

The Visual Psychological Influence of Cadet Soldiers on Terracotta Materials on the Shape of the Facade of the Main Hall Building of Akmil Magelang

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KEYWORDS

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Education Institution;
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ABSTRACT

The Indonesian Army Military Academy (Akmil) in Magelang, established on October 31, 1945, plays a key role in the education and development of career officers for the Indonesian Army (TNI AD). This research aims to evaluate the design of a new Main Hall facility at Akmil, focusing on the use of terracotta materials for its façade. This study employs a quantitative research method with a descriptive approach, supported by qualitative insights from interviews. The primary objective is to empirically assess the psychological impact of terracotta materials on the façade of the Main Hall at Akmil. Data collection involves questionnaires and surveys targeting cadet soldiers to assess their visual perceptions, emotional responses, and preferences regarding the terracotta façade. The proposed design using terracotta materials for the façade is anticipated to enhance both the physical and emotional appeal of the Main Hall. The use of terracotta is expected to create a welcoming, symbolic landmark that reinforces Akmil's institutional identity and the pride of its personnel. The new Main Hall, incorporating terracotta, promises to address the space limitations while enhancing the psychological and symbolic value of the building. This upgrade will strengthen Akmil's role as a leading institution in military education. The findings provide insights into how architectural design can contribute to both functional efficiency and emotional well-being in military institutions. This research offers recommendations for future military building designs, emphasizing the importance of material selection for promoting institutional pride and identity.

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Introduction

The Military Academy (Akmil) Magelang has a long history, beginning with the establishment of the Militaire Academie in Yogyakarta in 1945 (Sutrisno, 2020). Over time, various organizational changes occurred, including the integration and separation of military education institutions, leading to the formation of the TNI Academy, which includes the Army

(AKMIL), Navy (AAL), and Air Force (AAU) academies (Kurniawan et al., 2023). The Akmil Main Hall, which functions as the Governor's office and leadership headquarters, was built in the 1980s and has undergone several rehabilitations (Rahman, 2019). However, the building's area has not been expanded, making it inadequate for current personnel needs (Sihombing, 2021). This limitation highlights the importance of strategic planning for the future development of military education infrastructure (Purnomo & Widiyanto, 2022).

Previous studies have explored the psychological impact of architectural materials and design on individuals, particularly in institutional settings. One such study by Ching (2017) discussed the influence of materials like brick and stone in evoking a sense of permanence and authority in public buildings, which aligns with the potential of terracotta in military architecture (Ching, 2017). Another relevant study by Smith and Jones (2018) focused on the emotional effects of architectural aesthetics in educational institutions, emphasizing how material choices can influence student morale and identity (Smith & Jones, 2018). However, these studies primarily concentrate on general institutional buildings without addressing the specific psychological needs and symbolic aspects of military environments (Liu et al., 2019). This research fills the gap by specifically examining the use of terracotta in a military academy context, exploring its visual, psychological, and symbolic impact on cadets—a demographic whose emotional and psychological state is critical to their training and identity formation (Thompson & Lee, 2020). The findings in this research contribute to a deeper understanding of how architectural materials shape military training environments (Martinez, 2021).

This research focuses on the visual psychological impact of terracotta materials used in the façade design of the Main Hall Building on Akmil cadets. The main objectives are to assess how the physical appearance of the building affects the emotions, perceptions, and sense of identity among personnel (Chang et al., 2019); evaluate the influence of terracotta on the functionality of the space (Harrison & Smith, 2020); and explore the symbolic role of the building in representing the authority and pride of the military institution (Lee, 2021). It also aims to understand how architectural design can enhance the spirit of nationalism and motivation in cadets, as architectural elements significantly impact psychological well-being and group identity (Wu & Zhang, 2020). Previous studies have indicated that the materials used in military architecture are crucial in shaping cadet perceptions of discipline and duty (Martinez & Toh, 2018).

The results are expected to provide recommendations for improving the visual psychological impact, functionality, and symbolic value of military buildings through the use of terracotta materials. This study can serve as a reference for future architectural designs and material selection in military environments, especially if terracotta is shown to have a positive psychological effect. Ultimately, it aims to support policy-making and innovation in modern military architecture by offering a prototype of a functional and emotionally meaningful military office building.

