Mahfirah & Arisona, 2022](#)). The shift from conventional lecture-based methods to more active strategies, such as SGD, reflects the growing demand for a participatory and student-centered learning environment in midwifery education. Midwifery students are required to develop not only cognitive competencies but also clinical and professional skills within a realistic and supportive setting. Traditional lectures are often seen as less effective in promoting active engagement and comprehensive mastery of cognitive, affective, and psychomotor domains, which are critical in midwifery education ([Ljungblad et al., 2025](#)).

In contrast, SGD stands out as a preferred alternative because it fosters intensive and focused interaction in small groups, offering advantages over extensive class discussions or broader project-based learning models. Studies have shown that SGD effectively enhances academic performance, improves writing skills through active discussion and idea exchange, and increases student participation and deep content comprehension within Student Centered Learning frameworks ([Gantino et al., 2020](#)). Furthermore, evidence indicates that implementing SGD significantly improves midwifery students' knowledge scores compared

to traditional lecture methods, reinforcing its relevance as an effective pedagogical strategy for competency-based education (Ulfah et al., 2021).

In addition to enhancing subject comprehension, SGD also contributes to the development of professional attitudes, improved communication skills, and a sense of responsibility within learning groups (Lozano et al., 2022). Even in the context of online learning, this method remains effective in maintaining attendance, encouraging active participation, and supporting students' academic achievement (Erawan & Basar, 2023). The dynamic interaction among group members through SGD also fosters greater learning enthusiasm and deeper conceptual understanding (Awaliah, 2024). Overall, these findings suggest that SGD provides consistent and complementary contributions to the cognitive, affective, and social dimensions of midwifery students, thereby reinforcing its relevance as a holistic and contextual approach to learning in midwifery education.

Midwifery education positions students as active learners who are expected not only to master technical skills but also to develop a reflective capacity and autonomy in clinical decision-making (Tierney et al., 2023). To support the achievement of these competencies, various contextual learning approaches have been implemented, such as extended field practice and interprofessional simulations, which significantly shape the professional identity of future midwives (Baird et al., 2022; Lee et al., 2022). With the growing demands of clinical practice, technology-based innovations such as web-based learning and clinical mentoring programs have also proven effective in enhancing students' readiness for practice and building their confidence (Stefaniak & Dmoch-Gajzlerska, 2020). In line with these trends, the application of active and collaborative learning models, such as blended approaches integrating structured clinical examinations, has also been shown to improve midwifery students' communication skills and clinical competencies (Susanti & Mandiri, 2024). These studies generally indicate that integrating contextual, technology-based, and participatory approaches is a strategic combination that can comprehensively shape students' professional competencies.

The learning outcomes of midwifery students reflect the extent to which they have successfully comprehended the material, developed clinical skills, and expressed satisfaction with the learning process. More broadly, learning outcomes encompass students' abilities to formulate clinical questions, evaluate scientific evidence, and apply it ethically in professional practice (Dolezel et al., 2021). Other studies classify these learning outcomes into five main domains: the use of evidence in clinical practice, evidence search and analysis skills, ethical application and reflection, interprofessional collaboration, and the integration of evidence into healthcare (Redmond et al., 2024). Meanwhile, learning outcomes in digital contexts also take into account factors such as online learning infrastructure, collaboration, and access to electronic facilities.

To effectively achieve the desired learning outcomes, learning strategies should go beyond merely transferring knowledge. They must also facilitate the development of clinical skills and foster students' professional attitudes. One method that has been widely recognized for meeting both of these needs is the Small Group Discussion (SGD) approach. This method is considered effective in creating an interactive learning environment and encouraging active student participation in constructing shared understanding, especially in competency-based education such as midwifery (Gantino et al., 2020). Through SGD, students are encouraged

to be more engaged in the learning process, exchange ideas, and develop critical thinking and collaborative skills that are essential in midwifery practice. Therefore, it is important to revisit the role of SGD in midwifery education, particularly in supporting the comprehensive achievement of learning outcomes.

Although the SGD method has been widely applied and studied across various educational fields, specific research on its effectiveness within Indonesian midwifery education remains limited. Existing studies indicate that SGD can enhance students' knowledge and active engagement, yet most of them do not explicitly focus on the midwifery context in Indonesia. However, most findings still focus predominantly on strengthening the cognitive domain (Erawan & Basar, 2023). In reality, successful learning in midwifery education should encompass balanced achievements across cognitive, affective, and psychomotor domains, as the profession requires mastery of theory, practical skills, and the development of a comprehensive professional attitude (Ulfah et al., 2021).

