



APPLYING THE PSYCHOLOGICAL OF SPACE IN ISLAMIC BOARDING SCHOOL (CASE STUDY: PESANTREN AL MAHSHYAR NURUL IMAN)

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ABSTRACT

Adolescents have different psychological conditions and spend a lot of time in boarding schools because they must live in Islamic boarding schools where many rules and activities must be followed. The research method used in this case study is a qualitative method which consists of a survey, literature review, and data analysis. A spatial approach is taken to "read" the user of space in understanding the spaces that trigger negative psychological conditions. Negative psychological conditions were understood through interviews and literature studies. The Pesantren Al Mahsyar Nurul Iman case study has students aged 12-15 years. At the Pesantren Al Mahsyar Nurul Iman, it is necessary to pay attention to things that are based on the character and psychology of the students to create a calming, comfortable and safe environment for students who are experiencing cognitive development and changes in psychological conditions, so that students can feel at home and become more comfortable which can be taken into consideration in the design of the next pesantren. These conditions can be done by paying attention to the privacy area, creating stimulant and calming visual concepts and adding facilities to study rooms and communal areas to support the character of students who like to explore and do group activities.

KEYWORDS:

Islamic Boarding School; Adolescent; Psychology; Design

INTRODUCTION

Pesantren or Islamic boarding school is Indonesia's first and oldest educational institution [1]. The concept of pesantren, consisting of traditional and modern pesantren, is helpful for enriching students' knowledge and improving morality, upholds spiritual and human values, teaches honest attitudes and behaviour and familiarizes religious ethics [2]. Indonesia has a growing number of Islamic boarding schools. The results of the 2021 DITDPONTREN statistical data note that there are 20,888 Islamic boarding schools that have educational units throughout Indonesia [3]. The education units consist of SD/MI, SMP/MTs, SMA/MA, and college levels

Activities at the pesantren last for 24 hours so it is necessary to facilitate boarding students as a place to live [4]. In the pesantren, the students must follow various rules and activities such as organizational activities, general and religious education learning activities and other activities. The density of activity and the time spent often cause pressure for students who live in Islamic boarding schools with many lessons and parents' high demands on their children [5]. This can cause interference with the learning activities and development of the students. Living in a dormitory can be part of the experience in shaping the personality of

the youth in the future [4].

Adolescents have different psychological conditions because they are entering a transition period from childhood to adulthood. High curiosity makes teenagers desire to experiment, fantasize, group activities, anxiety feeling, and confusion [6]. In addition, teenagers in Islamic boarding schools may feel they are not free to do things they like and are limited by the rules. They also feel uneasy, sick and alone [5]. In fact, they spent 24 hours a day for many years in the pesantren. They also grow and develop together with other people while at the pesantren; therefore, an environment suitable for their psychological condition is needed.

An approach is needed to produce a solution. The approach used is spatial psychology due to the importance of psychological aspects in the design process. Space psychology is a science that studies human behaviour and mental processes and interactions in space through lighting, proportions, colours, scales, shapes, materials, and acoustics that can produce perceptions and feelings [7]. Maslow's theory reveals that a beautiful environment can lead to a sense of comfort, passion, and health [6]. Likewise, a comfortable space can affect the feeling of being at home for its residents [8].

The case study uses the Pesantren Al Mahsyar

Nurul Iman accredited A, even though it was only established in 2017. The boarding school has a *Madrasah Tsanawiyah* (MTs) level or the equivalent of Junior High School and is located on Jalan AP Mangkunegara, Tenggaraong Seberang, Kutai Kartanegara, East Kalimantan. The students are 12-15 years old and are teenagers.

Previous research, it has discussed the negative psychological conditions that students can feel, but there has been no research related to the application of the design that can prevent its negative psychological conditions based on the character of adolescents. This study aims to obtain a design with a calming, comfortable, and safe environment for students who are experiencing cognitive development and changes in psychological conditions so that students can feel at home and continue to develop in studying by following the vision, mission, and curriculum that the Islamic boarding school foundation has set. It also can be considered in the design of the next Islamic boarding school.

METHODS

The study case is chosen at Pesantren Al Mahsyar Nurul Iman, Tenggaraong Seberang, Kutai Kartanegara in East Kalimantan, shown in Figure 1. Since there are many buildings in this boarding school, the research will focus on the main facilities, such as learning facilities and dormitories located in the buildings in the red box below. Figure 2 shows one of the buildings, with two floors in each building. Pesantren Al Mahsyar Nurul Iman was built in 2017 and was motivated by concern for the children’s future of rural residents of Kutai Kartanegara. After 5 years, The Madrasah has gotten an A accreditation, wherefore this Islamic boarding school was chosen as the study case object.

