

Neuropsychological Intervention Using an Islamic Religious Approach to Prevent Bullying: Case Study at Madrasah Aliyah Mu'allimaat Muhammadiyah Yogyakarta

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ABSTRACT

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Bullying cases continuously spread in educational institutions so that they affect student physical and psychological development and even give the institution reputation bad name. Madrasah Mu'allimaat Muhammadiyah Yogyakarta, on the other hand, is able to decrease the number of bullying cases. The objective of this research is to theorize bullying preventing practices in Madrasah Mu'allimaat Muhammadiyah Yogyakarta. The approach of this research is descriptive qualitative. The informants of the research are the head of the madrasah, teachers, and students. The data collection methods are observation, interview, interpretation, and documentation. The data analyses are done with description, categorization, interpretation, and theorization. The result of the research shows that bullying preventing practices are done by combining psychological approach, neuroscience, and Islamic learning. The practices are then theorized into neuropsychology. Neuropsychology learns the relationship between brain and behavior, studies various functions including knowledge, skills in managing emotions focusing on empowering individuals. Neuropsychological interventions done at Madrasah Mu'allimaat Yogyakarta are: (1) Self-control through guidance, (2) Self-control through fasting habitation, (3) Self-control through collaboration and the values of friendship, (4) Self-control through religious activities (5) Self-control through empathy among students, and (6) self-control through patience and discipline. Theoretical configuration of the neuro-psychological intervention can be a model for the next research on bullying prevention in other Islamic educational institutions.

Keywords: *Islamic Education; Bullying; Self-control; Neuropsychology*

ABSTRAK

Kasus-kasus perundungan terus menerus merebak di lembaga-lembaga pendidikan sehingga berdampak pada perkembangan fisik dan psikis siswa bahkan mencoreng nama baik lembaga tersebut. Sebaliknya Madrasah Mu'allimaat Muhammadiyah Yogyakarta mampu menurunkan angka kasus bullying. Penelitian ini bertujuan untuk memberikan teori mengenai praktik pencegahan bullying di Madrasah Mu'allimaat Muhammadiyah Yogyakarta. Pendekatan penelitian ini adalah deskriptif kualitatif. Informan penelitian adalah kepala madrasah, guru, dan siswa. Metode pengumpulan data yang

digunakan adalah observasi, wawancara, interpretasi, dan dokumentasi. Analisis data dilakukan dengan deskripsi, kategorisasi, interpretasi, dan teorisasi. Hasil penelitian menunjukkan bahwa praktik pencegahan bullying dilakukan dengan menggabungkan pendekatan psikologis, neurosains, dan pembelajaran Islami. Praktik-praktik tersebut kemudian diteorikan menjadi neuro-psikologi. Neuro-psikologi mempelajari hubungan antara otak dan perilaku, mempelajari berbagai fungsi termasuk pengetahuan, keterampilan dalam mengelola emosi dengan fokus pada pemberdayaan individu. Intervensi neuropsikologis yang dilakukan di Madrasah Muallimaat Yogyakarta adalah: (1) Pengendalian diri melalui bimbingan, (2) Pengendalian diri melalui pembiasaan puasa, (3) Pengendalian diri melalui kerjasama dan nilai-nilai silaturahmi, (4) Pengendalian diri melalui keagamaan. kegiatan (5) Pengendalian diri melalui empati pada diri siswa, dan (6) pengendalian diri melalui kesabaran dan kedisiplinan. Konfigurasi teoritis intervensi neuro-psikologis dapat menjadi model untuk penelitian selanjutnya mengenai pencegahan bullying di lembaga pendidikan Islam lainnya.

Kata-kata Kunci: Pendidikan Islam; Bullying; Pengendalian Diri; Neuropsikologi

1. INTRODUCTION

The main problem of this research is the massive bullying behavior among teenagers, especially at schools. Bullying has become actual and phenomenal for the last three years (Johansson et al., 2022; Martínez-Monteagudo et al., 2023). Indonesian children Protection Commission (KPAI) received at least 37,381 reports on bullying in the period of 2011 to 2019. From that number, most cases were in educational places (Flannery, 2023). Arie Rukmantara, Director of Java Island representative of UNICEF, states that bullying cases happen massively in DIY, the number even reaches 21% for cases in 13 to 17 year old children (Setiawan, 2019). Bad school environment can be the cause of bullying (Astuti, 2008). The bullying cases deal with the factors of students, teachers, and staffs (Noer et al., 2021). Behavioral psychologists state that bullying is something done, not just being thought by the bullies but the desire to hurt (Masdin, 2013).