Furthermore, the importance of supporting the effectiveness of discussion-based learning methods such as SGD is also highlighted in several studies that emphasize the benefits of this approach within the context of integrated curricula and contextual learning in midwifery education (Susanti et al., 2024). This approach has the potential to address the limitations of previous studies that have focused solely on cognitive aspects by demonstrating that SGD can also meaningfully support the achievement of affective and psychomotor domains. Students are divided into small groups to actively discuss the material, allowing for more intensive interaction among them as they build a shared understanding (Sobirin & Suryani, 2022).

Through the discussion-based learning process conducted in small groups, learning becomes not merely one-directional. However, it cultivates the essential components of activeness, collaboration, and reflection, which are crucial for developing professional attitudes and interpersonal skills. These interactions foster a participatory and reflective learning environment, thereby supporting the comprehensive development of competencies (Ashiela et al., 2023). This aligns with the demands of midwifery education, which requires not only theoretical mastery but also practical skills and the ability to make independent clinical decisions.

Discussion, problem-solving, and active student participation are key elements proven to enhance learning outcomes, and these principles form the foundation of the Small Group Discussion (SGD) approach (Nicahya et al., 2023). Therefore, the SGD approach holds strong potential to address the challenges of modern midwifery education, which demands the holistic achievement of professional competencies. Previous studies have demonstrated that SGD is effective in enhancing students' learning outcomes across various domains, including cognitive, affective, and psychomotor aspects (Lin et al., 2022). Furthermore, SGD has been shown to enhance communication, collaboration, and critical thinking skills (Darmayani, 2023; Kurniawan et al., 2023). Therefore, integrating SGD into midwifery education curricula is highly recommended to enhance students' professional readiness and preparedness.

The problem addressed in this study stems from the limited research specifically exploring the effectiveness of the SGD method in midwifery education, particularly in improving students' holistic learning outcomes across cognitive, affective, and psychomotor domains. Although this method has been widely applied in various fields of education, empirical

evidence on its contribution to achieving midwifery students' competencies in Indonesia remains scarce. Furthermore, most previous research has predominantly focused on cognitive aspects alone, without integrating holistic learning outcomes. Thus, the objective of this article review is to analyze the role of the SGD method in enhancing the holistic learning outcomes of midwifery students, encompassing cognitive, affective, and psychomotor domains.

LITERATURE REVIEW

Small Group Discussion (SGD) versus Conventional Learning in Midwifery Education

In midwifery education, the development of both theoretical knowledge and practical skills is crucial in preparing students for the demands of clinical practice. Active learning strategies, particularly SGD, have been widely recognized for their role in enhancing knowledge acquisition, critical thinking, and collaborative skills among students. Theoretically, SGD is grounded in the principles of constructivist learning, which emphasize the importance of interaction, dialogue, and collaborative problem solving as pathways to deeper understanding. Unlike conventional lecture-based methods, which predominantly target the cognitive domain through passive information transfer, SGD actively engages students in constructing knowledge through peer discussion and shared inquiry. This approach fosters not only cognitive mastery but also supports the development of affective and psychomotor competencies critical for midwifery practice (Ulfah et al., 2021).

Empirical studies consistently affirm the effectiveness of SGD in enhancing learning outcomes. For example, both online and offline implementations of SGD have demonstrated improvements in students' academic performance, underscoring the method's adaptability across different educational platforms (Wahyuni & Syahriyanti, 2021). Furthermore, Efthymiou and Sidiropoulos (2023) in "*Team-Based Learning: Enhancing Student Engagement and Learning Outcomes*" show comparative analyses between SGD and other active learning methods, such as Team-Based Learning (TBL), reveal that SGD effectively cultivates key competencies such as critical thinking, problem-solving, and communication skills, skills that are indispensable for clinical decision making and patient-centered care.

The integration of SGD within midwifery curricula is consistent with broader trends in health education, which increasingly emphasize student-centered learning to foster comprehensive competency development. Strategies such as Problem-Based Learning (PBL), Role-Play, Team-Based Learning (TBL), and Simulation-Based Guided Learning (SGD) are commonly implemented to ensure that students not only possess robust theoretical knowledge but also demonstrate clinical proficiency and interpersonal competence (Ningsih et al., 2022; Safinatunnaja & Mawaddah, 2024). Given these theoretical foundations and empirical findings, the use of SGD emerges as a strategic pedagogical choice for midwifery education, aligning with the overarching goal of producing competent, reflective, and adaptable healthcare professionals who are ready to meet the dynamic needs of modern healthcare systems.

