

# Impact of Social Environment on Cognitive Abilities and Learning Outcomes in Bugis Bridal Make-Up Training

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## Abstract

Bugis bridal make-up is a traditional art form requiring specialized training to master its intricate techniques. Understanding the factors that influence learning outcomes in this field is crucial. Cognitive abilities and the social environment play significant roles in educational success, yet their impact on Bugis bridal make-up training remains underexplored. This study aims to examine the impact of the social environment on cognitive abilities and learning outcomes in Bugis bridal make-up training. A mixed-methods approach was utilized, involving quantitative surveys and qualitative interviews with 150 trainees from various training centers. Data were collected on participants' cognitive abilities, perceived social support, and learning outcomes. Statistical analyses were conducted to identify significant relationships, and thematic analysis was used to interpret qualitative data. The findings reveal a positive correlation between a supportive social environment and enhanced cognitive abilities, which in turn significantly improve learning outcomes in Bugis bridal make-up training. Trainees who reported higher levels of social support demonstrated better cognitive performance and achieved higher proficiency in make-up skills.

**Keywords:** *Social Environment; Cognitive ability; Learning outcome; Bugis Bridal Make-up.*

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## Introduction

Bugis bridal makeup in Indonesia is a traditional and culturally significant practice that involves intricate designs and techniques passed down through generations. Learning Bugis bridal make-up goes beyond technical skills; it requires a deep understanding of both the artistic and cultural aspects (Untara & Rahayu, 2021). The effectiveness of training programs for Bugis bridal make-up is influenced by various factors, including cognitive abilities and the social environment in which the learning takes place (Sabet et al., 2021). Studies have shown that training programs, such as bridal makeup training, can significantly impact participants' economic and social positions in the community, leading to improvements in their livelihoods (Bilad, 2018). Additionally, the courage shown by participants in deciding to open businesses in bridal makeup indicates their ability to analyze various conditions and make informed decisions based on available information (Habiby & Wening, 2019).

Moreover, the concept of scaffolding, which refers to the support provided by the environment in acquiring new abilities, plays a crucial role in the learning process (Ghiglino et al., 2023). Creating a conducive social environment and providing quality training are essential for the success and satisfaction of students in their learning experiences (Nettasinghe & Samarasinghe, 2018). Furthermore, the use of social simulations and social cognitive skills training can enhance leadership skills and decision-making in complex and turbulent environments (Fraser et al., 2011; Hunsaker, 2007). Bugis bridal make-up training is not just about acquiring technical skills but also about immersing oneself in Indonesia's cultural and artistic heritage. By considering cognitive abilities, social environments, and effective training

programs, individuals can develop a deep understanding of Bugis bridal make-up and contribute to preserving this traditional practice for future generations.

The social environment, encompassing peer support, instructor-student relationships, and the overall learning atmosphere, plays a vital role in educational settings. It can significantly impact cognitive development and, consequently, learning outcomes. In Bugis bridal make-up training, understanding how these social factors interact with cognitive abilities can provide valuable insights for improving training methodologies and outcomes. In Bugis bridal make-up training, the quality of the learning environment is essential for the delivery of effective training programs (Nettasinghe & Samarasinghe, 2018). Providing a supportive and engaging learning environment that encourages creativity, critical thinking, and cultural appreciation can enhance the overall learning experience for participants. By incorporating elements of psycho-social learning environments, Bugis bridal make-up training programs can promote student achievement, satisfaction, and success (Nettasinghe & Samarasinghe, 2018).

Additionally, the concept of artificial scaffolding, which involves using external support to enhance cognitive capabilities, can be applied to Bugis bridal make-up training (Ghiglinio et al., 2023). By leveraging technological advancements and social simulations, trainers can augment social cognition and support learners as they acquire new skills and knowledge. Integrating artificial scaffolding techniques into Bugis bridal make-up training can enhance the learning process and facilitate the transfer of knowledge from trainers to trainees (Guo et al., 2023). Exploring the interplay between social environments, cognitive abilities, and learning outcomes in Bugis bridal make-up training is essential for advancing our understanding of how traditional arts education can be optimized. By considering the impact of social interactions, cognitive profiles, and learning environments, trainers and educators can design more effective and culturally immersive programs that empower individuals to preserve and perpetuate the rich heritage of Bugis bridal makeup in Indonesia.