Moreover, social media becomes one of the causes of bullying practices (Ibrohim & Budi, 2023). Bullying done excessively like injuring often result in Children with Legal Problem. Indonesian Children Protection Commission (KPAI) in 2020 reported 123 cases of Children with Legal Problem as bullies. Most criminal cases were physical abuse, as many as 30 cases, followed with sexual cases, which were 28 cases (Kiss et al., 2015). Viewed from their background, Children with Legal Problems (ABH) are generally boys and teenagers between 13 and 17 years (Pinandari et al., 2023). In the context of neuroscience, bullying causes changes in the victim's nervous system such as changes in neurochemical release, nerve structure, and changes in nervous activity (Pieter Rossouw, 2013). Meanwhile, in terms of psychology, the victim feels depressed, such as being nervous, anxious, suddenly becoming quiet, gloomy,

fearful, stressed, not wanting to socialize, and experiencing various disorders (Martínez-Monteaugudo et al., 2023). Bullying also has a long lasting impact on the victim. British researchers conducted research on 1,420 children aged 9-16 years who had been victims of bullying. Experts studied their mental condition over a period of 4-6 years. The result showed that children who has experienced bullying more often experience various types of anxiety disorders and panic disorders (Hu et al., 2016).

However, in a preliminary study conducted by the author, it was found that not all educational institutions were exposed to bullying cases. One of these educational institutions is Madrasah Mu'allimat Muhammadiyah Yogyakarta. Both through direct observation and digital searches, it was not found that Madrasah Mu'alimat Muhammadiyah Yogyakarta had any cases of bullying. On the other hand, what was found were Islamic religious intervention practices in anticipating bullying practice. Some that can be mentioned here are Makruf's research on character education (Makruf, 2019), Khasanah and Arifin's research on student leadership in the internationalization of religious values (Khasanah & Arifin, 2017), Sutarman and Cahjono's research on the effectiveness of the spiritual quotient (Sutarman & Tjahjono, 2019), holistic education (Sutarman, Heru Kurnianto Tjahjono, 2017), Fakhruddiana & Sulisworo's research on the balance of developing aspects of values and knowledge (Fakhruddiana F. & Sulisworo D., 2017), and so on. All of this research has a close connection with various approaches to preventing bullying, especially Islamic religious learning, psychology, and even neuroscience.

So far, not many research focusing on preventing bullying using a neuropsychological approach. Just as an example, Garandean's research on the anti-bullying movement only focuses on preventing bullying behavior in schools, but does not use new approaches, especially neuropsychology (Abdullah & Ilham, 2023; Garandean et al., 2023; Paula et al., 2022; Putri & Harahpan, 2018). Another research was conducted by Dafiq on "Education to Prevent Bullying for Adolescents at School". This research discuss bullying prevention but not neuropsychological interventions (Dafiq et al., 2020; Ningsih et al., 2022; Saputri et al., 2023; Useche et al., 2023). Likewise, C. Nasti's research on the relationship between personality and bullying among elementary school students (Nasti et al., 2023). The study discussed school-based bullying prevention interventions but, like other studies, it did not use a neuropsychological approach. Based on a review of previous research, this research has a new aspect, which is neuropsychological intervention.

In an effort to prevent bullying, various approaches have been taken, but they have not shown significant results. Therefore, there is a need for a new approach, one of which is neuropsychological intervention with an Islamic religious approach. Neuropsychology studies the relationship between the brain and behavior (Oktaviani, Kartika N., Esmeralda C. Djamal, 2018; Smith et al., 2023), carries out assessment and

treatment of behavior with impaired brain function (Cubelli, 2021), and the correlation between abilities the brain in processing information on human attitudes (Kalscheur et al., 2022). Neuropsychological studies relate to various functions, including: knowledge, motor skills, skills to manage emotions (expressions and feelings), self-characteristics, and even mental disorders (depression) (Daulay, 2017). The brain receives information through the five senses before interpreting it into concrete behavior (Westlin et al., 2023). Then, this information greatly influences human behavior (Imron et al., 2021).

In the context of Islamic education, preventing bullying with neuropsychological intervention includes a self-control system, which is the ability to regulate, limit, delay, or prevent emotional impulses in oneself (Giommi et al., 2023). The development of brain-based self-control is very important for a person to be able to get along with other people and to achieve personal goals (Centanni & Smith, 2023). The ability to control oneself, especially bullying behavior, in this case is the ability to control impulsive behavior, control stimuli, anticipate an event, make decisions (Sanchez et al., 2019). Mildawani calls self-control a person's physical, psychological and behavioral regulation, in other words a series of processes that require oneself (Mildawani et al., 2022). The development of self-control is very important to be able to socialize and to achieve personal goals (Wesarg-Menzel et al., 2023; Yusmaliana & Suyadi, 2019).