This study focuses on the visual psychological impact of terracotta material on the façade of the Main Hall Building at the Military Academy (*Akmil*) Magelang. It explores how the building's physical appearance, particularly the use of terracotta, affects the emotions, perceptions, motivation, and identity of cadets and personnel. The Main Hall is not only a functional command

center but also holds symbolic and emotional significance. The research aims to objectively assess the psychological effects of terracotta, evaluate its contribution to the building's symbolism, and provide recommendations to enhance both its functionality and emotional impact. The findings are expected to support material selection policies and inspire architectural innovations that align with the psychological needs of military personnel.

Materials and Methods

This study employs a quantitative research method with a descriptive approach, supported by qualitative insights through interviews. The primary objective is to empirically examine the psychological impact of *Terakota* materials on the façade of the Main Hall building at the Indonesian Military Academy (*Akmil*) in Magelang. Data collection is carried out using questionnaires and surveys targeting cadet soldiers to assess their visual perceptions, emotional responses, and preferences regarding the *Terakota* façade. A Likert scale is used to quantify responses, which are then processed and analyzed using statistical tools such as Microsoft Excel to identify patterns and trends.

Additionally, in-depth interviews are conducted to gain a deeper understanding of individual perceptions and emotional connections to the façade design. Both primary data (from respondents' perceptions) and secondary data (site and architectural information) are used to support the analysis. The findings aim to interpret whether the use of *Terakota* has a significant psychological and emotional effect on its users, particularly military cadets who interact with the building regularly.

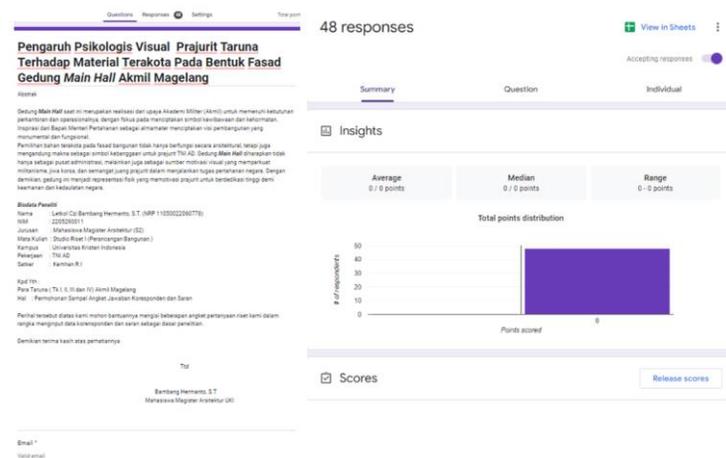


Figure 1. Questionnaire Instruments
(Source : <https://forms.gle/jhgCYP6wHEsyQoYM6>)

Results and Discussions Common

Architectural design is a crucial element in shaping buildings that influence not only their physical use but also the psychological experience of their users. The success of a design lies not

only in its physical attributes but also in how it impacts the emotions, well-being, and motivation of its occupants. The Main Hall building at the Indonesian Military Academy (Akmil) in Magelang plays a vital role as a training environment for cadet soldiers. In this context, the cadets' visual experience of the building façade—particularly with the use of Terakota material—can significantly affect their psychological well-being and overall training experience. This research aims to explore the psychological visual impact of Terakota material used on the façade of the Main Hall, selected due to its distinct aesthetic and physical characteristics. As the "face" of the building, the façade serves as a key architectural feature that shapes the atmosphere and image of the structure. By understanding the interaction between visual psychology and Terakota material, the study seeks to inform future design improvements, creating more supportive, aesthetically pleasing, and motivational environments for cadet soldiers. The findings are expected to provide valuable insights for architects, designers, and stakeholders involved in this project and similar architectural developments.

Data and Facts

1. The Psychology of the Soldiers

The Military Academy is an educational institution for prospective Army officers located in Magelang. The students of the Military Academy or Akmil are called cadets and have different ranks for each level. Like other higher education institutions in Akmil, the cadets also take learning from level 1 to level 4 as the end. Every level of education at Akmil must be lived and completed properly so that students can be inaugurated as Young Officers. After that, of course, they will serve as TNI Army soldiers with the rank of Second Lieutenant (Letda).