The Implementation of Small Group Discussion (SGD) in Preparing Midwifery Students for Competency Exams

SGD is recognized as an active learning approach that places students at the center of the learning process through interactive discussions and collaborative engagement. Grounded in constructivist learning theory, SGD enables learners to build their knowledge independently by exploring clinical cases, articulating opinions, posing questions, and working collaboratively with peers. This dynamic interaction promotes not only a deeper understanding of clinical materials but also the development of critical professional competencies, such as critical thinking, communication, and teamwork—skills that are essential for success in competency-based assessments (Hastie & Barclay, 2021).

In midwifery education, the ability to integrate theoretical knowledge with clinical reasoning and interpersonal communication is crucial. The SGD method facilitates this integration by creating an environment that encourages active participation and peer-to-peer learning. Through discussion sessions, students become more engaged, develop better conceptual grasp, and enhance their readiness for practical examinations. Evidence from various studies suggests that the implementation of SGD leads to significant improvements in post-test performance, underscoring its positive impact on academic achievement and examination preparedness (Darmayani, 2023).

Moreover, the flexibility of SGD enables its practical application across various learning platforms. Whether delivered through face-to-face (offline) settings or online modalities, SGD consistently facilitates learning outcomes by fostering interaction, reflection, and group cohesion. Although offline sessions may offer enhanced direct interaction and stronger group dynamics, studies suggest that both online and offline implementations effectively improve try-out scores in competency examinations (Wahyuni & Syahriyanti, 2021). This adaptability is particularly relevant in contemporary midwifery education, where hybrid learning environments are becoming increasingly prevalent.

Significantly, SGD also facilitates discussions on sensitive and complex topics, such as reproductive health, in a more open and supportive environment. This setting enables students to develop the empathy, professional ethics, and emotional intelligence components essential for providing comprehensive midwifery care (Rahmawati & Elsanti, 2020). By engaging students in reflective and critical dialogues, SGD promotes the comprehensive development of both cognitive and affective domains. Overall, the literature highlights that integrating SGD systematically into competency test guidance programs can significantly enhance students' academic performance, critical thinking, communication abilities, and professional readiness. Its focus on active learning, meaningful engagement, and collaborative problem-solving positions SGD as a strategic approach for producing competent and adaptive midwifery graduates prepared to meet the demands of modern healthcare services.

The Effectiveness of Small Group Discussions (SGD) in Health Education

Active learning methods have become increasingly prioritized in midwifery education, aiming not only to strengthen students' theoretical knowledge but also to foster the development of

essential professional competencies. Responding to the growing complexity and collaborative nature of healthcare services, educational strategies that promote critical thinking, effective communication, and teamwork are urgently required. Among these, the SGD method has emerged as a particularly effective approach, emphasizing active student engagement through structured small-group interactions. By encouraging collaborative exploration of clinical cases, idea exchange, and joint knowledge construction, SGD supports the creation of student-centered learning environments that enhance both academic and professional development (Hastie & Barclay, 2021).

In terms of cognitive development, SGD has been shown to improve students' comprehension and retention of complex material significantly. Compared to traditional lecture-based approaches, students participating in SGD consistently demonstrate higher levels of conceptual mastery, attributed to the deeper cognitive processing involved in active engagement. The interactive nature of SGD enables learners to actively reconstruct knowledge actively, facilitating improved academic performance and enhanced long-term retention. This process aligns with the principles of the ICAP framework, which recognizes that interactive and constructive activities produce higher-quality learning outcomes and deeper cognitive engagement (El-Mansy et al., 2022).

Beyond cognitive outcomes, SGD plays a crucial role in developing essential soft skills necessary for professional practice. Active participation in small-group discussions promotes the development of critical thinking, communication, and teamwork skills that are essential for effective healthcare delivery (Rahmawati & Elsanti, 2020). Through structured interactions, students not only internalize theoretical concepts but also enhance interpersonal competencies such as empathy, negotiation, and collaborative problem-solving, which are vital for interdisciplinary clinical work.

The relevance of SGD to midwifery education is further underscored by its potential to prepare students for the dynamic, interdisciplinary, and patient-centered nature of modern clinical environments. By engaging students in active, collaborative learning experiences, SGD bridges the gap between theoretical learning and professional practice (Wahyuni & Syahriyanti, 2021). Therefore, systematically integrating SGD into midwifery curricula is essential. It addresses the dual goals of enhancing cognitive academic outcomes and developing critical professional skills, equipping graduates with the competencies necessary to navigate the evolving challenges of contemporary healthcare practice.