Emotions cause hormonal imbalance in the body and result in psychological tension, especially negative emotions (Baker et al., 2023). Medical science has discovered a number of changes in the human body caused by anger (Potegal & Nordman, 2023). Medical research has concluded that anger, whether visible or hidden, is harmful to health. Because holding onto anger continuously can increase blood pressure (Park & Kim, 2021). Another term for self-control is mujahadah. Al-Shadiqi stated that mujahadah is the ability to suppress the urge of lust which always wants to do something that is not right, then being able to force it to do what is good (Nurjannah, 2022). Lust, which is meant by the lust of anger, is lust that tends to the nature of the body, attracting the human heart to do low deeds in accordance with the primitive instincts (Hartati et al., 2004). A person who is able to restrain him/herself from anger is an emotionally intelligent person. Daniel Goleman states that emotional intelligence refers to the ability to motivate oneself and endurance when dealing with situations of frustration, controlling the heart, regulating feelings of pleasure, managing stress so that not to paralyze thinking, empathy, and prayer (Fauziatun & Misbah, 2020). Therefore, preventing bullying due to students' emotions can be done through neuropsychological intervention with an Islamic religious approach, including: fasting, sports activities, praying, empathy, patience, religious activities, helping each other, and cooperation.

So far, research on preventing bullying behavior has been studied by Emy Yunita Rahma Pratiwi, et al (2022) who explains that bullying has a negative impact on

victims because learning achievement is strongly influenced by disruptions in children's development. [Nina Dwi Lestari \(2020\)](#) states that to prevent bullying, student empowerment programs need to be created to increase knowledge, awareness and ability to prevent bullying. Meanwhile, [Elly Junalia and Yenni Malkis \(2022\)](#) states that service to the school community can be done through outreach such as presenting material, showing short videos about bullying using power points, discussions and questions and answers, as well as providing anti-bullying educational media in the form of posters. [Ike Sintia Suci, Gusgus Graha Ramdhanie, and Henny Suzana Mediani \(2021\)](#) say that bullying prevention interventions are carried out by incorporating prevention programs into the curriculum by involving various stakeholders.

Based on the research above, the research includes the need to conduct further research to complement previous research. The novelty in this research is related to the method used, where this research offers aspects of neuropsychological intervention with an Islamic-based religious approach so that it can prevent bullying behavior at Madrasah Mu'allimaat Muhammadiyah. Neuropsychological intervention with an Islamic religious approach focuses on efforts to empower individuals who experience emotional disorders and behavioral disorders to achieve their maximum potential psychologically, socially and in their daily functioning.

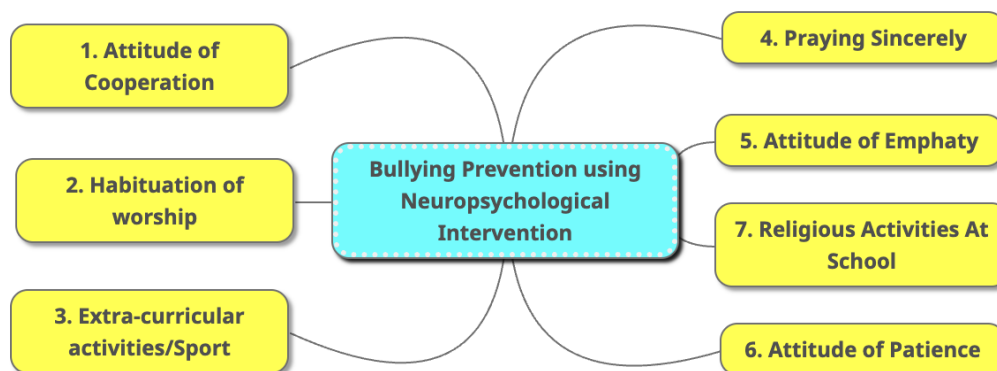


Figure 1. Neuropsychology with Islamic Religious Approach

[Figure1](#) explains that preventing bullying with neuropsychological intervention approach is managed in eight steps (1) an attitude of honesty, (2) the habituation of worship, (3) extra-curricular activities or sports, (4) praying sincerely, (5) an attitude of empathy, (6) an attitude of patience, (7) religious activities at school, and (8) a helpful attitude. Considering that this neuropsychological intervention was designed for Islamic-based schools or madrasas, the repertoire of religious activities relatively dominates over the others.

2. METHOD

This research was conducted at Madrasah Aliyah Mu'allimaat Muhammadiyah Yogyakarta. Researchers chose Madrasah Mu'allimaat Yogyakarta because: (a) high school students are vulnerable to violence between students, bullying, and even crimes that result in fatalities; (b) The school has minimal bullying and has an enthusiasm for participation in the Child-Friendly School Program. (c) in the preliminary study, it was discovered that Madrasah Mu'alimaat Yogyakarta implicitly applies a neuropsychological approach.

The approach used in this research is qualitative-descriptive. The researcher created the main instrument in this research from specific things, from one stage to the next, until finally drew conclusions. The researcher was assisted by six research subjects as key instruments, including the Deputy Director for Student Affairs, Counseling Guidance, Teacher of Al-Islam Kemuhammadiyah and Arabic Language (Ismuba), Musyirifah, Mujanibah, and Madrasah Mu'alimat students.

