

How Does Group Cohesiveness Contribute to Student Productivity and Performance?: A PRISMA Systematic Review

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Abstrak. Kohesivitas kelompok telah lama dikenal sebagai faktor penting dalam meningkatkan kinerja individu dalam berbagai konteks sosial dan pendidikan. Penelitian ini bertujuan untuk mengeksplorasi peran kohesivitas kelompok dalam meningkatkan produktivitas dan kinerja siswa. Fokus utama dari penelitian ini adalah untuk mengidentifikasi bagaimana faktor-faktor seperti kepercayaan, komunikasi, dan kesamaan tujuan kelompok berkontribusi terhadap efektivitas kelompok dalam konteks pendidikan. Penelitian ini menyajikan tinjauan literatur dengan kerangka kerja Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) untuk mensintesis temuan dari berbagai penelitian terkait yang telah dilakukan sebelumnya. Artikel-artikel yang dipilih secara kritis dianalisis untuk menggambarkan mekanisme internal dan eksternal yang mengulas peran kohesivitas kelompok terhadap produktivitas dan kinerja akademik siswa. Temuan dari penelitian ini menunjukkan bahwa kohesivitas kelompok memiliki peran yang penting dan eksploratif terhadap produktivitas dan kinerja siswa. Hasil sintesis literatur ini diharapkan dapat memberikan pemahaman yang lebih mendalam tentang bagaimana praktik manajemen kelas dan intervensi pendidikan dapat memanfaatkan kohesivitas kelompok untuk meningkatkan hasil belajar. Penelitian ini memberikan wawasan yang berharga bagi para pendidik, administrator sekolah, dan peneliti untuk mengembangkan strategi intervensi yang lebih efektif dalam meningkatkan kohesivitas kelompok di kelas dan sekolah, dengan tujuan akhir untuk meningkatkan kinerja akademik siswa dan pengalaman belajar secara keseluruhan.

Kata kunci: “kohesivitas kelompok, kinerja, siswa, produktivitas”

Abstract. Group cohesiveness has long been recognised as an important factor in enhancing individual performance in various social and educational contexts. This research aims to explore the role of group cohesiveness on improving student productivity and performance. The main focus of this research is to identify how factors such as trust, communication, and commonality of group goals contribute to group effectiveness in an educational context. This study present a literature review with Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework to synthesise the findings from various related studies that have been conducted previously. Critically selected articles were analysed to illustrate the internal and external mechanisms that review the role of group cohesiveness on students' academic productivity and performance. The findings of this study indicate that group cohesiveness has an important and explorative role on students' productivity and performance. The results of this literature synthesis are expected to provide a deeper understanding of how classroom management practices and educational interventions can utilise group cohesiveness to improve learning outcomes. This research provides valuable insights for educators, school administrators and researchers to develop more effective intervention strategies to improve group cohesiveness in classrooms and schools, with the ultimate goal of improving students' academic performance and overall learning experience.

Key word: “group cohesiveness, performance, students, productivity”

INTRODUCTION

In the contemporary academic landscape, fostering student productivity and performance remains a paramount goal for educators and institutions alike. The ability of students to effectively learn, engage, with material, and demonstrate their understanding is a cornerstone of educational success (Aulia et al., 2024). However, achieving optimal level of productivity and performance in the educational settings can be a complex endeavor, influenced by a multitude factors (Anisah et al. 2020). One of the crucial factors is including the learning environment (Javornik and Mirazchiyski, 2023). The classroom settings, teaching methods, available resources, and the relationship with people inside the setting, also have a big impact on how well students will perform and having the productivity (Ferreira et al., 2020). A supportive and engaging learning space encourages students to take part, work together and think (Aga, 2024). The Pursuit of high student productivity and performance is driven by several key considerations. Firstly, it is intrinsically linked to the overall effectiveness of the educational process. When students are productive and perform well, they acquire valuable knowledge and skills, which are essential for personal growth, future career prospects, and contributing to society (Fauzi et al., 2023). Secondly, it is vital for the success of educational institutions. Institutions strive to create learning environments that cultivate high levels of student achievement, as this enhances their reputation, attracts resources, and ultimately fulfills their mission (Irawan, 2021). Finally, individual student success is intrinsically linked to their well-being. Students who experience high levels of productivity and performance often exhibit higher self-esteem, greater confidence in their abilities, and a stronger sense of purpose (Jorge and Garrido, 2023). The academic journey is inherently characterized by collaborative learning, where group dynamics play a significant role in shaping individual and collective outcomes (Hashim et al., 2023). understanding the intricate relationship between group cohesion and students' success offers valuable insight for educators, researchers, and students themselves. students are uniquely positioned within a structured environment where group work is often mandated. this has been explain by Mc Kay and Sridharan (2023) in their research where This structure is meant to develop a range of key skills, such as communication,