Effectiveness of the lecture method and small group discussion on reproductive health

The selection of practical learning methods is fundamental to enhancing student learning outcomes, particularly within the context of midwifery education. Conventional methods, such as lectures, although efficient for delivering large volumes of information, often fall short in fostering active engagement, critical thinking, and problem-solving abilities among students. These limitations underscore the urgent need for alternative strategies that actively involve students in constructing their understanding. SGD emerges as a promising alternative by creating interactive learning environments that encourage participation, collaboration, and deeper conceptual engagement (Rahmawati & Elsanti, 2020).

SGD facilitates cognitive engagement by promoting structured dialogue, idea exchange, and collaborative problem-solving among students. Through these mechanisms, students are encouraged to question assumptions, synthesize information, and collectively construct new knowledge, leading to enhanced comprehension and skill acquisition. In health education contexts, where critical thinking and sensitivity are crucial, such as in reproductive health education, SGD has been shown to improve learning outcomes and student engagement significantly (Gantino et al., 2020). This evidence highlights SGD's effectiveness not only in content delivery but also in fostering higher-order thinking skills, which are essential for healthcare professions.

The theoretical foundations supporting SGD are deeply rooted in active learning frameworks, particularly constructivist learning theory, which emphasizes that meaningful learning occurs through active student-centered interaction and collaborative knowledge construction. Studies consistently demonstrate that when learners engage actively through discussion and peer interaction, they achieve deeper conceptual understanding, develop critical thinking abilities, and acquire communication skills essential for professional practice. In the specific context of midwifery education, where the ability to work in interdisciplinary teams and communicate effectively with patients and colleagues is paramount, the systematic integration of SGD into the curriculum represents a strategic approach to producing graduates equipped for the dynamic demands of contemporary clinical environments (Hidayat et al., 2023).

METHODS

This study employs a Systematic Literature Review (SLR) to assess the effectiveness of the Small Group Discussion (SGD) method in enhancing the learning outcomes of midwifery students.

Research Question

The review aimed to answer "What is the role of the Small Group Discussion (SGD) method in enhancing the learning outcomes of midwifery students, specifically in the cognitive, affective, and psychomotor domains?"

Data Sources

Articles were retrieved from four academic databases: Scopus, PubMed, Google Scholar, and ScienceDirect. The search was limited to peer-reviewed articles published between 2020-2025, in English or Bahasa Indonesia, focusing on the application of SGD in midwifery education or health-related fields.

Search Strategy

A search strategy using Boolean operators (AND, OR) was applied to combine search terms. Keywords used included "Small Group Discussion" AND "midwifery students", "SGD method" AND "learning outcomes", "active learning" AND "competency-based education".

Inclusion Criteria

Inclusion criteria included:

1. Empirical studies exploring the role of SGD in midwifery students' learning outcomes
2. Studies reporting measurable learning outcomes in cognitive, affective, and psychomotor domains
3. Peer-reviewed journal articles in English or Bahasa Indonesia
4. Published between 2020-2025

Exclusion Criteria

Exclusion criteria included

1. Conceptual papers or opinion articles without empirical data
2. Literature not focused on midwifery or health education
3. Studies without clear learning outcome measures

Screening and Selection

Titles and abstracts were screened for relevance. Full-texts were then reviewed to confirm eligibility. The PRISMA flow diagram was used to document the selection process. The article selection process in this study follows the procedures recommended by PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses). The search began with a review of articles in four primary databases: Scopus, PubMed, Google Scholar, and ScienceDirect, covering a publication date range of 2020 to 2025. Relevant articles were then selected based on inclusion criteria, such as those related to Small Group Discussion (SGD) in midwifery education. Articles that did not meet the inclusion criteria, such as those unrelated to midwifery education or published before 2020, were excluded from the analysis. After the initial screening, the methodological quality and relevance of the articles to the research objectives were assessed. The PRISMA flow diagram was then used to document the number of articles identified, screened, and ultimately included in the literature review. This diagram provides a clear visual representation of each stage of the article selection process in this study.

Data Extraction

Extracted information included:

1. Author and year
2. Study context and design
3. SGD implementation details

4. Reported learning outcomes (cognitive, affective, psychomotor)
5. Key findings

Data Analysis

A narrative synthesis approach was used to analyze the findings. Quantitative results were tabulated and compared descriptively, while themes related to the role of SGD, its effectiveness, and pedagogical implications were identified across studies.