Researchers used Miles and Huberman data analysis which consists of four stages: data collection, data reduction, data display, and data verification. The validity testing of the research results was done through: first, credibility. Credibility meant here is to increase the degree of trust. The researcher conducted in-depth interviews within the appropriate time period with the research subjects, which were Deputy Director for Student Affairs, Guidance Counseling, Teachers of Al-Islam, Kemuhammadiyah, and Arabic (Ismuba), Musyirifah, Mujanibah, and Madrasah Mu'allimat students. The second is transferability, where researchers try to explain research data information clearly and in depth about neuropsychological interventions with an Islamic religious approach in preventing bullying. The third is dependability, which means the research was carried out using field notes throughout the research process and results with an interview guide. The last is conformability, which means researchers detected records at Madrasah Aliyah Mu'allimaat Muhammadiyah Yogyakarta, so they can be traced back. This research was strengthened by triangulation with lecturer direction and guidance so that the data obtained was valid data.

3. RESULTS AND DISCUSSION

Madrasah Mu'allimaat Muhammadiyah is a cadre school located in the center of Yogyakarta, precisely on Jalan Soronatan NG II/653 Notoprajan Ngampilan with dormitories spread across the villages of Notoprajan, Suronatan and Kauman. The boundaries of Madrasah Mu'allimaat Muhammadiyah Yogyakarta are: 1) to the south of the residential area of Suronatan village, 2) to the east of Jalan Suronatan, 3) to the west of the residential area of Notoprajan village, and 4) to the north of the residential area of Suronatan village. Madrasah Mu'allimaat Muhammadiyah has a strategic position so that it is easy to reach by the public, especially for people who do not know the city of

Yogyakarta. Every female student who goes to school at Mu'allimaat lives in dormitories spread across several points.

Previously, the Madrasah Mu'allimaat dormitory was used as the office of the Yogyakarta Regional Leadership of Muhammadiyah. In the Mu'allimaat dormitory, since the independence era, there has been religious formation. However, the material presented was adapted to the situation and conditions of the dormitory supervisor and in accordance with the needs of Mu'allimaat students. After going through a long process and the hard work of all parties involved in helping to solve the problem of the Mu'allimat Muhammadiyah dormitory, finally Mu'allimaat Madrasah had a dormitory that was quite representative of both pre-independence buildings and new buildings as the result of togetherness. Now, Madrasah Mu'allimaat has 13 (thirteen) dormitories located in 3 (three) locations, which are Notoprajan, Suronatan, and Kauman. Facilities in the dormitory include: A safe and comfortable environment, dormitory room, bed, wardrobe, bathroom, and place to dry clothes. The complete addresses of the dormitories are presented in table 1 below:

Table 1. Location of Madrasah Mu'allimaat Yogyakarta Dormitories

No.	Dormitories	Address	Dormitory Supervisors
1	Siti Aminah	Jln. Suronatan NG II/51 Yogyakarta	Sumarwoko, S.T.
2	Siti Aisyah	Jln. Suronatan No.6 Yogyakarta	Muslihah, S.Pd.I.
3	Siti Aisyah Timur	Jln. Suronatan No.6 Yogyakarta	Azizatun Nisa, S.Pd.I.
4	Ummu Salamah Barat	Notoprajan NG. II/634 Yogyakarta	Agus Salim, S.H.I.
5	Ummu Salamah Timur	Notoprajan NG. II/635 Yogyakarta	Agus Salim, S.H.I.
6	Marya Qibtya	Notoprajan MG. II 596 Rt 32 RW 5 Yogyakarta	Niswatul Lailah, S.Pd.I.
7	Siti Fatimah Barat	Jln. Suronatan No. 42 Notoprajan Yogyakarta	Maisaroh, S.S.
8	Siti Maryam	Jln. Suronatan NG. IV/83 Yogyakarta	Nur Hasanah
9	Khansa'	Suronatan NG. II/855 Yogyakarta	Untung Nugroho Riwahyono, S.Pd.
10	Salsabila	Kauman GM. I/ 261 Yogyakarta	Dwi Setiyawan, S.Pd.
11	Rumaisho	Suronatan.NG II 836/Yogyakarta	Dian Ayu, S.Pd.
12	Shofiyah	Jalan Suronatan No.55 Yogyakarta	Luthfi Kusuma Dewi, S.Pd.
13	Siti Zaenab	Jln. H. Agus Salim No. 33 Yogyakarta	Desi Ikasari

Table 1 explains that Madrasah Mu'allimat Muhamamdiyah Yogyakarta has 13 dormitories in different locations. This condition, according to Sinaga, actually has the potential for bullying between dormitories. However, with neuropsychological intervention, the risk of bullying can be anticipated. In preventing bullying behavior, Deputy Director III for Student Affairs, Counseling Guidance, Al-Islam, teachers of Muhammadiyah and Arabic Language (ismuba), musyirifah, and mujanibah teachers use neuropsychological intervention with an Islamic religious approach.