Table 1 Criteria for Cadet Rank Levels

No	Rank Levels	Criterion
1	Cadet Soldier (Pratar) Basic Kindergarten	Lowest Rank, 4 months of education, Education change mindset from civilian to military with physical and mental strength
2	Cadet Corporal (Koptar) Tk. I	The duration of education is 9 months where the education taken consists of 70% practice and 30% theory.
3	Cadet Sergeant (Sertar) Tk.II	Length of Education for 12 months, has had one junior level below
4	Sergeant Major Two Cadets (Sermadatar) Tk.III	Duration of education for 12 months, has had two junior levels below
4	Sergeant Major of One Cadet (Sermatutar) Tk.IV	The length of education for 12 months, has had three junior levels under him, the Final Level of Cadets before being inaugurated as a Second Lieutenant Officer by the President

(Source : <https://www.smadwiwarna.sch.id/pangkat-taruna-akmil/>)

Table 2 Criteria for Cadet Stress Level

No	Stress Level	Criterion
1	Very Heavy	Lowest Rank, Doesn't Have Juniors, Pressure More from Seniors (3 Kindergartens Above + Coach), Doesn't Know the Environment Well
2	Heavy	Lowest rank, Not having juniors, Pressure more than seniors (3 kindergartens above coaches), Knowing little about the environment
3	Keep	Rank one level higher than Koptar, Have a Junior one level, Pressure is still a lot from seniors (2 kindergartens above + coach), just know the environment
4	Light	Rank one level higher than Sertar, Has two levels of Junior, Pressure is still there from the senior (1 tk above), already knows the environment well
4	Usual	Rank one level higher than Sertmadutar Has three levels of Junior, Pressure is still there from seniors (coaches), knows the environment very well

(Source: Personal Observation and Assessment)

Table 3 Recap of Kindergarten Relationships. Stress Based on Rank

No	Cadet Rank (Akmlil)	Number of Personnel/Level	Average Age (Years)	Duration of Education	Psychological Condition (Stress Level)
1	Basic Cadet Private (Pratar)	400	18–24	4 Months	Very Severe
2	Cadet Corporal (Koptar) Level I	400	18–24	7 Months	Severe
3	Cadet Sergeant (Sertar) Level II	400	18–24	12 Months	Moderate
4	Cadet Second Sergeant Major (Sermadatar) Level III	400	18–24	12 Months	Mild
5	Cadet First Sergeant Major (Sermadatar) Level IV	400	18–24	12 Months	Normal

2. Terracotta Materials Study

a) Physical Characteristics

Terracotta is a glazed or unglazed ceramic that is produced from burnt clay and has a porous body. It has been used in architecture since the early 1800s when a church, designed by Sir Edmund Sharpe, was built almost exclusively of terracotta in Germany in 1824. The material in its unglazed form, eventually became popular as a versatile construction material with superior aesthetics and cost-effectiveness. Many of the advantages in the leading architecture can be identified that use terracotta as a façade material. . Terracotta has a series of properties or characteristics that make it a façade material, including recyclable, durable, minimal maintenance, fire resistance, impact resistance, temperature resistance in maintaining a stable room temperature, noise reduction, many

shades and textures and has a unique natural color that is ultraviolet resistant that will not change over time. (<https://mccoymart.com/post/terracotta-the-exemplary-facade-material/>)

b) Visual Psychological Aspects

Table 4 Visual Psychological Aspects

No	Psychological Aspects	Information
1	Emotional Association	The distinctive color and texture of terracotta can evoke certain emotional associations. For example, the red or orange color often associated with terracotta can evoke a warm, cozy, or even traditional feeling.
2	Authenticity/Connection With Nature	Terracotta, as a natural material, can give a sense of authenticity and connection to nature. This can create a visual experience that blends in with the surrounding environment.
3	Visual Depth	The richness of the color and texture of terracotta can add visual depth to the design. This can create eye-catching dimensions and nuances and create complex looks.
4.	Safety and Comfort	The selection of terracotta can create a feeling of security and comfort. It can be related to the association of terracotta colors and textures with the elements of the house or dwelling
5.	Texture and Visual Experience	The natural texture of terracotta can provide a rich visual and tactile experience. Roughness or surface patterns can provide an artistic and eye-catching element
6.	Cultural and Traditional Context	In some cultures or traditional architectural contexts, the use of terracotta can reflect cultural heritage and values. This can have a psychological impact on people who feel connected to those aspects.
7.	Contrast Visual	Terracotta can be used to create a visual contrast with other elements in the design. Contrast can draw attention, create focus, and provide visual dynamics
8.	Historical Factors and Traditional Values	The terracotta's connection to history and traditional values can create psychological resonances. This may enhance the historical and emotional value of a building or design.