RESULTS AND DISCUSSION

Small Group Discussion (SGD) versus conventional Learning in Midwifery Education

The study by Ulfah et al. showed that the SGD method is significantly more effective than conventional methods in improving the knowledge of midwifery students. The average score in the SGD group increased by 1.8 points (from 6.3 to 8.1), while the conventional group only experienced a 0.7-point increase (from 6.1 to 6.8). The proportion of students categorized as having "good" knowledge was also much higher in the SGD group (47.37%) compared to the conventional group (10.52%), with the t-test showing a significant value of $p = 0.006$ (Ulfah et al., 2021).

These findings are consistent with another study, which observed that the SGD method is not only effective in improving cognitive knowledge but also in promoting active participation and emotional engagement in the learning process, even in online learning environments (Susanti & Mandiri, 2024). Additionally, these findings are supported by a synthesis of several recent studies, which show that SGD helps students develop critical thinking, problem-solving, and collaboration skills (Darmayani, 2023; Lin et al., 2022). These skills are crucial for midwifery students to meet the complex demands of clinical practice, highlighting SGD's role as an effective, student-centered learning method.

The Implementation of Small Group Discussion (SGD) in Preparing Midwifery Students for Competency Exams

The implementation of the SGD method, both online and offline, has proven effective in improving midwifery students' competency exam try-out scores. Both groups experienced significant score increases following the SGD intervention, with $p = 0.000$ in the statistical tests for each group. Although no statistically significant difference was found between the online and offline methods ($p = 0.728$), the offline group showed a slightly higher average improvement in scores. These results are consistent with recent studies that highlight the importance of the SGD method in fostering active learning, as it encourages critical thinking and deeper understanding of the material (Wahyuni & Syahriyanti, 2021).

Furthermore, studies emphasize that small group discussions contribute significantly to the development of professional competencies in midwifery students, including cognitive, communication, and collaboration skills. Interactive and constructive discussions, as seen in SGD, promote active student engagement and better prepare students for competency exams and clinical practice. Therefore, the SGD method is considered an adaptive and

effective learning strategy, applicable across various midwifery education contexts (El-Mansy et al., 2022). These findings support the claim that SGD enhances not only academic performance but also essential soft skills that are critical for future clinical practice.

The Effectiveness of Small Group Discussions (SGD) in Health Education

The implementation of the SGD method is more effective than lecture-based methods in enhancing the learning experience of medical students, particularly in understanding the principles of family medicine. Another quasi-experimental study demonstrated that while the post-test scores of the SGD group (14.77 ± 3.92) were higher than those of the lecture group (13.67 ± 4.29), the difference was not statistically significant ($p = 0.197$) (Roshni & Rahim, 2020). However, the overall learning experience median score for the SGD group was 30, significantly higher than the lecture group's score of 26 ($p < 0.001$). SGD also outperformed lectures in maintaining students' attention span, enhancing understanding, and improving memory retention of the learning material (Roshni & Rahim, 2020).

In addition, a synthesis of recent studies supports the claim that SGD's advantage extends beyond academic score improvement. SGD fosters an interactive learning environment that promotes active participation, deepens conceptual understanding, and develops collaborative skills among students. Small group discussions encourage students to enhance their communication, critical thinking, and decision-making abilities in clinical contexts (Aein et al., 2020; El-Mansy et al., 2022). Furthermore, SGD is associated with higher student satisfaction and engagement, confirming its effectiveness as a student-centered learning approach in health professions education (Roshni & Rahim, 2020). Therefore, SGD is not only an effective method for improving academic outcomes but also plays a crucial role in preparing students for real-world clinical practice by developing essential soft skills.

Effectiveness of the lecture method and small group discussion on reproductive health

This study reveals that the Small Group Discussion (SGD) method is significantly more effective than the lecture method in improving students' knowledge and attitudes regarding adolescent reproductive health. In a quasi-experimental study conducted at SMA Muhammadiyah Sokaraja, the SGD group showed an average increase in knowledge score of 14.77 points, which was higher than the 10.55-point increase in the lecture group. In terms of attitude, the SGD group also showed a greater improvement (56.65) than the lecture group (51.55), with a statistically significant difference of 5.1 points. Paired t-test and independent t-test confirmed that this difference was statistically significant ($p < 0.05$). The strength of SGD lies in its interactive and participatory nature, allowing students to engage in meaningful dialogue, deepen understanding, and form stronger connections with the subject matter (Rahmawati & Elsanti, 2020).

SGD improves critical thinking and conceptual understanding, especially for complex topics such as reproductive health (Ashiela et al., 2023). Through small-group interactions, students are more motivated to exchange ideas, clarify information, and refine their arguments in a supportive environment (Rahmawati & Elsanti, 2020). This supports the

enhancement of a deeper understanding of sensitive and complex topics, such as reproductive health.