In preventing bullying behavior, Deputy Director III for Student Affairs, Guidance and Counseling teachers, Al-Islam, Muhammadiyah and Arabic Language (ismuba) teachers, musyirifah, and mujanibah use Neuropsychological Intervention with an Islamic religious approach. This religious approach is applied through Islamic-based activities and habits in Madrasas and dormitories, especially those relating to self-control, such as whudu, sunnah and obligatory prayers, fasting on Mondays and Thursdays, cooperation and friendship, tolerance, empathy, prayer, tadarus Al- Qur'an, interpretation of Al Qur'an verses, empathy, patience, compassion, and other religious habits. Based on the results of interviews and documentation, neuropsychological interventions using an Islamic religious approach used to prevent bullying can be described in the following 6 activities.

1. Self-control through Fasting Habituation

Basically, the command to do fasting is not just about enduring hunger, thirst and sexual activity. However, fasting purifies the soul and cleanses oneself of bad behavior (Andriessen et al., 2023). Fasting is one of the efforts made to prevent bullying at Mu'allimaat, especially sunnah fasting on Mondays and Thursdays. One of the Mu'allimaat students said that fasting on Monday and Thursday is not mandatory, because each person's physical endurance is different. Ismuba teachers explained that this appeal was not only aimed at all students but also teachers and staffs. However, fasting is only a recommendation, not an obligation.

Fasting is a means of training patience, controlling negative emotions, practicing empathy, and reducing arrogance. Dadang Hawari states that fasting is self-control. Self-control is one of the main characteristics of a morphologically healthy mind (Doncheva et al., 2023). Not only controls emotions, fasting (Monday-Thursday) also increases intelligence. This is according to the research conducted by the Baltimore National Institute on Aging stating that fasting once or twice a week can protect the brain from Alzheimer's and Parkinson's disease (Ranisavljev et al., 2023). When there is no food intake in the body, the intestines will rest, food essence will decrease so that the burden on the blood carrying it will decrease (Horne et al., 2023).

Research results prove that there is a significant relationship between fasting and the self-control system. Mostafa Salari Rad's research shows that fasting influences decision making in critical conditions (Hofer et al., 2022; Rad, 2023). In fact, Suyadi's research on ngrowot fasting has significant implications for improving the quality of brain performance (Suyadi, 2019, 2022; M. K. A. Suyadi, 2018). This shows that fasting has implications for strengthening the self-control system in limited conditions.

2. Self-control Through Cooperation and Friendship

The cooperation ordered by Islam is cooperation that has implications for good values. Madrasah Mu'allimaat prevents bullying with cooperation and friendship through routine activities at the Madrasah such as extracurricular activities. The

Guidance and Counseling teacher says that fostering the values of friendship between students from outside the region is carried out through extracurricular activities. Students are free to choose the activities they want. Deputy Director III for Student Affairs says that extracurricular activities essentially teach how to respect and tolerate one another because they teach to work together with one another. Doing activities such as sports/extracurricular is part of controlling emotions.

Ulrike Fasbender explains that there are many findings by Diane Tice regarding strategies for reducing anger (Fasbender et al., 2023). One of which is to go walking for a long time. According to him, this method changes the body's physiology from high anger stimulation to low stimulation (Assadzadeh et al., 2023). Moreover, cooperation and the value of friendship are also carried out through an activity called Iftor Jami'. Deputy Director III for student affairs said that iftor jami' activities aims to bring each batch closer together. Besides iftor jami', another activity is the Member Meeting (Teta). This activity aims to bring students closer together to build friendship values. Deputy Director III for Student Affairs explains that the Member Meeting (Teta) is an event carried out under the coordination of the santri organization (organtri) which is initiated by IPM. In the Teta activity, the students create a stage to display their various creativity, such as making used items into useful items, singing, dancing, reading poetry, and so on. In addition, cooperation and friendly values are also carried out through daily pickets.

As stated by Mujanibah (Islamic boarding school administrator), instilling the values of cooperation and friendship with daily pickets, whether group pickets involving several rooms or daily pickets. The value of friendship is also carried out through study groups. Collaboration makes it easier for students to discover and understand difficult concepts if they discuss, work together, and help each other to solve problems. Cooperation is understood as a form of active participation by each individual to get involved in providing positive value to every problem, object or need of the people around them. The Guidance Counseling Teacher adds that with busy activities at school, students do not have room to engage in bullying.

This explanation is in line with studies in the field of neuroscience, that the part of the brain that regulates cooperation and collaboration is mirror neurons. Afidz explains that mirror neurons have imitating characteristics and even have a high level of imitation (Nurrohman Afidz, 2020). This shows that humans can learn through imitation of others (Jailani et al., 2021, 2022).