The selection of materials in architectural design takes into account not only the functional aspect, but also the desired psychological effect on the user. Therefore, understanding visual psychology can help architects and designers in making more in-depth decisions and in accordance with the aesthetic and functional goals of a project.

3. Terracotta Materials in the Use of Building Facade Concepts

The use of terracotta on the façade brings a natural aesthetic with its distinctive colors and textures, creating a warm and welcoming impression. With its durability, strength, and heat-sound regulating capabilities, terracotta provides a functional dimension that is balanced with visual beauty. In addition, the connection with tradition and culture, color variability, and the ability to form patterns and textures add to the uniqueness and appeal of the façade. Overall, the use of

terracotta on the façade not only creates an attractive visual appearance, but also brings elements of sustainability and cultural values that can enrich the experience of the occupants or users of the building.

Terracotta is often used in construction, including bricks, tiles, tiles, and decorative elements. Its ability to regulate heat and sound, along with its sustainability, makes it a popular choice in architectural design. Its production process which involves burning at high temperatures makes it resistant to weather and very durable.

Table 5 Examples of Terracotta Materials Applied to Other Buildings

No	Building Pictures	Building Name	Source
1.		Bangunan Northwestern Terra Cotta Company di Lincoln Park,	https://www.istockphoto.com/id/foto/gedung-northwestern-terra-cotta-company-di-chicago-gm458304097-25932088
2		Royal Shakespeare Theatre, Stratford-upon-Avon, Warwickshire, England, Western Europe	https://www.istockphoto.com/id/foto/teater-royal-shakespeare-stratford-upon-avon-gm502002879-43528960
3		Universitas Kassel (Gesamthochschule GhK)	https://www.istockphoto.com/id/foto/universitas-kassel-dengan-ruang-kuliah-1-gm90406888-4498914
4		Bangunan barak di Us Marine Corps Recruit Depot Parris Island, SC.	https://www.istockphoto.com/id/foto/barak-pulau-parris-02-gm139983517-1957152
5		<i>Majalengka Square</i>	https://wisata-id.com/rekreasi-alun-alun-majalengka/

4. Respondent Data

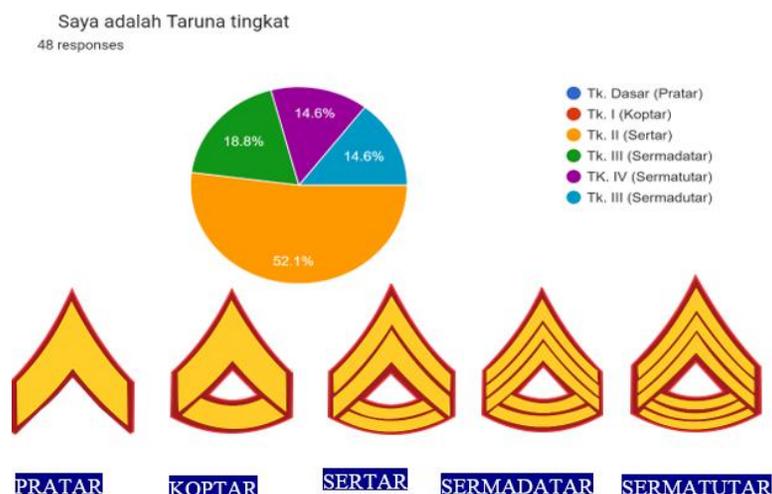


Figure 2 Symbol of Akmil Cadets Rank

In measuring and assessing the results of the research, it is through the collection and processing of the required data, one of which is correspondent data with the object of the Akmil cadets. Several research questions about responses and suggestions for the visual psychological influence of Akmil cadets on the main hall building must be proven. Therefore, the variables of the questions that are the basis of the output of a study are processed based on the results of correspondents.