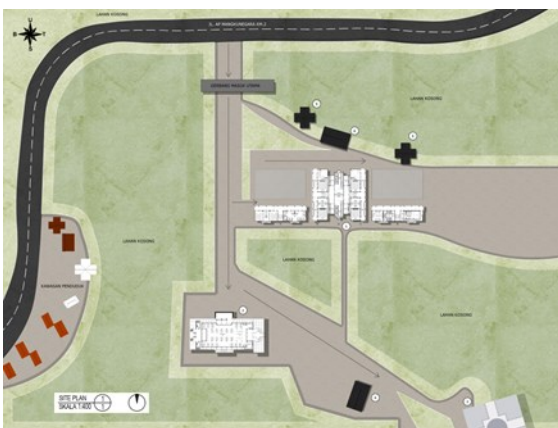


Figure 1. Site Plan of Pesantren Al Mahsyar Nurul Iman (Source: Author, 2022)

The research method will take steps following the flowchart in Figure 3. The first step is doing a literature study to identify the background problems of Islamic boarding schools, which leads to a study about student characteristics as adolescents and negative psychological conditions that can be experienced by the students in the previous research. The literature

study is also equipped with some data collected through observation, interviews, and questionnaires. Furthermore, study literature is also done to get the standard data about design that is linked to psychology.



Figure 2. Building of Pesantren Al Mahsyar Nurul Iman (Source: Author, 2022)

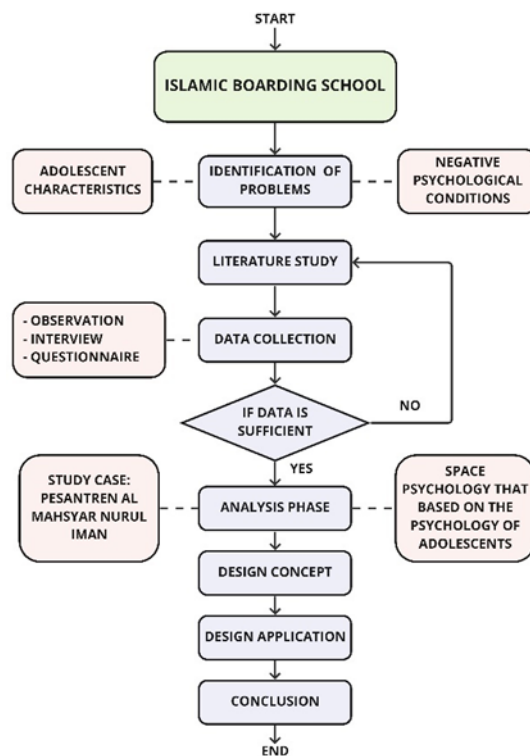


Figure 3 Research Flowchart (Source: Author, 2022)

This study used primary data from direct observation of the case study object. The observations were done on 25th September and 7th October 2021 in the morning and afternoon at Pesantren Al Mahsyar Nurul Iman. The author observed interior design’s general aspects, such as space organization and layout, visual concept, general space requirements, and facilities, so that the author can be compared with standardized data obtained. Furthermore, an interview

was held with the foundation’s staff, Ms Rustika to get information about facilities, activities, technical drawings of Islamic boarding school, etc. Questionnaire forms were also given to the students to get data about their characteristics through their feelings and their complaints about the design of its Islamic boarding school.

After it has been sufficient, the data will be analyzed using study case and space psychology based on the psychology of adolescents. In this section, data analysis will focus more on the most characteristics students have based on research. After analyzing the data, the author made a concept that can be applied to the study case object and other Islamic boarding schools to solve the problems.

DISCUSSION

SPACE PSYCHOLOGY THAT BASED ON THE PSYCHOLOGY OF ADOLESCENTS

The spatial psychology approach is used to solve problems related to the concepts and psychological conditions of the occupants. The Pesantren Al Mahsyar Nurul Iman case study has students aged 12-15 years. According to Jean Piaget, this age enters the peak level of cognitive structure development. In addition, they also experience emotional changes and intelligence development, such as being sensitive or sensitive, being aggressive, and tending to be rebellious, critical, and exploratory due to the transition from childhood to adulthood [23]. Maslow's theory also suggests that the general characteristics of adolescents are feeling restless, conflicted, fantasizing, and exploratory activities or wanting to try everything [6]. This theory is also supported by the results of a questionnaire survey on 86 adolescents at the Pesantren Al Mahsyar Nurul Iman through questions about what teenagers feel based on these characters.