3. Self-control through Prayers

Student activities in Mu'alimat before starting learning are praying together, reciting Al-Qur'an, reviewing Al-Qur'an verses, praying *Dhuha*, and praying *Zuhur* together. Students recite prayers, recite AL-Qur'an, and interpret Al-Qur'an verses every day, starting from 07:00 to 07:15. All students, both MTs and MA are scheduled

to lead the prayer using loud speaker in picket room, and other students and teachers listen and follow with concentration. During the group prayer, each class is supervised by the IPM to monitor whether the prayer is going well or not. One of the Mu'allimata students states that the supervision done by the IPM is aimed at ensuring that no students play or fall asleep during prayer. Ismuba teachers states that before learning, each class is accompanied by a teacher and two IPM members.

In a neuroscientific perspective, prayer is a learning process that relies on the theory of relaxation and meditation as self-control techniques (Rezky A. Yastab, Taufiq Pasiak, 2014). Prayer, relaxation, and meditation, have many similarities, as well as differences (Muhimmah & Suyadi, 2020; Pasiak, 2018). According to Tice, relaxation methods, such as taking deep breaths and relaxing the muscles, can change the body's physiology from a state of high anger stimulation to a state of low stimulation. Likewise, prayer done in a relaxed manner (*khusyu'*) makes the mood healthier (Pasiak, 2012). As stated by Tice, praying, if someone is very religious, is very beneficial for all moods (Nurjannah, 2022). On that basis, it is possible that prayer before and after studying is a self-control technique that can effectively regulate the emotional system (Suyadi, 2020). In Islamic perspective, prayer has an important position. The effort for self-control is by wishing Allah for protection. This means that every time someone gets angry he or she ask Allah to save him or her from the anger (Ahmad, 2008). Therefore, the focus of discussion on prayer is not sacred values of text taken from holy book, but rather the *khusyu'* condition when praying (Suyadi, 2020).

Religious activities at Mu'allimat include not only praying but also reciting the Al-Qur'an, studying verses, *Duha* prayer and *Zuhur* prayer in congregation. *Duha* prayer activities are usually done in each dormitory. Besides duha prayer, congregational *Zuhur* prayer is also a routine at Madrasahs before students return to the dormitory. Students who are in their period gathered together in a *murajaah* (repeating) class memorizing Al-Qur'an. Praying in a *khusyu'* condition is also highly recommended in Islam. The meaning of *khusyu'* here is calm and sincere to God in performing prayer. In the perspective of psychology, *khusyu'* condition is easier to get when someone is in Alpha condition than in Beta condition. As we know, brain wave energy is divided into four categories, which are Beta (13-28 CPS), Alpha (7-13 CPS), Theta (3.5 – 7 CPS), and Delta (0.5 – 3,5 CPS). To achieve concentration and *khusyu'* in worshipping, it takes a declining condition from Beta to Alpha.

According to Sentot Haryono, shalat (prayer) contains psychological aspects: muscle relaxation aspect, which according to Walker, this aspect can reduce anxiety, insomnia, and hyperactivity; meditation aspect, prayer has an effect like meditation and yoga and is even a high level of meditation if carried out in *khusyu'* condition; a means of forming personality, through prayer humans will have an attitude of discipline, hard work, love of cleanliness, peace, and so on. After the prayer, the students then perform

dhikr and memorize several *dhikr* pronunciations, especially for new students. Religious activities in Madrasas are managed by IPM and religious activities in dormitories are handled by *mujanibah* and *musyrifah*. Religious activities such as prayer and reading Al-Qur'an, according to one of the Mu'allimaat students, can prevent bullying behavior because in the Al-Qur'an, behavior is taught in the *Akidah*. *Madrasah* also teaches the same thing that Muslims must behave well.

4. Self-control Through Emphaty Among Students

Sense of empathic is a part of bullying prevention in Madrasah Mu'allimat. In instilling the sense of emphatic, ISMUBA teachers give appreciation to students. The appreciation is given to students giving presentation although the answers are not as they are expected. Ismubateachers also encourage students to respect their friends who are presenting by paying attention to what is being presented and giving applause instead of ridicule. People who have high empathy will be friendly to everyone, never hurt people, make friends easily, always help others (Suyadi, 2021). Instilling a sense of empathy is also done by holding routine activities every Monday and Thursday called *Infaq Ceria* (cheerful infaq). Mu'allimat students are encouraged to give donations in the form of money after doing tadarus. The donations that have been collected are then managed by the *Muhammadiyah Amil Zakat Infaq* and *Sedekah* Institution (LazisMu). If one of the students is sick, donations will be taken from the *infaq* that have been collected. A sense of empathy is also developed through the habit of helping each other. Deputy Director III for Student Affairs gave an example, if one of the students in class is sick, the others are used to helping take the sick student to the Student Health Unit (UKS) or to the dormitory. In the dormitory, empathy is also practiced, if a student is sick, other students take care of her by getting food or drink.