Additionally, the SGD method has been shown to enhance individual responsibility, foster learning autonomy, and enrich the educational experience through social exploration and reflective discussions. In this context, SGD is not only cognitively relevant but also effective in shaping students' affective domain. This is evident in the increase in positive attitudes towards reproductive health among students who participated in group discussions, which was greater than that of those who only attended lectures. Overall, the synthesis of various studies indicates that the SGD method is consistently effective in enhancing conceptual understanding, improving critical thinking skills, and facilitating the development of communication and teamwork skills among students. Furthermore, this method also contributes to a more profound mastery of the material, especially in sensitive topics such as reproductive health. Therefore, this method becomes particularly important in adolescent health education, especially in the context of reproductive health education (Ashiela et al., 2023).

Discussion

The findings of this literature review confirm that the Small Group Discussion (SGD) method is consistently effective in enhancing midwifery students' learning outcomes, particularly in the cognitive, affective, and psychomotor domains. Across various studies analyzed, SGD consistently demonstrated superiority over conventional lecture methods in improving conceptual understanding, promoting active engagement, and fostering critical thinking skills (Ulfah et al., 2021; Rahmawati & Elsanti, 2020). The effectiveness of SGD is primarily attributed to its ability to create an interactive and collaborative learning environment that encourages student participation and the exchange of ideas. Unlike traditional lectures, SGD demands active involvement from each participant, thereby deepening cognitive processing and facilitating meaningful learning experiences (Gantino et al., 2020). Through active discussions, students not only retain information more effectively but are also trained to critically analyze and apply knowledge in clinical contexts, which is vital in midwifery practice (Hidayat et al., 2023).

Furthermore, the application of SGD aligns with the ICAP framework, emphasizing learning activities that are interactive and constructive, thus leading to deeper cognitive engagement and better retention of knowledge (El-Mansy et al., 2022). This model supports students in developing essential professional competencies such as critical thinking, communication, and teamwork, which are increasingly recognized as key elements of modern healthcare education (Tierney et al., 2023; Baird et al., 2022). The flexibility of SGD, whether implemented through face-to-face sessions or online platforms, further strengthens its relevance in diverse educational contexts. Studies have shown that both online and offline SGD formats significantly improve students' learning outcomes, with no substantial differences in effectiveness between the two modes (Wahyuni & Syahriyanti, 2021; Erawan & Basar, 2023). This suggests that SGD can be effectively adapted to various learning environments, supporting the continuity of education even in situations that require remote learning, such as during a pandemic. Moreover, SGD not only contributes to cognitive

achievements but also to affective development, including improvements in students' attitudes toward learning and their ability to collaborate effectively (Ashiela et al., 2023).

Active participation in small groups enhances interpersonal skills and instills a sense of responsibility, both of which are crucial for future midwives working within interdisciplinary healthcare teams (Awaliah et al., 2024). However, despite the clear benefits identified, the current body of literature still presents several limitations. Most studies predominantly focus on cognitive outcomes, while fewer explicitly measure long-term impacts on professional behavior, clinical decision-making skills, and patient care competencies. Therefore, future research should aim to conduct longitudinal studies that examine how participation in SGD influences graduates' clinical practice and professional development over time. The integration of the SGD method into midwifery education presents a promising approach for developing competent, reflective, and collaborative healthcare professionals. By systematically embedding SGD into the curriculum, educational institutions can better prepare midwifery students to meet the complex demands of modern clinical environments, ultimately improving the quality of maternal and child healthcare services.

CONCLUSION

The integration of interactive learning methods has become a key approach in enhancing the quality of education in various fields, including midwifery. This study concludes that the Small Group Discussion (SGD) method plays a significant role in enhancing the holistic learning outcomes of midwifery students, covering cognitive, affective, and psychomotor domains. Based on the research results, SGD consistently demonstrates superiority over conventional lecture methods by fostering a deeper conceptual understanding, promoting critical thinking, improving communication skills, and enhancing teamwork abilities. These competencies are crucial for preparing midwifery students to meet the complex demands of modern clinical practice. The findings align with the initial objectives of this study, which aimed to evaluate the effectiveness of SGD in improving students' holistic learning outcomes and supporting the development of critical soft skills essential for professional competence. SGD provides a dynamic, interactive, and collaborative learning environment that enhances students' readiness to work in interdisciplinary healthcare teams. Therefore, the systematic integration of the SGD method into midwifery education curricula is highly recommended to optimize students' professional preparation and ensure they are equipped to face future clinical challenges effectively.