empathy, teamwork, conflict resolution, leadership, and self-management. These skills are highly sought after by employers, recruiters, and other stakeholders in the globalized, technology-enhanced world of work. Collaborative group work (CGW) is seen as a powerful tool in education to enhance student engagement and learning. It is also considered responsive to the demands of accreditation bodies to make education more relevant and responsive in terms of the learning environment. From classroom projects to extracurricular activities, students are regularly immersed in collaborative settings. This provides a controlled environment for studying the effects of group cohesiveness. Students serve as ideal subjects because of their involvement in structured group activities, quantifiable academic achievements, and diverse individual characteristics provide a fertile ground for exploring the complex dynamics of collaborative learning and its impact on individual and collective success.

Group cohesiveness is a multifaceted construct that refers to the forces that bind members together in a group, fostering a sense of belonging, unity, and shared purpose (Lee, 2020). It is the degree to which members of a group feel attracted to each other and motivated to remain part of the group. Group cohesiveness is influenced by several key factors. One major element is the attraction and liking among members; individuals in a cohesive group typically enjoy each other's company and find each other likable. Shared values, interests, and personalities often play a significant role in this mutual attraction (Nowack and Schoderer, 2020). Another important factor is having shared goals and purposes (Gu and Xue, 2022). When group members work towards a common objective, it enhances their sense of unity and commitment. Accomplishing shared goals fosters a collective sense of pride and accomplishment, further bonding the group. Group norms and values also play a crucial role in fostering cohesiveness (Sidorenkov and Borokhovski, 2023). Cohesive groups tend to develop shared norms and values that guide their behavior and interactions, promoting cooperation, mutual support, and a sense of belonging (He, 2023). External challenges or threats can also boost group cohesiveness, as members come together to face and overcome these adversities (Lang et al., 2021). The level of group cohesiveness can significantly impact group dynamics and performance. High cohesiveness often leads to better communication and

cooperation, with members more likely to engage openly and effectively, resulting in improved collaboration and problem-solving (Ganotice Jr. et al., 2022). This cohesiveness also enhances motivation and commitment, as members feel valued and connected, driving them to work harder and contribute more (Layaman et al., 2021).

In the context of educational environments, the concept of cohesion has been linked to the creation of more conducive classroom environments and improved student attendance (Thornton, 2019). However, there is a relatively limited scope of research exploring the impact of group cohesion on the productivity and performance of the student. Thornton et al. (2020) found that attendance, a key factor in student productivity, was linked to overall cohesion, with a stronger correlation in the second semester. This shows that cohesion develops over time. However, there was no significant correlation between cohesion and other performance measures such as retention, achievement, and overall success. These findings clearly show that while fostering group cohesion may improve student productivity by increasing attendance, its direct impact on broader performance measures remains unclear. Fortunately, that research also has been supported by Sidorenkov and Borokhovski (2023) which gives a more detailed picture about the relationship between group cohesion and the productivity and performance of students in groups. The results of the study suggest that group cohesion has a significant impact on productivity and performance, but this relationship varies depending on whether it is examined at the subgroup or the overall group level. For informal subgroups within larger work groups, high cohesion positively correlates with the implementation of plans and current tasks, as assessed by group leaders. This is because informal subgroups tend to exhibit stronger mutual responsibility and understanding, which enhances coordination and motivation. Therefore, the higher the cohesion within these subgroups, the more positively the productivity norms influence their performance. Conversely, no significant relationship was found between productivity norms and performance effectiveness at the larger group level. This discrepancy might be due to the stronger cohesion and productivity norms within subgroups compared to the entire group, leading to better performance outcomes in smaller, cohesive units rather than the broader group.