Table 6 Recap of the Frequency of Akmil Cadet Correspondents

No	Level/Rank	Frequency
1	Tk. I (Talks)	None
2	Tk. II (Sertar)	16 Orang
3	Tk. III (Sermadatar)	17 Orang
4	KINDERGARTEN. IV (Sermatutar)	6 Orang
	Total	39 Orang

Table 7 Observation of Stress Levels by Rank

No	Level/Rank	Stress Levels
1	Tk. I (Talks)	Very High
2	Tk. II (Sertar)	Tall
3	Tk. III (Sermadatar)	Low
4	KINDERGARTEN. IV (Sermatutar)	Very Low

Table 8 Research Question Questionnaire

No	Code Var	Research Questions
	A	Material Terracotta
1	A.1	Do You Know Terracotta Materials
2	A.2	The characteristics of Terracotta Base Material are Clay that is burned with a rectangular size module in general and a varied texture (smooth and rough)
3	A.3	Terracotta material has a connection with the history and culture of the Indonesian nation
4	A.4	Can the Pattern, Texture and Color of Terracotta Material Affect Your Psychology.
5	A.5	Has the application of Terracotta Materials to the façade of the Akmil Main hall building given a grand and monumental impression
6	A.6	The use of terracotta materials on the façade of the Main Hall Building can strengthen the identity of the alma mater and increase the soldiers' sense of pride in military educational institutions.
7	A.7	There was a difference in perception and visual psychological influence between cadets who interacted with the Main Hall Building using terracotta materials and cadets who interacted with other buildings that used different materials
8	A.8	In terms of visual capture of the Main Hall building, which part is a value for yourself in affecting psychologically
9	A.9	In terms of visual capture of the Main Hall building, the use of façade materials in buildings is more dominated by any material
10	A.10	What elements of the Philosophy element are contained in the Terracotta material of the façade of the Akmil Main hall building
	B	Visual Psychology of Cadets
11	B.1	How does it affect psychologically for you in supporting motivation and enthusiasm in undergoing education with the establishment of the Main Hall Building in the knighthood of educational institutions
12	B.2	What do you think about the existence of the Main Hall building inside the knighthood of an educational institution
13	B.3	Terracotta material on the façade of the Main Hall Building has an effect on the psychology of cadets in Akmil Magelang?
14	B.4	The perception of the cadets towards the monumental impression given by the façade of the Main Hall Building which uses terracotta material is very appropriate
15	B.5	Certain aspects in the façade design of the Main Hall Building use terracotta materials can more effectively motivate cadets
16	B.6	Have an emotional and motivational reaction of cadets when interacting with the Main Hall Building which has a terracotta façade
17	B.7	The use of terracotta material on the façade of the <i>Main Hall Building</i> has an impact on the formation of the soul of the corps and the fighting spirit of the cadets in Akmil Magelang

18	B.8	Psychologically, what influence has the most impact on you about the Main Hall building
	C	Facades of the Main hall Building
19	C.1	The design of the façade of the Main Hall Building with terracotta material can create a symbol of honor and authority desired by the academic institution
20	C.2	The implementation of the façade design of the Main Hall Building using terracotta materials aims to build a symbol of honor and authority
21	C.3	The perception of cadets through the design of the façade of the Main Hall Building with terracotta material has the concept of symbolizing security and state sovereignty

Table 9. Statement Response Score Value

No	Response	Score	Notes
1	Strongly Agree	5	
2	Agree	4	
3	Somewhat Agree	3	
4	Disagree	2	
5	Strongly Disagree	1	

Table 10. Percentage and Criteria for Statement Responses

No	Percentage Range	Criteria
1	0–20%	Very Weak
2	21–40%	Weak
3	41–60%	Fair

Source : Sugiyono, 2011 - Bandung Education Research Method :Abeta Page 137

Influential Factors

Psychological comfort is very necessary where people who carry out activities/activities in educational institutions will need energy, thoughts and emotions so that to be able to relieve the emotions and minds of cadets, a design that can provide psychological comfort is needed. There are several aspects in realizing psychological comfort, including color, texture, material and dimensions.

The use of materials, textures in a building or room must also pay attention to the color of the material/texture, because without a match in the color of the material/texture, the meaning of the material/texture cannot be felt properly, colors can also realize psychological comfort in a space, because each color has a different meaning, dark colors will give a narrow impression of a room while bright colors will Giving a sense of relief to a room, color combinations can also give an impression. In addition to the design elements above, the psychological condition of cadets is also determined by nature and the environment in knighthood, so that motivation and enthusiasm for learning and fostering ethical values require a physical form or symbol that can have an effect.