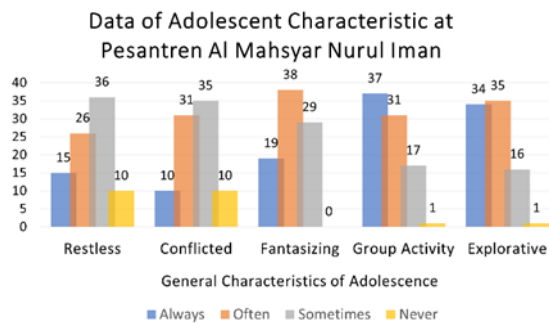


Figure 4. Data of Adolescent Characteristics at Pesantren Al Mahsyar Nurul Iman (Source: Author, 2022)

The survey results in Figure 4 show the results of the survey of adolescent characters at the Pesantren Al Mahsyar Nurul Iman. The characteristics that most often and always occur in adolescents are fantasizing, group activities and exploratory. While the characteristics of feeling restless and conflict only occur occasionally.

The spatial psychology approach can use

adolescent psychology to create an environment that can support the psychological development of the Santri so that they can feel at home and develop in a better direction in studying. These general characteristics can be applied to the design of the space. The application of the design is described in Table 1.

PESANTREN AL MAHSYAR NURUL IMAN

The existence of a pesantren that is used as a place to study and live requires an environment that can support the development and psychological processes of students through interior design at the pesantren. However, the concept of interior design at the pesantren has yet to support the developmental and psychological processes of the students. Based on the results of a survey conducted at the Pesantren Al Mahsyar Nurul Iman, there are several things that are not compatible with Table 1, such as problems related to the privacy area, the use of colours and shapes that are still visually monotonous and the room facilities are not complete, such as in the laboratory and library. These problems are also supported by literature studies.

Table 1 Application of Design Based on Adolescent Characteristics (Source: Author, 2022)

Adolescent Characteristics	Design Applications
Restless: Lots of desires and ideals	Creating a comfortable space through the design of the atmosphere of the room
Conflicted: Feeling confused Want to be independent but not able Want to feel safe Stimulus from other people who are not suitable lead to resistance	Creating a privacy area in the bedroom and a comfortable space through the design and the room’s atmosphere
Fantasizing: Putting ambition and seeking satisfaction in delusion	Adding room facilities and furniture to be productive in laboratories and libraries so that imagination can be constructive. Creating a focal point in a particular learning area to keep students focused
Group Activities: Like to hang out.	Adding communal space facilities
Explorative: High curiosity Want to be like an adult Adding area facilities and furniture to the laboratory and library	Adding area facilities and furniture to the laboratory and library Creating visual concepts that can stimulate students through colors and shapes

A boarding school that functions as a place to live replaces a house so it must consider the privacy aspect [4]. Adolescence is dominated by social relationships [6]. However, adolescents are also social beings who need their privacy that is not disturbed by others [11]. Therefore, several people occupy dormitory rooms for

daily rest. In this case study, the dorm rooms of the Pesantren Al Mahsyar Nurul Iman are occupied by 24 people and 12 bunk beds in each room. In addition, the bunk beds are placed next to each other, so students have no privacy. The laying of beds close to each other is caused by the limited number of rooms, namely 3 female and male rooms with an area of about 90 m² or is reduced by 30% circulation area, and the existing room area is only 54 m². Dormitory space with 12 bunk beds with 24 people requires a minimum area of 720 sqft or 66.8 m² [12]. So that the room is not following the standardization and causes the beds to be pressed together and impacting the students' privacy.

Colour is the most essential interior element in a plan can give the desired impression very comprehensively [13]. Colour influences human emotions and moods, creating a hot or cold atmosphere, sympathetic or provocative to calming or exciting [14]. In the case study, the Pesantren Al Mahsyar Nurul Iman is dominated by white and browns. The white colour has the characteristics and psychological impact of peace, spaciousness, and isolation; while the brown colour on wood can create a warm atmosphere, and the dominant brown colour can have a destructive effect [15]. People who learn will do best when they are energized and will be energized when in a colour environment that has more saturation [16]. Pastel colours make the eyes less tired and less scary [17]. Therefore, the use of colour variations with high and low saturation, such as pastel colours in Islamic boarding schools, is needed to provide energy but adjust to the psychological characteristics of adolescents who have anxiety and confusion.