Based on these explanations, This research aims to explore the role of group cohesiveness on improving student productivity and performance. The main focus of this research is to identify how factors such as trust, communication, and commonality of group goals contribute to group effectiveness in an educational context. By using A PRISMA Systematic Review, we will synthesise the findings from various related studies that have been conducted previously.

METHODS

In July 2024, the research team used the PRISMA framework to search for publications in Scopus, PubMed, and Taylor and Francis indexed journals that met the following inclusion criteria: (1) the population was students, (2) the intervention used group cohesiveness, (3) the outcome was productivity, (4) publications in the last five years (2019-2024), and (4) English language. Keywords were obtained based on the general terminology of PICOT questions (population, intervention, comparison, outcome, and time).

Search Strategy and Selection Process

The research team conducted an initial search using Scopus, PubMed, and Taylor and Francis databases to determine the number of publications that met the inclusion criteria before screening for duplicates and conducting post-identification exclusion and inclusion phase screening. The research team used Mendeley reference management software to manage bibliographic data and related research materials.

However, the research team had limited access to articles, so they re-screened articles that were fully open access. These limitations allowed for a minimum of articles to be reviewed in the research. The principal investigators, Galuh Nadhita and Heru Mugiarto, organised the articles found through Scopus, PubMed, and Taylor and Francis databases based on thematic analysis, examining the abstracts of all included articles. After evaluating the main themes and relevance of the articles, they synthesised the content and findings of the full articles into thematic groups based on the relevant details of each article.

RESULT AND DISCUSSION

Result

Completing the screening process outlined in the PRISMA diagram for publications found through the Scopus, PubMed, and Taylor and Francis databases resulted in 19 articles eligible for inclusion in this study; using the same screening process, publications found in Scopus resulted in 155 articles eligible for inclusion, PubMed 15 articles, and Taylor and Francis 100 articles (Figure 1). Each included article is identified in the bibliography of this paper with an asterisk (*).

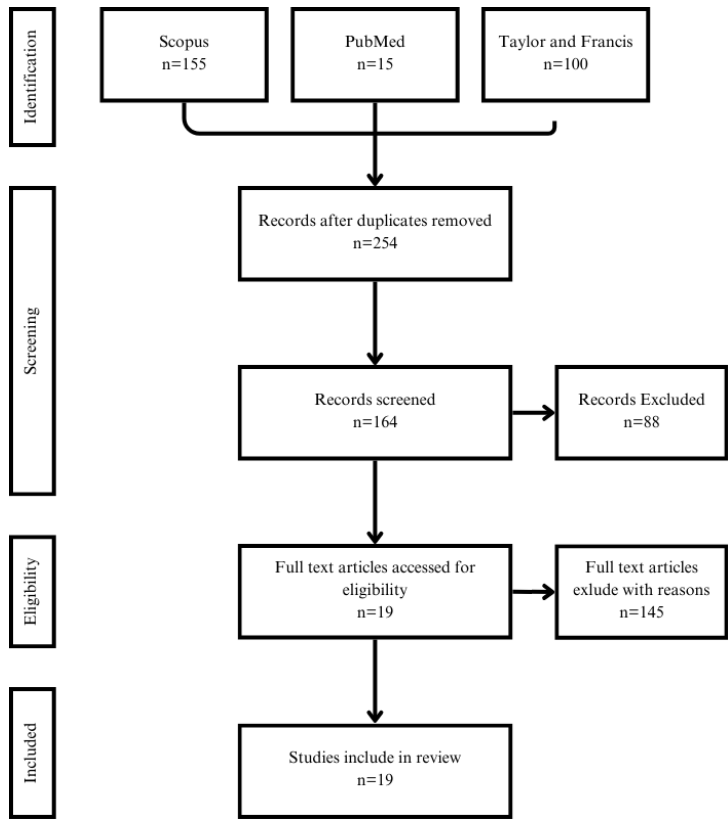


Figure 1 Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) diagram

Overall, the articles included in this study demonstrate the important role of group cohesiveness and collaborative activities in improving student productivity and performance across a range of educational contexts. When analysed further, there were several sub-themes in the selected articles. The first sub-theme is Socio-Emotional and Creative Skills Development (n=4; 21%) which focuses on developing socio-emotional skills and creativity through collaborative interactions and the use of educational

strategies such as music and emotional literacy programmes. Next, Group Cohesiveness and Collaborative Learning (10=; 53%) highlighted the importance of group dynamics, constructive argumentation and teamwork in enhancing independent learning and collective creativity. The third sub-theme was Community and Social Responsibility (5=; 26%) with articles emphasising the benefits of participation in social responsibility projects and communities of practice, which promote personal and professional growth, as well as scientific productivity.