The Influence of Terracotta Materials on the Facades of Main Hall Buildings

Research results may also include an assessment of terracotta materials as an architectural element. This can involve an understanding of the physical and aesthetic characteristics of terracotta materials. Based on the results of 48 correspondents with cadets, it was obtained that 74.4% of the façade material in the form of terracotta has been known in the Akmil cadets' environment, so that in applying the material to the façade of the Main Hall. Therefore, cadets have insight or experience of the values they contain.

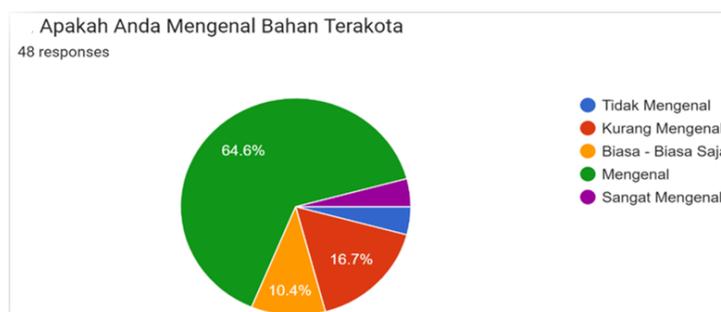


Figure 3. Variable Indicator A.1 (Terracotta Material)

Secara tangkap visual terhadap bangunan Main Hall, penggunaan material fasad pada bangunan lebih didominasi oleh material apa saja
48 responses

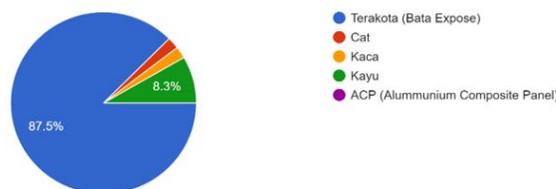


Figure 4. Variable Indicator A.9 (Terracotta Material)

1. The value of the physical characteristics of terracotta materials involves the identification of physical properties such as texture, durability, strength, durability, and the ability of the material to withstand weather and damage. Cadet soldiers may provide an assessment of the quality of terracotta materials and consider the extent to which they meet their functional needs.
2. In addition to the functional aspects, the assessment of the color, shape and texture of terracotta in the context of architectural aesthetics is considered a beautiful element and whether it matches their visual preferences.

Secara tangkap visual terhadap bangunan Main Hall, bagian mana yang menjadi nilai bagi diri anda dalam mempengaruhi psikologis

48 responses

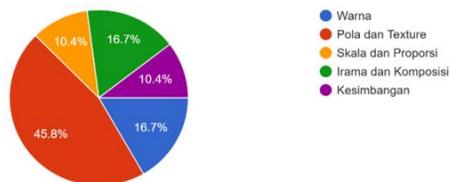


Figure 5. Variable Indicator A.8 (Terracotta Material)

3. Terracotta materials are related to the values and identities possessed by cadets that are relevant in a military or academic context.

11. Unsur unsur Filosofi apa yang terkandung dalam material Terrakota fasad bangunan Mainhall

Akmil

48 responses



Figure 6. Variable Indicator A.10 (Terracotta Material)

4. Terracotta materials with certain colors, textures, or patterns are able to create a different atmosphere as well as warm and natural in creating a positive and comfortable mood.

5.

The Influence of Terracotta Material on the Visual Psychology of Cadets.

Material terakota pada fasad Gedung Main Hall berpengaruh terhadap psikologis prajurit taruna di Akmil Magelang?

48 responses

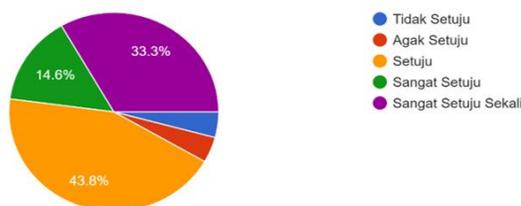


Figure 7. Variable Indicator B.3 (Visual Psychology)

The results of the study can reveal how cadets respond visually to the façade of buildings made of terracotta material. This can include their feelings, preferences, and visual perceptions of the façade. The results of the study may identify the feelings and emotions felt by cadet soldiers when they see the façade of the terracotta building. The material, color, and texture of the façade can affect how they feel. For example, there may be a feeling of comfort or serenity associated with terracotta materials, or conversely, there may be negative associations that arise. It is important to note that psychological influences can vary between individuals, but in general, an aesthetic and positive physical environment tends to have a good impact on mood and motivation.