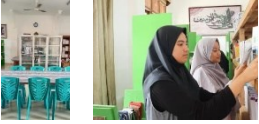
Ching explained that shape is one of the factors that influence the process of visual perception. Visual perception is defined as the ability to capture information through the sense of sight in each individual [18]. Variations in texture, shape, and type of symmetry are different, with a moderate amount leading to creating spaces that provide energy appropriately when used in spaces [16]. However, the variation in the shape of the Pesantren Al Mahsyar Nurul Iman is only a few varieties by only using square and rectangular shapes in the study room.

Imagination can be positive and constructive, such as realising specific ideas that arise; besides that, a sense of desire to try everything that teenagers have can lead to positivity if they get guidance and are conveyed properly [6]. Adequate learning facilities aim to support the learning process to make it easier for students to find reference sources quickly, but it can also support students in conveying talents and fostering a more optimal spirit [19]. Therefore, conveying teenagers' imagination and curiosity can be done through the existing learning facilities in the pesantren. In the case study of the Pesantren Al Mahsyar Nurul Iman there are several learning facilities such as classrooms, science laboratories, computer laboratories, art laboratories and libraries. Although the rooms have been provided, they still need the

complete infrastructure and according to general requirements in supporting the students' activities. The shortcomings in the findings regarding facilities in existing data are described in **Table 2**.

Awareness of growing silence encourages adolescents to socialize [6]. Therefore, many activities are conducted by the students in groups or gathering with their friends, both learning activities together, memorizing, discussing, or relaxing during recess. This condition can also be seen from the results of observations that have been made at the Pesantren Al Mahsyar Nurul Iman. The students at the pesantren usually gather in the classroom or dormitory terrace. However, the pesantren do not have sitting facilities such as chairs or benches, so the students just sit on the floor.

Table 2 Learning Facilities at Pesantren Al Mahsyar Nurul Iman (Source: Author, 2022)

Standards	Existing Data
<p>Science Laboratory:</p> <ul style="list-style-type: none"> Has preparation, practice and storage areas [20]. 	 <p>It doesn't have a prep area and doesn't have enough storage</p>
<p>Art Laboratory:</p> <ul style="list-style-type: none"> Has stage, performance, monitor and storage areas Having infrastructure in the form of furniture, multimedia and stage lighting, sound system and recording to support activities in the art laboratory [21]. 	 <p>The art laboratory is still shaped like an ordinary classroom, so it doesn't have a stage and monitor area. Does not have stage lighting, sound system and recording</p>
<p>Library:</p> <ul style="list-style-type: none"> At least have a collection area, reading area, work area and multimedia [22]. Having educational media in the form of media equipment such as computers, tv, radio, vcd/ dvd players [20]. 	 <p>It doesn't have multimedia area so there is no educational media.</p>

CONCEPT AND THE APPLICATION

Based on the problems in the Pesantren Al Mahsyar Nurul Iman and the objectives, the solution to the problem uses the concept of Creative and Relieved. The concept is expected to create a

comfortable atmosphere for residents to grow and learn. The atmosphere in the redesign is made fun and can stimulate the creativity of the residents so that it can support the psychological condition of the residents who are exploratory and like to fantasize and group activities. Although it is a stimulant, the room's atmosphere is also calming, especially in the bedroom, using colours that are not too flashy.

PRIVATE AREA AND THE APPLICATION

Privacy is required in dorm rooms. However, the limited space that 24 people occupy causes the beds to be pressed against each other. Therefore, a private area can be created by redesigning the space organization and layout to increase the number of rooms and redesigning the bed with a capsule shape.

Figure 5 shows the redesign of the space organization and layout in the Pesantren Al Mahsyar Nurul Iman, which allows adding 1 more room so that the total rooms are 4 male rooms and 4 female rooms occupied by 18 people and 9 bunk beds.