Despite the recognized importance of social environments and cognitive abilities in educational success, there is a paucity of research specifically examining their impact on learning outcomes in traditional arts education. This study addresses this gap by investigating the relationship between social environment, cognitive abilities, and learning outcomes in Bugis bridal make-up training. This study aims to:

1. Investigate the impact of the social environment on cognitive abilities in Bugis bridal make-up training.
2. Examine the relationship between cognitive abilities and learning outcomes in Bugis bridal make-up training.
3. Identify the key social factors that influence cognitive development and educational success in this specific cultural context.

By exploring these objectives, this research seeks to provide a comprehensive understanding of how social and cognitive factors interact to shape the learning experiences and outcomes of trainees in Bugis bridal make-up programs. This study will contribute to the enhancement of training practices and the preservation of this culturally significant art form.

## **Methodology**

### **Research Design**

This study employs a mixed-methods research design, integrating both quantitative and qualitative approaches to comprehensively investigate the impact of the social environment on cognitive abilities and learning outcomes in Bugis bridal make-up training. The quantitative component involves the use of surveys to gather data on cognitive abilities, social environment, and learning outcomes. The qualitative component includes in-depth interviews to gain deeper insights into the experiences of the trainees.

## Sample

The sample consisted of 150 students enrolled in the Bugis bridal cosmetology education program at Universitas Negeri Jakarta, Indonesia. Participants were selected using purposive sampling to ensure diverse representation in terms of age, background, and level of experience in makeup. Inclusion criteria included enrolment in a formal Bugis bridal cosmetology education program and willingness to participate in the survey and interview components of the study.

## Data Collection

A structured questionnaire was developed to assess cognitive abilities, perceived social support, and learning outcomes. The cognitive abilities section included standardized tests to measure memory, attention, and problem-solving skills. The social support section utilized a Likert scale to gauge the level of support from peers, instructors, and the overall training environment. The learning outcomes section evaluated the proficiency of participants in various Bugis bridal make-up techniques. Surveys were administered during scheduled training sessions, ensuring a consistent environment for all participants. Data collection spanned three months, from January to March 2023.

Semi-structured interviews were conducted with a subset of 30 trainees selected from the survey participants. The interview guide included questions on personal experiences, perceptions of social support, challenges faced during training, and insights on how the social environment influenced their cognitive abilities and learning outcomes. Interviews were conducted in person at the training centers, each lasting approximately 45-60 minutes. All interviews were audio-recorded and transcribed verbatim for analysis.

## Data Analysis

Descriptive statistics were computed to summarize the demographic characteristics of the participants and the key variables (cognitive abilities, social support, learning outcomes). Pearson correlation analysis was conducted to examine the relationships between social support, cognitive abilities, and learning outcomes. Multiple regression analysis was employed to identify the predictive power of social environment factors on cognitive abilities and learning outcomes. The interview transcripts were analyzed using thematic analysis to identify recurring themes and patterns related to the influence of the social environment on cognitive abilities and learning outcomes. Coding was conducted in multiple stages, beginning with open coding to generate initial themes, followed by axial coding to refine and categorize the themes.

By employing a robust mixed-methods approach, this study aims to provide a comprehensive understanding of the complex interplay between social environment, cognitive abilities, and learning outcomes in Bugis bridal make-up training. The findings are expected to inform the development of more effective training programs and contribute to the preservation of this culturally significant art form.

## Results and Discussion

The study sample consisted of 150 trainees, with a mean age of 24.6 years ( $SD = 5.2$ ). The majority of participants were female (85%), with varying levels of prior experience in make-up artistry. Descriptive statistics for the main variables indicated that participants generally perceived a high level of social support ( $M = 4.2$ ,  $SD = 0.7$  on a 5-point Likert scale) and demonstrated moderate to high cognitive abilities (mean scores for memory, attention, and problem-solving skills ranged from 70 to 85 on a 100-point scale). Learning outcomes, measured by proficiency in Bugis bridal make-up techniques, showed an average score of 78 ( $SD = 10$ ). Table 1 shows the results of the data analysis.