Empathy, as practiced by teachers at Madrasah Mu'allimat Muhammadiyah Yogyakarta, is one of the dimensions of positive emotions in neuroscience (Apri Wulandari, 2019; Suyadi, 2018; Wulandari & Suyadi, 2019). Helping and thinking about people is part of good deed. The caring character meant is concern for sharing and helping each other as a form of a Muslim's responsibility towards oneself and God (Prayitno et al., 2022). Caring is an attitude that cannot grow by itself. Therefore, intense training, familiarization and cultivation is needed, so that an attitude of caring grows and takes strong roots (Kumar et al., 2018). Helping is a natural tendency of human. Humans have the basic need to ask for and provide help (Palma et al., 2020). Helping behavior has an impact on life, including: 1) cultivating strong bonds of brotherhood, 2) maintaining existing bonds of brotherhood, 3) fostering a sense of affection between the person helping and those being helped, and so on (Miller, 2015). Instilling a sense of empathy is not only inside the Madrasah or dormitory environment, but also outside through community service activities such as social service activities, *santri mukim* (students from far area who stay in the dormitory), Local Da'wah Team

group work, *hijrah* preachers, and student service. According to Deputy Director III for Student Affairs, Mu'allimaat had previously collaborated in several locations to conduct social services. However, not all students are included in the same activities, because each class has its own program. Another activity is *santri mukim*. Guidance Counseling teachers explain that *santri mukim* is an activity conducted specifically for *santri* to form character so that they feel differences from other boarding schools.

The next program is called the Local Da'wah Team (TDL) which is attended by the fourth grade students or equivalent to grade 1 of Senior High School (SMA) which is held once a year. The TDL program is a program that interacts directly with the community by deploying Mu'allimaat students in various TPAs around the madrasah. The goal is to grow affection for their juniors. Besides local da'wah, another activity is the *Mubaligh Hijrah (Hijrah Preachers)* activity, which is usually held when students reach the fifth grade or the equivalent of the second grade of high school. *Mubaligh Hijrah* is done by sending students to several regions, both nationally and internationally, to convey religious knowledge to the community. Another activity is *Santri Mengabdi*. In this activity, students are trained to become students who dedicate themselves to the surrounding community, mingle and work together, build orphanages, carry out various activities, and teach young children to read Al-Qur'an.

Empathetic character is called as the ability to feel what other people feel, whether desires, interests, difficulties, or problems faced by other people. Johnson states that empathy is the tendency to understand the condition or state of mind of another person. An empathetic person is described as someone who is tolerant, able to control themselves, friendly, has influence, and is humanistic (Ewin et al., 2017). Goleman also stated that the prerequisite for being able to practice empathy is self-awareness, recognizing hidden emotional signals in one's own body reactions. In other words, someone can only empathize if they first know themselves.

5. Self-control through Patience

Preventing bullying at Madrasah Mu'allimat is also done by instilling the value of patience. Among the values of patience is the habit of queuing. The Guidance and Counseling Teacher considers the culture of queuing, such as when taking *wudhu*, bathing, taking food, paying after buying food, including taking turns using the school room, to be values of patience. According to one of the students, the value of patience applied at Mu'allimaat is when queuing to pay at the canteen, queuing to shower, queuing to eat, patiently waiting for the gate to open when school is finished, and being patient in waiting for the test scores to be released. This has the effect of preventing bullying. One of the students says that the queuing culture implemented at the Madrasah has become a habit, and they are not allowed to make noise while queuing. Meanwhile, the Ismuba teacher instills patience through oral test. During the oral test, the students

used to scramble to get their turn quickly. However, in instilling the value of patience, ISMUBA teachers make the students discipline by calling them one by one.

Patience is said to be part of the value of faith which has implications on a person's behavior (Subandi, 2011). Ibn al-Qayyim, as quoted by Qymnastiar and Ubaid, explains that patience is restraining oneself from giving in to one's desires, controlling one's words from complaining, and controlling one's body parts from immoral acts (Michelle et al., 2023). From a neuroscientific perspective, patience is a person's resilience to disaster (Dilla et al., 2018; Muarifah et al., 2020). The same thing has also ever been asked to Dzunun, he then answered, "avoid breaking the rules, be calm in bad times, and show sufficiency when facing a lack of livelihood (Ubaid, 2012). In daily life, the value of patience is needed when someone is facing various psychological problems, for example when facing stressful situation, facing problems, bad luck, or when in emotional condition of anger (Subandi, 2011). Those who are able to be patient in hard times, misery, and wars (including wars against anger and lust) are godly people and therefore God is with them.

6. Self-control System through Guidance

In providing guidance, Ismuba teachers always start the learning by telling stories (K. Z. P. & Suyadi, 2016). After telling the story, the teacher then invites the students to communicate or share their knowledge and experiences. From a neuroscience perspective, the process of interaction between teachers and students is one way to reduce emotions (Apri Wulandari, 2019). Students become more open in their interactions and do not hesitate to give their opinions to their teachers. *Musyirifah* also provides guidance to the students with good communication. When communicating, *Musyirifah* always provides good advice. In counseling, the sharing method was not found, but researchers believe that what *Musyirifah* meant was personal counseling. This is based on a book written by Siti Rahmi, citing Ahmadi's statement, that individual guidance is a series of activities designed to help students face personal and social problems, make personal and social adjustments, choose social groups, and choose types of social activities (Rahmi, 2021). Syamsu Yusuf in his book, *Kesehatan Mental (Mental Health)*, also mentions that personal counseling aims to enable individuals to understand, accept and direct themselves positively, and the construction is by guidance teachers or counselors (Yusuf, 2018).