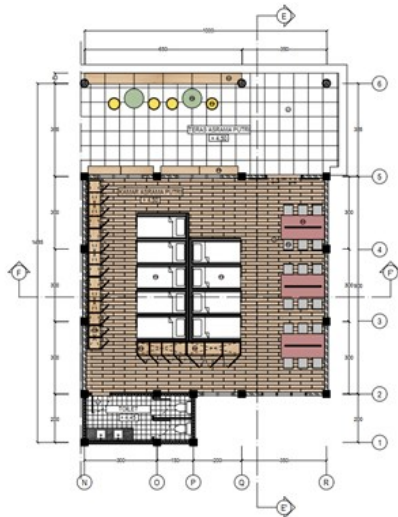


Figure 5 Dormitory's Layout (Source: Author, 2022)

The redesign of the capsule-shaped bed maintains privacy between students even though they are close to each other due to the barrier as seen in the picture below Figure 6.



Figure 6 Design of Dormitory's Bunk Beds (Source: Author, 2022)

VISUAL CONCEPTS AND THE APPLICATION

The colours applied to the redesign use brown and white combined with other colours, such as: green, yellow, orange, red, blue, pink, grey and black. Green is quite widely used, especially in classrooms, science laboratories, and libraries. In addition to the psychological impact that gives a calm, refreshing, relaxing, and calm effect. The green colour is also taken from the Pesantren Al Mahsyar Nurul Iman Foundation logo. Figure 7 shows that the colours like white, brown, and green in this redesign are the primary colours. The classroom uses green colour on the furniture and walls to give a calm, refreshing, relaxing, and calm effect. While the yellow colour is applied to the walls and drawers to stimulate the students' brain and muscle nerves while studying, it also gives the impression of optimism and joy. At the same time, the white colour gives a broad impression of the classroom and is offset by brown to give a warm impression of the classroom. In addition, the classroom walls use a mural with a plant motif in a darker green colour.



Figure 7 Primary Colour Concept and the Application (Source: Author, 2022)

Meanwhile, red, orange, yellow, blue, pink, grey and black are secondary colours, as shown in Figure 8. Red, orange and yellow are used to stimulate students in learning activities, blue and pink are used to provide calming impressions, while grey and black give a formal impression.



Figure 8 Secondary Colour Concept (Source: Author, 2022)

The shape concept used in the redesign still applies a square or rectangular shape to give a formal impression. However, adding variations of shapes are processed from triangles and circles, as shown in Figure 9. These shapes are applied to give a positive, creative impression and to support group activities for teenagers

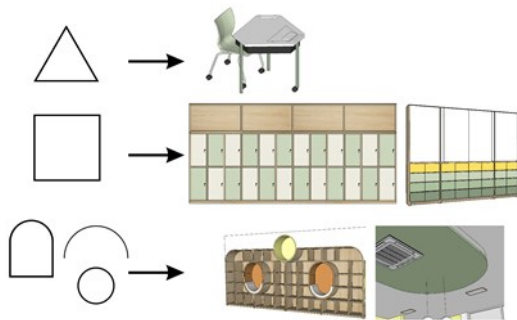


Figure 9 Shape Concept (Source: Author, 2022)

The transformed triangular shape is applied to the classroom study table. At the same time, the square and rectangular shapes are mostly applied to the shape of space and furniture, such as blackboard cabinets, lockers, cupboards, mattresses, et cetera. The transformed circle shape is applied to bookshelves and science laboratory walls to drop ceilings in libraries.

LEARNING AREA FACILITIES AND THE APPLICATION

The concept of facilities in the redesign is used to solve the problems in the pesantren. In addition to creating a space that suits the activity's needs, the facility's concept is also made to add communal space facilities in several areas, such as classroom terraces and dormitories, libraries, and dorm rooms to classrooms. The facility concept and its implementation are depicted in Figure 10.

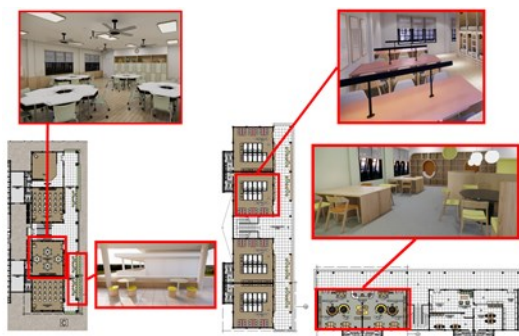


Figure 10 Facilities Concept (Source: Author, 2022)

The design of the facilities is adjusted to the needs of their activities so that the students can be productive, creative and positive. For example Figure 11 shows a science laboratory that has been redesigned to facilitate a preparation area in the form of a preparation table and sink and a practice area consisting of storage cabinets and learning media in the form of posters and 3D learning models.