Therefore, the selection of materials such as terracotta not only pays attention to the functional aspect, but also takes into account its contribution to the psychological experience of cadets.

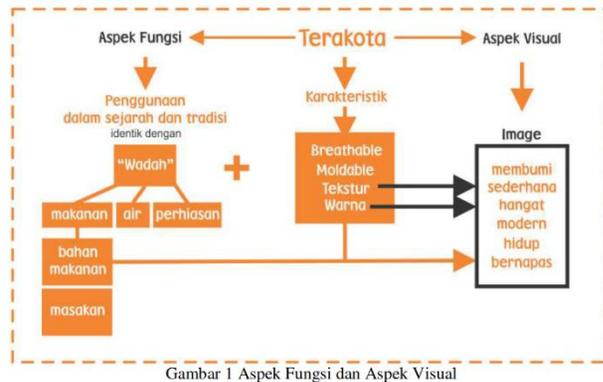


Figure 8. Functional Aspects and Visual Aspects

1. Terracotta material has the virtue of traditional or local values, can strengthen cadets' relationship with institutional values and traditions. It can provide a sense of ownership and appreciation for the history of the alma mater.
2. Elegant terracotta materials can increase the cadets' sense of pride and identity towards their alma mater. A strong visual impression of terracotta can be a symbol of the success and prestige of an institution. Based on the results of the correspondent on the Akmil cadets, in general, it is stated that terracotta material has the power for the visual influence of cadets in strengthening their identity and pride for military educational institutions.



Figure 9. Indicator Variable B.1 (Visual Psychology)

3. Terracotta material has architectural beauty that can be a source of motivation and enthusiasm for cadets. A visually appealing building can increase positive energy and motivate them to achieve their best achievements.

Bagaimana pengaruh secara Psikologis bagi anda dalam mendukung motivasi dan semangat dalam menjalani pendidikan dengan berdirinya Ged...g Main Hall di dalam ksatrian lembaga pendidikan
48 responses

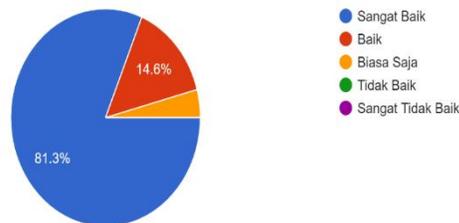


Figure 10. Indicator Variable B.5 (Visual Psychology)

Aspek-aspek tertentu dalam desain fasad Gedung Main Hall yang menggunakan material terakota yang dapat lebih efektif memotivasi prajurit taruna
48 responses

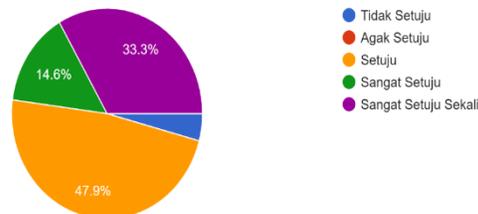


Figure 11. Variable Indicator B.8 (Visual Psychology)

4. City materials can provide a positive experience for cadets while in the building, supporting their involvement in academic activities and campus life.
5. Terracotta materials can contribute to mental well-being which can provide visual beauty can create a positive atmosphere, help reduce stress, and improve the well-being of cadets.
6. Terracotta material in understanding the level of satisfaction and comfort of cadets with the façade of the building and has a direct impact on their level of comfort and satisfaction when around the façade.

Memiliki Reaksi emosional dan motivasional prajurit taruna ketika berinteraksi dengan Gedung Main Hall yang memiliki fasad berbahan terakota
48 responses

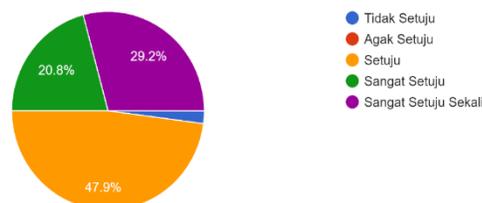


Figure 12. Variable Indicator B.6 (Visual Psychology)

The Psychological Influence of Visual Cadets on Terracotta Materials and the Facades of the Main Hall Building.