**Table 1. Results of the data analysis**

	Score	SD	$\beta$	r	p-value
Social environment	4.2	0.7			
Learning outcome	78	10	0.47	0.5	<0.01
Cognitive ability	85		0.43	0.45	<0.01

**Impact of Social Environment:** Correlation analysis revealed significant positive relationships between perceived social support and cognitive abilities ( $r = 0.45$ ,  $p < 0.01$ ), as well as between social support and learning outcomes ( $r = 0.50$ ,  $p < 0.01$ ). Multiple regression analysis further indicated that social support was a significant predictor of both cognitive abilities ( $\beta = 0.43$ ,  $p < 0.001$ ) and learning outcomes ( $\beta = 0.47$ ,  $p < 0.001$ ), explaining 19% and 22% of the variance in these variables, respectively.

**Cognitive Abilities:** Participants with higher perceived social support demonstrated better performance on cognitive tests, particularly in memory ( $\beta = 0.35$ ,  $p < 0.01$ ) and problem-solving skills ( $\beta = 0.39$ ,  $p < 0.01$ ). Qualitative data supported these findings, with interviewees highlighting the importance of encouragement and feedback from peers and instructors in enhancing their cognitive skills.

**Learning Outcomes:** Learning outcomes were positively influenced by both cognitive abilities and social support. Regression analysis showed that cognitive abilities accounted for 25% of the variance in learning outcomes ( $\beta = 0.50$ ,  $p < 0.001$ ). Qualitative interviews revealed that participants who felt more supported and integrated within their training environment were more likely to excel in mastering Bugis bridal make-up techniques. Themes such as collaborative learning, emotional support, and a positive training atmosphere emerged as critical factors contributing to successful learning outcomes.

**Statistical Analysis:** The statistical analyses confirmed that the social environment significantly impacts both cognitive abilities and learning outcomes in Bugis bridal make-up training. The combined effect of social support and cognitive abilities explained 47% of the variance in learning outcomes ( $F(2, 147) = 65.23$ ,  $p < 0.001$ ). This underscores the importance of a supportive social environment in enhancing educational success.

#### Key Findings:

- A supportive social environment positively influences cognitive abilities and learning outcomes in Bugis bridal make-up training.
- Cognitive abilities, particularly memory and problem-solving skills, are significantly enhanced by social support.
- Learning outcomes are directly impacted by both cognitive abilities and the perceived social environment, with trainees who experience higher levels of social support achieving better proficiency in make-up techniques.

These results highlight the crucial role of the social environment in shaping cognitive development and educational outcomes in traditional arts training. The findings suggest that fostering a supportive and collaborative training atmosphere can significantly enhance both cognitive abilities and practical skills in Bugis bridal make-up artistry.

## Discussion

The findings of this study highlight the significant impact of the social environment on cognitive abilities and learning outcomes in Bugis bridal make-up education. The positive correlation between social support and cognitive abilities suggests that a supportive instruction atmosphere enhances memory, attention, and problem-solving skills among trainees. This, in turn, leads to better learning outcomes, as evidenced by the higher proficiency scores in Bugis bridal make-up techniques among those who reported stronger social support.

The significance of the social environment in educational settings has been extensively studied, with research demonstrating that social support from peers and instructors can enhance cognitive development and academic performance (Härkönen et al., 2018). These findings are particularly relevant in traditional arts education, such as Bugis bridal make-up training, where similar mechanisms of social interaction and support play a crucial role in shaping learning outcomes (Tenda et al., 2021; Wardana et al., 2022; Yuyun, 2023). Studies have highlighted the importance of social interactions and communal support in fostering sustainable development in education (Anser et al., 2020; Hori & Fujii, 2021). In the context of Bugis bridal make-up training, creating a supportive social environment that encourages collaboration, cultural exchange, and a sense of community can enhance the learning experience and contribute to the preservation of cultural heritage (Barwiński, 2019; Chin & Wang, 2021; Sustiawati et al., 2023; Wang et al., 2022). By emphasizing the role of social support systems, Bugis bridal make-up trainees can develop a deeper appreciation for the art form and strengthen their technical skills (Ariza & Olatunde-Aiyedun, 2023; Chan et al., 2023; Patelis et al., 2015).

Furthermore, research in art education has emphasized the importance of incorporating cognitive aspects into the learning process (Heaton, 2021). Moving away from traditional scientific associations, educators are recognizing the embodied nature of cognition and its impact on educational practices (An & Carr, 2017; Zhang et al., 2022). This shift in perspective acknowledges the role of affective and sensory experiences in cognitive development, highlighting the need for a holistic approach to arts education that considers both cognitive and emotional dimensions (Bonn, 2020; Sarıkaya & Coşkun, 2015).