Counseling Guidance teachers also provide guidance with good communication (I. Z. P. dan Suyadi, 2016). The communication is based on Islamic values, not solely psychology. In its implementation, students understand that bullying is behavior that has a negative impact on both the victim and the perpetrator. Before guidance is given, Guidance and Counseling teachers look for the root of the problem, clarify it, and find the problem that occurs. After finding the root of the problem, the victim and perpetrator are then given guidance, and the two parties are reconciled. Guidance and

Counseling teachers adds that the guidance can be in the form of providing problem solving, understanding, and ways to control emotions. The emotional control meant by the Guidance and Counseling teachers is in line with Darwis Hude's statement that the emergence of a person's emotions can be recognized from the expression they show immediately whether from changes in their face or tone of voice or behavior. Controlling emotions is very important in human life, especially to reduce tension that arises due to heightened emotions.

As a further step to minimize emotions, intense guidance is needed because the students still lack of understanding about the environment, about themselves, and even about their lives' direction. In terms of guidance, students are helped to solve or overcome the problems they face constructively and develop their mentality individually or in groups (Lewandowski et al., 2021). There are three types of guidance at Madrasah Mu'allimat: classical guidance, group guidance, and personal guidance. Classical guidance is usually done in each class once a week for 45 minutes. Deputy Director III for Student Affairs says that in class the material provided by Guidance Counseling teachers is not only about anti-bullying, but also material on social ethics, Islamic religious views on bullying, and so on. Grouped guidance is conducted by combining several classes and then holding programs such as anti-bullying seminars. This group guidance is also done by inviting students and then giving them guidance to solve their problems. This guidance is given so that students gain a correct understanding of life and solve problems related to their lives (Brændstrup et al., 2023).

Grouped guidance can be called a guidance service that allows students together to obtain various materials from certain sources, from supervisors or counselors, which are useful to support their lives. Grouped guidance services aim to solve student problems. As stated by Febblina Daryanes, group guidance is used to help students solve the problems they face through grouped activities (Daryanes et al., 2023). Another guidance provided at Madrasah Mu'allimaat is personal guidance. Counseling and Guidance teachers explain that personal counseling is carried out face to face (alone) by one student with one Counseling Guidance teacher. Personal guidance is not only about bullying cases, but according to students' needs such as personal problems, social problems, learning, and so on (Molnár & Greiff, 2023). This personal guidance is provided to overcome various problems or difficulties faced by individuals.

4. CONCLUSION

Based on the research results, it can be concluded that bullying behavior is part of the problem in the madrasah/school environment. One of the causes of bullying is differences in character among students. Whatever the form of bullying behavior, it has a negative impact on the victim, including preventing children from actualizing themselves. Therefore, cooperation and serious efforts of educational institutions are

needed to prevent bullying behavior. One effort that can be made is to use Neuropsychology with an Islamic religious approach. The following is the process of preventing bullying with Neuropsychological intervention using an Islamic religious approach at Madrasah Aliyah Mu'allimaat Muhammadiyah Yogyakarta: (1) Guidance and habituation to fasting. This guidance is given individually and in groups. It is recommended for students and employees to fast on Mondays and Thursdays, (2) Cooperation and friendship values are carried out through student activities such as extracurricular activities, *iftor jami'*, member meetings, competition activities in the madrasa environment, learning methods in the classroom, and so forth, (3) Prayer and religious activities. Prayer as self-control is done before and after studying, then religious activities are conducted in Madrasas and Dormitories, such as congregational prayers, reading Al-Qur'an, and zikir (4) Developing empathy is done by instilling the values of always respecting others, giving donations every Monday and Thursday, getting used to living together. An empathetic attitude is also instilled through activities outside the madrasah such as students service program, *santri mukim*, local da'wah teams, and *hijrah* preachers, (5) Patience is self-control in the Mu'allimaat madrasah. Students are instilled with the values of patience such as queuing and being patient when doing activities in the madrasah/dormitory environment. (6) Tolerance is also part of preventing bullying at Mu'allimaat. Students are instilled with an attitude of tolerance, such as the habit of respecting friends, smiling, greeting, saying hello when meeting friends or teachers. This research recommends that further research be conducted specifically regarding the evaluation of neuropsychological intervention models at Madrasah Mu'allimat Muhammadiyah Yogyakarta. The effectiveness of the neuropsychological intervention model opens up opportunities for other Islamic educational institutions to adapt and modify to prevent bullying in the future.

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