Visual psychological influence on cadets can have a significant impact on the selection of terracotta materials and the façade design of the *Main Hall building*. Some of the visual psychological aspects that may affect cadets' perception of buildings, particularly the *Main Hall*, involve the interaction between shape, color, texture, and overall design. Here are some considerations to consider:



Figure 13. Cadet Soldiers in Uniform

Desain fasad Gedung Main Hall dengan material terakota dapat menciptakan simbol kehormatan dan kewibawaan yang diinginkan oleh lembaga pendidikan akmil
48 responses

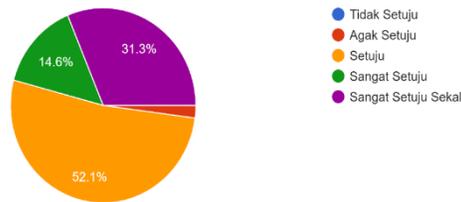


Figure 14. Variable Indicator C.1 (Main Hall Facade)

Implementasi desain fasad Gedung Main Hall yang menggunakan material terakota bertujuan membangun simbol kehormatan dan kewibawaan
48 responses

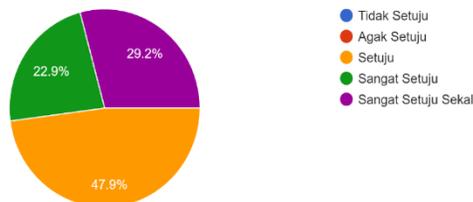


Figure 15. Variable Indicator C.2 (Main Hall Facade)

21. Persepsi prajurit taruna melalui desain fasad Gedung Main Hall dengan material terakota memiliki konsep simbolisasi keamanan dan kedaulatan negara
48 responses

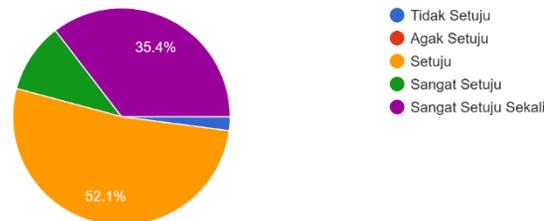


Figure 16 . Variable Indicator C.3 (Main Hall Facade)

1. Compatibility with Institutional Identity: The choice of colors and design elements on terracotta materials must be in line with the identity of the institution or organization owned by the Main Hall. Certain colors and symbolism can create a sense of identity and pride among cadets.
2. Inspiring Aesthetics: The design of the façade and terracotta materials should be able to evoke a sense of visual involvement. Shapes, patterns, and aesthetic details can inspire and motivate cadets who engage with buildings.
3. Strong Visual Appeal: Urban materials with attractive designs can capture attention and motivate cadets to explore or interact with the *Main Hall* building. Visual appeal can create a positive emotional bond.
4. Consistency with the Philosophy of Education: The design and materials of terracotta should reflect the educational philosophy of the institution. The choice of materials and designs that are consistent with educational values can increase cadets' sense of ownership and identification with the *Main Hall*.
5. Flexibility and Adaptability: Terracotta materials are used for the formation of specific structures or elements, consider the flexibility of the space. A space that can be adapted to a variety of activities and cadets' needs can create an environment that supports their development.

By paying attention to the visual psychological aspects, the terracotta materials and façades of the *Main Hall* building can be designed to create an environment that motivates, inspires and supports the positive development of cadets.



Figure 17. Akmil Main Hall Facade Documentation

Conclusion

The study found that most *Akmil* cadets are familiar with terracotta materials and associate them with durability, aesthetics, and institutional identity. Terracotta contributes positively to the Main Hall's environment by creating a warm, natural atmosphere that enhances cadets' visual psychology, emotional connection, and sense of pride. Its use supports academic engagement, psychological well-being, and motivation, highlighting the importance of thoughtful architectural design aligned with institutional values. Future studies could assess how other materials or architectural styles might evoke different emotional responses and institutional affiliations. A broader study across different military academies could also provide comparative insights into the use of material design in military spaces, contributing to the development of standardized architectural guidelines for military institutions.

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