Social-Emotional and Creative Skills Development

Various collaborative programmes and interactions in the field of basic education, especially those involving music and creativity, have been shown to be effective in improving students' social-emotional and creative skills. The Emotional Literacy Programme (ELP) and Creative Thinking Development (Flow) in particular make a positive contribution in creating a better classroom environment. In addition, collaborative interaction and music play an important role in developing social skills and creative engagement, especially in children with ASD. However, further research with larger sample sizes and more in-depth explorations are needed to fully understand the impact and long-term effectiveness of these approaches.

Group Cohesiveness and Collaborative Learning

Group cohesiveness and collaborative learning have a significant impact on learning dynamics and student creativity. Positive group dynamics and emotional openness support independent learning, while constructive disagreement in creative discussions can stimulate new ideas. Teamwork in the context of arts and crafts education encourages collective creativity and effective dialogue, which are important in a variety of professional contexts. Team interaction training also showed significant benefits in improving educational understanding and practice among university students. Limitations of the study include the small sample size and potential bias, but the findings still provide valuable insights for the development of effective learning strategies.

Community and Social Responsibility

Participation in university social responsibility (USR) projects and building communities of practice (CoP) has a positive impact on personal, academic and

professional development. USR projects promote students' empowerment, civic awareness and multi-faceted development. Meanwhile, CoPs in medical education environments enhance productivity and mentorship, and play an important role in scientific development with a focus on impactful research.

Discussion

Results and discussion are combined in one part. It contains: The results of the findings to answer the research objectives, Figure and table should be clear and the description must be concise and clear, Discussion must reveal the in depth analysis of the obtained results it is critically and in-depth synthesis accompanied by proof of evidence related latest references, Explain the novelty of your research, The benefits and contribution of research for the science/society.

Group Cohesion

Group cohesion refers to the bonds that connect members of a group, fostering unity and a sense of belonging. This is reinforced by a statement from Christensen et al. (2021) that Group cohesion refers to a sense of belonging, mutual support, and identification with other group members. Group harmony has been associated with better outcomes, lower exit rates, more interpersonal support, and better participation in psychotherapy. This concept is fundamental in educational settings as it directly impacts the effectiveness of group work, peer interactions, and the overall learning environment. A cohesive group environment can significantly enhance students' academic experiences by providing emotional support, facilitating collaboration, and promoting a sense of community. When students feel connected to their peers and their classroom, they are more likely to engage actively in learning activities and contribute positively to group tasks. Lourenço et al. (2020) examined how programs like the Emotional Literacy Program (ELP) and the Creative Thinking Development Program (Flow) enhance socio-emotional and creative skills among students. The study highlighted that students who participated in these programs exhibited higher levels of emotional intelligence and creativity, contributing to stronger group bonds and a more cohesive learning environment. Furthermore, Woezik et al. (2021) proved that cohesive group dynamics marked by candor and clear communication play a key role in effective self-directed

learning. Their research showed that these dynamics have an impact on critical thinking and problem-solving, which leads to better productivity and results. The study wrapped up by stating that strong group unity is vital to get the most out of SDL, as it fosters a helpful and team-oriented learning setting.

The findings from these studies show that structured programs and activities have a big impact on building group unity in schools. Using things like social-emotional learning, music activities, or setting up Communities of Practice helps students and teachers feel like they belong and are part of a team. This is key to creating a learning environment where everyone supports and works together. When groups are more connected, it doesn't just make things run smoother - it also sets the stage for better learning experiences and outcomes (Yoon et al., 2021).