AUTHOR'S NOTE

The author declares that there is no conflict of interest related to the publication of this article. The author affirms that the data and content of the article are free from plagiarism.

REFERENCES

- Aein, F., Hosseini, R., Naseh, L., Safdari, F., & Banaian, S. (2020). The effect of problem-solving-based interprofessional learning on critical thinking and satisfaction with learning of nursing and midwifery students. *Journal of Education and Health Promotion*, 9(1), 109-120.
- Ashiela, A., Kurniawati, D., & Palimbo, A. (2023). Pengaruh Small Group Discussion (SGD) terhadap tingkat pengetahuan siswa MAN 2 Banjarmasin tentang penggunaan antibiotik. *Jurnal Integrasi Kesehatan dan Sains*, 5(1), 27-32.
- Awaliah, F., Hasmawati, H., Wijangga, P., Halim, M. F., & Umar, N. K. (2024). Antusias belajar mahasiswa dengan model pembelajaran small group discussion di Departemen Sosiologi FISIP Unhas. *Sosmaniora: Jurnal Ilmu Sosial dan Humaniora*, 3(4), 398-408.
- Baird, K., Hastie, C. R., Stanton, P., & Gamble, J. (2022). Learning to be a midwife: Midwifery students' experiences of an extended placement within a midwifery group practice. *Women and Birth*, 35(1), 19-27.
- Darmayani, I. G. A. S. (2023). Effectiveness of Small Group Discussions (SGD) to improve learning outcome and critical thinking in medical student: A literature review. *Bali Medical Journal*, 12(1), 1179-1182.
- Dolezel, J., Zelenikova, R., Finotto, S., Mecugni, D., Patelarou, A., Panczyk, M., & Jarosova, D. (2021). Core evidence-based practice competencies and learning outcomes for European nurses: Consensus statements. *Worldviews on Evidence-Based Nursing*, 18(3), 226-233.
- El-Mansy, S. Y., Barbera, J., & Hartig, A. J. (2022). Investigating small-group cognitive engagement in general chemistry learning activities using qualitative content analysis and the ICAP framework. *Chemistry Education Research and Practice*, 23(2), 335-347.
- Erawan, A. N., & Basar, D. S. (2023). Implementation of small group discussion online on undergraduate nursing program students of STIKes Dharma Husada Bandung. *Jurnal Kesehatan STIKES Muhammadiyah Ciamis*, 10(1), 20-24.
- Gantino, R., Ruswanti, E., & Taufiqurrahman, T. (2020). Efektifitas implementasi metode ajar SCL model small group discussion. *Jurnal Ekonomi: Journal of Economic*, 11(2), 1-12.
- Hastie, C. R., & Barclay, L. (2021). Early career midwives' perception of their teamwork skills following a specifically designed, whole-of-degree educational strategy utilising groupwork assessments. *Midwifery*, 99(1), 1-37.
- Hidayat, C., Lengkana, A. S., Rohyana, A., Purwanto, D., & Rosalina, M. (2023). Motivating active learning in physical education: Critical thinking. *European Journal of Educational Research*, 12(2), 1-10.
- Imanipour, M., Ebadi, A., Monadi Ziarat, H., & Mohammadi, M. M. (2022). The effect of competency-based education on clinical performance of health care providers: A systematic review and meta-analysis. *International Journal of Nursing Practice*, 28(1), 1-31.