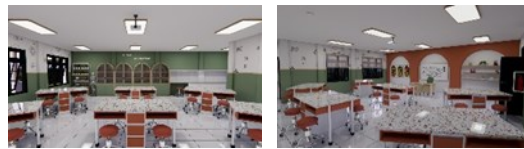


Figure 11 Science Laboratory Facility Concept and the Application (Source: Author, 2022)

The redesigned art laboratory facility has facilities to support the performing arts studied by students. The facility has a performance area with audience seats and a stage, as shown in Figure 12. While the backstage area has a property storage cabinet and a table for managing sound and screens on stage. In addition, it has also been equipped with a sound system and supporting lighting in it.

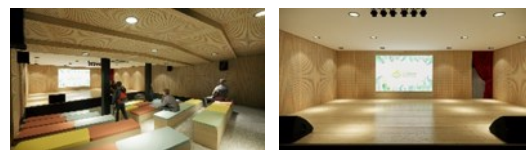


Figure 12 Art Laboratory Facility Concept and the Application (Source: Author, 2022)

The library was redesigned with multimedia area facilities in the form of computers and sitting facilities such as beanbags, chairs and banquettes. Its application is shown in Figure 13.

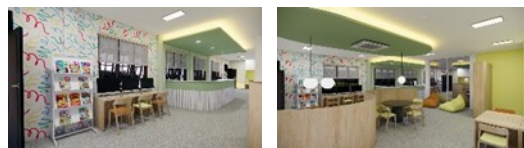


Figure 13 Library Facility Concept and the Application (Source: Author, 2022)

COMMUNAL SPACE FACILITIES AND THE APPLICATION

Adolescents have a character who likes to be in groups: besides that many activities in the pesantren are grouped and together, but this pesantren still does not have appropriate seating facilities. Therefore additional communal space facilities are needed. In the redesign, the seating facility is applied to the library shown in Figure 14.

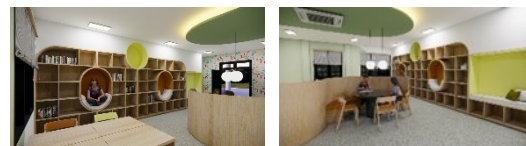


Figure 14 Communal Space Facilities Concept and the Application (Source: Author, 2022)

The dormitory terraces and classes that are commonly used by students to discuss, memorize and study in the existing do not have sitting facilities so that in the redesign, stools, banquettes and tables were added as shown in Figure 15.



Figure 15 Communal Space on the Terrace and The Application (Source: Author, 2022)

Furthermore, classroom desk facilities are also designed for groups according to class activities. The student desk is designed to be easily moved and forms a circle with a triangular processed shape, as shown in Figure 16.



Figure 16 Communal Space on the Class and The Application (Source: Author, 2022)

CONCLUSION

This study aims to prevent student's negative psychological condition by obtaining a design with a calming, comfortable, and safe environment for students who are experiencing cognitive development and changes in psychological conditions so that students can feel at home and continue to develop in studying in accordance with the vision, mission, and curriculum that the Islamic boarding school foundation has set. In the case study of the Pesantren Al Mahsyar Nurul Iman, it is still necessary to pay attention to things that are by characteristics that most often and always occur in adolescents are fantasizing, group activities and exploratory.

Based on the result and discussion above, the size of the bedroom is different from the standard and causes the beds to be pressed together and impacting the student's privacy. Meanwhile, applying a capsuled-bed design maintains privacy between students even though they are close to each other due to the barrier, as seen in Figure 5 and Figure 6.

Furthermore, the use of colour variations with high and low saturation, such as pastel colours in Islamic boarding schools, is needed to provide energy but adjust to the psychological characteristics of adolescents who have anxiety and confusion.

The classroom uses green colour on the furniture and walls to give a calm, refreshing, relaxing, and calm effect. While yellow colour is applied to the walls and drawers to stimulate the student's brain and muscle nerves while studying, it also gives the impression of optimism and joy. At the same time, the white colour gives a general impression of the classroom and is offset by brown to give a warm impression. The walls of the classroom use a mural with a plant motif in a darker green colour, as seen in Figure 7. Meanwhile, red, orange, yellow, blue, pink, grey and black are secondary colours. Red, orange and yellow are used to

stimulate students in learning activities, blue and pink are used to provide calming impressions, while grey and black give a formal impression, as seen in Figure 8. Moreover, The shape concept used in the redesign still applies a square or rectangular shape to give a formal impression. However, adding variations of shapes that are processed from triangles and circles is shown in Figure 9. These shapes are applied to give a cheerful, creative impression and to support group activities for teenagers.