Student Productivity and Performance

Students' productivity and performance are key indicators of educational success, shaped by factors such as personal motivation, group dynamics, and the learning environment. The evolution of classrooms towards active learning is increasingly integral to a comprehensive educational approach, encouraging student involvement and engagement in the learning process (Qureshi et al., 2021). In education, productivity refers to how efficiently and effectively students complete their academic tasks and meet their learning objectives. Performance, however, usually pertains to the results of these efforts, including grades, test scores, and overall academic achievement. Recognizing the elements that impact productivity and performance enables educators to create interventions and strategies to enhance student success. Kim et al. (2021) examined how different group contingency interventions have an impact on physical activity. The study looked at how dependent group contingencies, which create a feeling of responsibility and peer pressure, can boost target achievements and group unity. The findings showed these contingencies made overall performance better by pushing students to work as a team for shared goals. The research pointed out that structured group interventions work well to improve both individual and group performance. As well as the research from Sibero et al. (2023) which studied about how different types of arguments in group talks affect creative output. They looked at college students from

National Cheng Kung University and Singapore University of Social Sciences working on a creative project. They used the Conversational Argument Coding Scheme (CACS) and Lag-Sequential Analysis (LSA) to examine the students' talks and group argumentative behaviors. The study showed that helpful challenges in talks boost idea creation and overall creativity making groups more productive. These challenges when given in a supportive and team-like way, push group members to think harder and come up with new ideas. On the flip side, objections and negative interactions hurt the group's creative work causing fights and stopping good talks. This research shows how important it is to create a positive arguing space where helpful challenges are welcome, and negative objections are kept low. Such a space not only improves creative output but also makes students more productive and perform better by helping good talk and teamwork in groups.

The research shows how group dynamics have a big impact on how well students work and perform. Whether students argue, learn on their own, or follow set group rules, the way they interact in a group plays a key part in their educational results. It became clear that "active learning" encompasses a diverse range of concepts, including psychological and social constructs, instructional pedagogies, strategies, and design principles. Therefore, we recognized the need for focus and clarity (Lombardi et al., 2021). These discoveries highlight how crucial it is to create positive group dynamics and supportive settings to boost student productivity and performance.

The Contribution of Group Cohesiveness to Students Productivity and Performance

The relationship between group cohesion and student productivity and performance is complex and involves many factors. Cohesive groups typically show increased levels of collaboration, support, and shared objectives, which positively impact both individual and group outcomes (Grossman et al., 2021). When students feel a strong sense of belonging and connection with their peers, they are more inclined to actively engage in group activities, exchange ideas, and support each other's learning. This nurturing environment not only boosts individual academic performance but also enhances the overall productivity and success of the group (Mutonyi et al., 2021). According to a study by Legendre (2020) was used to show that those group cohesiveness

enhance musical activities boosts productivity in teams, the manner in which decisions are made and ultimately results achieved. The research also noted that the positive correlation with social and creative sub-dimensions seem to put a premium on cohesiveness for the accomplishment of set educational goals. From the study, the facilitators were able to learn that creative and collaborative exercises build group cohesiveness and hence, increase productivity and achievement rates among the learners. the study from Jones et al. (2022) have also provided an example how the establishment of the Community of Practice supports group identification that, in its turn, contributes to the improvement of the group performance and productivity by sharing research activities and knowledge mentoring. The CoP, in its structure and supportiveness, was identified by the researchers as highly valuable in the attainment of higher academic and professional goals. It also recommended that, coordinators of academic activities should promote group harmony in their various institutions as this will result in improved productivity and performance.

In the various studies done, the connection between group cohesiveness and effectiveness and output or efficiency of the students is clear. A review of the literature confirms the work-related benefits of group cohesiveness, defined by warmth or positivity in the interactions between the members and the presence of a collective purpose. By enhancing the group cohesiveness through social and emotional development, as well as creative purposes alongside the kind creativity which involves group interactions and communications, it will be possible for the educators to get the necessary settings which will promote the students as well as enhance their performance and achievements.

CONCLUSION

Group cohesiveness plays an important role in improving student productivity and performance by creating a supportive and collaborative learning environment. The use of programmes and interventions designed to enhance social-emotional skills and creativity can help strengthen group bonds, which in turn improve student learning outcomes and academic experiences. This research provides valuable insights for

educators, school administrators and researchers to develop more effective intervention strategies to improve group cohesiveness in classrooms and schools.

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