In the realm of visual arts education, collaborative and interdisciplinary approaches have gained prominence in recent years (Rousell & Fell, 2018). By emphasizing collective and community-based collaborations, visual arts programs have evolved to encompass a broader range of experiences that promote creativity, critical thinking, and cultural engagement (Little et al., 2020; Peng et al., 2022). These collaborative efforts not only enhance the learning experience for students but also contribute to the development of essential cognitive abilities necessary for meaning-making and creative expression (Brandes-Aitken et al., 2019). Arts education has been recognized for its role in fostering cognitive abilities and critical thinking skills in individuals (Lukaka, 2023). Studies have shown that incorporating art education into academic curricula can significantly improve students' academic performance and cognitive development (Hattie & Donoghue, 2016; Tokoro & Mogi, 2007). By emphasizing the process of art-making over final products, arts programs can enhance students' critical analysis, abstract reasoning, and non-linear thinking skills (Sanchez-Muñoz et al., 2022; Techataweewan & Prasertsin, 2018).

Moreover, the integration of music arts education has been found to enhance cognitive abilities such as memory retention, critical thinking, and emotional regulation in college students (Xu & Liu, 2024). By engaging students in music education, educators can promote lifelong engagement with the arts and help students develop into arts-engaged citizens (Lin & Hess, 2021). Recognizing the cognitive benefits of music education underscores the importance of incorporating arts programs into educational curricula to support holistic cognitive development (Ilgaz et al., 2018; Mercer et al., 2019). The interplay between the social environment, cognitive abilities, and learning outcomes in traditional arts education, particularly Bugis bridal make-up training, highlights the importance of fostering supportive communities and collaborative learning experiences. By integrating social support systems, cognitive development strategies, and interdisciplinary approaches, educators can enhance the learning outcomes of students in traditional arts education and promote the preservation of cultural heritage.

The implications of this study are manifold. For educators and trainers in Bugis bridal make-up, creating a supportive and collaborative environment is crucial. Strategies such as fostering peer support networks, providing constructive feedback, and maintaining a positive training atmosphere can significantly enhance cognitive abilities and learning outcomes.

Additionally, these findings suggest that training programs should integrate social components into their curricula to maximize educational success.

Despite the robust findings, this study has several limitations. The use of purposive sampling may limit the generalizability of the results to other populations or training contexts. Additionally, the cross-sectional design of the study does not allow for the examination of long-term effects of the social environment on cognitive abilities and learning outcomes. Future research should consider longitudinal studies to track these effects over time and explore other factors that may influence learning outcomes in traditional arts education.

Future research should explore additional dimensions of the social environment, such as cultural influences and individual differences in social support perception, to provide a more comprehensive understanding of their impact on cognitive abilities and learning outcomes. Moreover, comparative studies across different types of traditional arts training could offer valuable insights into the generalizability of these findings. Investigating the long-term impact of social support on career development and professional success in Bugis bridal make-up artists could also provide important contributions to the field.

## Conclusion

This study investigated the impact of the social environment on cognitive abilities and learning outcomes in Bugis bridal make-up training. The findings revealed a significant positive relationship between social support and cognitive abilities, which in turn significantly improved learning outcomes. Trainees who experienced higher levels of social support demonstrated better cognitive performance, particularly in memory and problem-solving skills, and achieved higher proficiency in Bugis bridal make-up techniques.

The study contributes to the existing body of literature by extending the understanding of how social environment factors influence educational outcomes in the context of traditional arts training. Specifically, it highlights the crucial role of social support in enhancing cognitive abilities and learning outcomes in Bugis bridal make-up training. These insights can inform the development of more effective training programs that incorporate social support mechanisms to optimize learning outcomes.

The findings of this study underscore the importance of fostering a supportive and collaborative training environment in Bugis bridal make-up programs. Educators and trainers should prioritize strategies that enhance social support, such as peer support networks, constructive feedback, and a positive training atmosphere. By doing so, they can significantly enhance cognitive abilities and learning outcomes, thereby contributing to the preservation and transmission of this culturally significant art form. The integration of social support mechanisms into training programs is essential for maximizing educational success in Bugis bridal make-up training. Future research should continue to explore the long-term effects of social support and other environmental factors on learning outcomes and career development in traditional arts education. These efforts will provide valuable insights for enhancing training practices and preserving cultural heritage.

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