- Kurniawan, R., Firman, F., & Netrawati, N. (2023). Information services using the small group discussion learning method to improve students' interpersonal communication skills. *Widyagogik: Jurnal Pendidikan dan Pembelajaran Sekolah Dasar*, 10(2), 324-334.
- Lee, T., Yoon, S. W., Fernando, S., Willey, S., & Kumar, A. (2022). Blended (online and in-person) Women's Health Interprofessional Learning by Simulation (WHIPLS) for medical and midwifery students. *Australian and New Zealand Journal of Obstetrics and Gynaecology*, 62(4), 596-604.
- Lin, T. J., Kraatz, E., Ha, S. Y., Hsieh, M. Y., Glassman, M., Nagpal, M., Sallade, R., & Shin, S. (2022). Shaping classroom social experiences through collaborative small-group discussions. *British Journal of Educational Psychology*, 92(1), 131-154.
- Ljungblad, L. W., Murphy, D., & Fonkalsrud, H. E. (2025). A mixed reality for midwifery students: A qualitative study of the technology's perceived appropriateness in the classroom. *BMC Medical Education*, 25(1), 337-350.
- Lozano, A., López, R., Pereira, F. J., & Blanco Fontao, C. (2022). Impact of cooperative learning and project-based learning through emotional intelligence: A comparison of methodologies for implementing SDGs. *International Journal of Environmental Research and Public Health*, 19(24), 1-17.
- Mahfirah, A. R., & Arisona, R. D. (2022). Upaya meningkatkan motivasi belajar IPS terpadu melalui small group discussion berbasis outdoor study. *JIIPSI: Jurnal Ilmiah Ilmu Pengetahuan Sosial Indonesia*, 2(2), 1-12.
- Masnunah, M. (2020). Penerapan model pembelajaran small group discussion berbasis multimedia terhadap hasil belajar mahasiswa pada materi Sejarah Sastra. *Jurnal Didactique Bahasa Indonesia*, 1(1), 1-12.
- Nicahya, T. K. P., Wardhono, W. S., & Rokhmawati, R. I. (2023). Evaluasi hasil belajar problem-based learning pada mata pelajaran Desain Multimedia Interaktif (Studi pada siswa jurusan Multimedia Kelas XII SMKN 12 Malang). *Jurnal Pengembangan Teknologi Informasi dan Ilmu Komputer*, 7(1), 179-185.
- Ningsih, A. D., Zakiah, A., & Andriyanto, A. (2022). Pengaruh metode problem-based learning terhadap hasil belajar mata kuliah Dokumentasi Keperawatan. *Jurnal Keperawatan*, 20(4), 76-85.
- Rahmawati, K., & Elsanti, D. (2020). Efektivitas metode ceramah dan small group discussion tentang kesehatan reproduksi terhadap tingkat pengetahuan dan sikap remaja SMA Muhammadiyah Sokaraja. *Jurnal Keperawatan Muhammadiyah*, 4(3), 126-134.
- Redmond, C., Farrell, R., Cunningham, C., Dineen, A., Foley, S., O'Donnell, D., & O'Neill, E. (2024). Development of the EVIBEC learning outcomes framework to support the delivery of evidence-based practice curricula in health care professional programmes: A codesign approach. *BMC Medical Education*, 24(1), 1-12.
- Roshni, M., & Rahim, A. (2020). Small group discussions as an effective teaching-learning methodology for learning the principles of family medicine among 2nd-year MBBS students. *Journal of Family Medicine and Primary Care*, 9(5), 2248-2252.

- Safinatunnaja, B., & Mawaddah, S. (2024). Metode pembelajaran pada mahasiswa kebidanan dalam mengembangkan keterampilan komunikasi: Literature review. *Jurnal Ilmu Kesehatan dan Farmasi*, 12(1), 17-20.
- Sobirin, M., & Suryani, E. (2022). Small Group Discussion (SGD) learning model on understanding the concept of the nature of light in SD Negeri 1 Puguh. *Widyagogik: Jurnal Pendidikan dan Pembelajaran Sekolah Dasar*, 10(1), 63-75.
- Stefaniak, M., & Dmoch-Gajzlerska, E. (2020). Mentoring in the clinical training of midwifery students-a focus study of the experiences and opinions of midwifery students at the Medical University of Warsaw participating in a mentoring program. *BMC Medical Education*, 20(1), 1-9.
- Susanti, A. I., & Mandiri, A. (2024). Evaluation of antenatal care competency with Objective Structure Examination Blended Learning (OSCE-BL). *Inovasi Kurikulum*, 21(2), 595-604.
- Susanti, A. I., Nurparidah, R., & Mandiri, A. (2024). Evaluation of problem-based learning models in the integrated midwifery curriculum. *Inovasi Kurikulum*, 21(1), 217-228.
- Tierney, O., Vasilevski, V., Kinsman, L., & Sweet, L. (2023). Advocacy, accountability and autonomy: The learning intention of the midwifery student continuity of care experience. *Nurse Education in Practice*, 72(1), 1-7.
- Ulfah, I. N., Dethan, R. D. A. S. S., Realita, F., & Rosyidah, H. (2021). Learning method comparison between Small-Group Discussion (SGD) and conventional to the knowledge improvement of midwifery department students. *Journal of Health Technology Assessment in Midwifery*, 4(1), 8-14.
- Wahyuni, S., & Syahriyanti, S. (2021). Efektivitas bimbingan ujian kompetensi dengan metode Small Group Discussion (SGD) online dan offline terhadap hasil nilai try out ujian kompetensi di Prodi D-IV Kebidanan Poltekkes Kemenkes Jayapura. *Intan Husada: Jurnal Ilmiah Keperawatan*, 9(1), 1-8.