In addition, conveying adolescent's imagination and curiosity can be conveyed through learning facilities in Islamic boarding schools. Besides creating a space that suits the needs of the activity, as seen in Figure 11 and Figure 12, the concept of the facility is also made to add communal area facilities in several areas, such as classroom terraces and dormitories, libraries, and dorm rooms to classrooms. The facility concept and its implementation are depicted in Figure 10.

REFERENCES

- [1] H. Herman, "Sejarah Pesantren di Indonesia," *Al-TA'DIB: Jurnal Kajian Ilmu Kependidikan*, vol. 6, no. 2, pp. 145–158, 2013,
- [2] D. Murdowo, D. Budimansyah, and Y. Ruyadi, "Student Dormitory as a Character-Based Education in Higher Schools (A Case Study at Telkom University Dormitory-Bandung)," *Int J Humanit Soc Sci*, vol. 7, no. 12, pp. 108–114, 2017, [Online]. Available: www.ijhssnet.com
- [3] EMIS PD-PONTREN, "Data Pesantren dan Pendidikan Keagamaan Islam," *Direktorat Pendidikan Diniyah dan Pondok Pesantren Direktorat Jenderal Pendidikan Islam Kementerian Agama RI*, 2021. <http://emispendis.kemenag.go.id/pdpontrenv2/> Dashboard (accessed Aug. 29, 2022).
- [4] R. Firmansyah, N. Shaari, S. Ismail, N. Utaberta, and I. M. S. Usman, "OBSERVATION OF FEMALE DORM PRIVACY IN ISLAMIC BOARDING SCHOOLS IN WEST JAVA, INDONESIA," *Journal of Islamic Architecture*, vol. 6, no. 4, pp. 360–368, 2021, doi: 10.18860/jia.v6i4.13091.
- [5] Z. A. Ikromi, A. M. Diponegoro, and F. Tentama, "Faktor Psikologis yang Mempengaruhi Subjective Well-being pada Remaja yang Tinggal di Pondok Pesantren," in *Prosiding Seminar Nasional Magister Psikologi Universitas Ahmad Dahlan*, 2019, pp. 412–420. Accessed: Apr. 11, 2022. [Online]. Available: <http://seminar.uad.ac.id/index.php/snmpuad/article/view/3454/784>
- [6] M. Ali and M. Asrori, *Psikologi Remaja: Perkembangan Peserta Didik*, 14th ed. Jakarta: PT Bumi Aksara, 2019.

- [7] A. A. Damanik, D. F. Asharsinyo, and T. M. Raja, "PERANCANGAN INTERIOR HOTEL BUTIK KOTA BANDUNG DENGAN PENDEKATAN PSIKOLOGI RUANG," in *e-Proceeding of Art & Design: Vol.8, No.4*, 2021, pp. 1642–1653. Accessed: Aug. 29, 2022. [Online]. Available: <https://openlibrarypublications.telkomuniversity.ac.id/index.php/artdesign/article/view/16287>
- [8] M. F. Faeza and M. Tharziansyah, "PONDOK PESANTREN MODERN PUTRA DI MARTAPURA," *JTAM LANTING*, vol. 10, no. 1, pp. 240–252, Feb. 2021, doi: <https://doi.org/10.20527/lanting.v10i1.755>.
- [9] F. S. Abraham and R. Firmansyah, "PERANCANGAN ULANG INTERIOR PONDOK PESANTREN DARUL MUTTAQIEN DI BOGOR REDESIGN INTERIOR OF PONDOK PESANTREN DARUL MUTTAQIEN IN BOGOR," *e-Proceeding of Art & Design*, vol. 6, pp. 463–472, 2019.
- [10] D. P. Oktari and A. Kosasih, "Pendidikan Karakter Religius dan Mandiri di Pesantren," *JURNAL PENDIDIKAN ILMU SOSIAL*, vol. 28, no. 1, p. 42, Jun. 2019, doi: [10.17509/jpis.v28i1.14985](https://doi.org/10.17509/jpis.v28i1.14985).
- [11] D. Hardianti, H. H. Anward, and M. S. Hidayatullah, "PERANAN PRIVASI TERHADAP KESESAKAN PADA SISWA ASRAMA DI MAN 4 BANJAR," *Jurnal Kognisia*, vol. 3, no. 1, pp. 115–120, Feb. 2020, Accessed: Mar. 06, 2022. [Online]. Available: <https://ppjp.ulm.ac.id/journals/index.php/kog/article/view/1421/2804>
- [12] J. de Chiara and J. H. Callender, *Time-Saver Standards for Building Types*, 2nd ed.
- [13] A. D. Purnomo and N. Laksitarini, "ANALISIS WARNA DAN BENTUK PADA INTERIOR PRODIA CHILDREN'S HEALTH CARE TERHADAP PSIKOLOGI ANAK," *Dimensi*, vol. 18, no. 2, pp. 181–188, Feb. 2022, doi: <https://doi.org/10.25105/dim.v18i2.10174>.
- [14] R. Ilmia and A. W. Anggraita, "Desain Interior SMP Negeri untuk Membentuk Karakter Disiplin Siswa," *JURNAL SAINS DAN SENI POMITS*, vol. 6, pp. 367–371, 2017, doi: [10.12962/j23373520.v6i2.27440](https://doi.org/10.12962/j23373520.v6i2.27440).
- [15] P. Zelanski and M. P. Fisher, *Color*, vol. 6. Upper Saddle River: Prentice Hall, 2010. Accessed: Mar. 07, 2022. [Online]. Available: <https://archive.org/details/color0006zela/mode/2up>
- [16] S. Augustin, N. Frankel, and C. Coleman, *Place Advantage Applied Psychology for Interior Architecture*. John Wiley and Sons, 2009.
- [17] S. M. Sari, "PERAN WARNA INTERIOR TERHADAP PERKEMBANGAN DAN PENDIDIKAN ANAK DI TAMAN KANAK-KANAK," *Dimensi Interior*, vol. 2, pp. 22–36, Jun. 2004,
- [18] E. B. Prastyo and I. Indrawati, "Persepsi Visual Pengunjung Caffe terhadap Elemen Interior Bergaya Klasik di Sukoharjo," in *Prosiding (SIAR) Seminar Ilmiah Arsitektur II*, Feb. 2021, pp. 213–221. Accessed: Mar. 08, 2022. [Online]. Available: <https://publikasiilmiah.ums.ac.id/xmlui/handle/11617/12587>
- [19] D. Kusumaningrum, "PENGARUH FASILITAS BELAJAR TEMAN SEBAYA TERHADAP MOTIVASI DALAM EKONOMI XI IPS MAYOGA," *Jurnal Economia*, vol. 6, no. 2, pp. 175–180, 2017, Accessed: Sep. 05, 2022. [Online]. Available: <https://journal.student.uny.ac.id/index.php/ekonomi/article/view/6093/5818>
- [20] Menteri Pendidikan Nasional, *Permendiknas Nomor 24 Tahun 2007 Tentang Standar Sarana dan Prasarana untuk Sekolah Dasar/Madrasah Ibtidaiyah (SD/MI), Sekolah Menengah Pertama/Madrasah Tsanawiyah (SMP/MTs), dan Sekolah Menengah Atas/Madrasah Aliyah (SMA/MA)*. Menteri Pendidikan, Kebudayaan, Riset, dan Teknologi Indonesia, 2007. Accessed: Mar. 04, 2022. [Online]. Available: <http://repositori.kemdikbud.go.id/18715/1/Permendiknas-No.-24-tahun-2007.pdf>
- [21] Kemendikbud, *Petunjuk Spesifikasi Teknis Fasilitas Laboratorium Seni Budaya di Satuan Pendidikan Tahun 2018*. 2018, pp. 1–59.
- [22] PERPUSNAS, *PERATURAN KEPALA PERPUSTAKAAN NASIONAL REPUBLIK INDONESIA NOMOR 11 TAHUN 2017 TENTANG STANDAR NASIONAL PERPUSTAKAAN SEKOLAH MENENGAH PERTAMA/ MADRASAH TSANAWIYAH*. Indonesia: https://simpuh.kemenag.go.id/regulasi/perkaPnri_11_17.pdf, 2017.
- [23] S. D. Gunarsa, *Psikologi Perkembangan Anak dan Remaja*, 13th ed. Jakarta: PT BPK Gunung Mulia, 2008. Accessed: Sep. 03, 2022. [Online]. Available: https://books.google.co.id/books?hl=en&lr=&id=sDcYbzE-dXAC&oi=fnd&pg=PA3&dq=gunarsa+2008&ots=39xQUJdqh2&sig=1o4kldPi5oUJokNnhPsOuliUl5s&redir_esc=y#v=onepage&q=gunarsa%202008&f=false