

## Countering Radicalism in STEM: Design and Validation of the *Tarbiyah* Mentoring System Model for Mathematics Students

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Received: 25 August 2025

Accepted: 04 November 2025

Published: 19 November 2025

**Abstract: Countering Radicalism in STEM: Design and Validation of the *Tarbiyah* Mentoring System Model for Mathematics Students.** **Objectives:** This study aims to develop the Anti-Radicalism *Tarbiyah* Mentoring System Model (TMSM) as an innovative character-building model for students in the Mathematics Department, Faculty of Mathematics and Natural Sciences, Universitas Negeri Makassar (UNM). The model is designed to strengthen students' understanding, mentality, and moral attitudes in countering radicalism in the academic environment. **Method:** This research employed a *Research and Development* (R&D) approach using the PLOMP model, which consists of five stages. The study accomplished the first four stages: (1) needs assessment, (2) design, (3) realization, and (4) formative evaluation. Data were collected through surveys, focus group discussions (FGDs), and expert validation to ensure the feasibility, relevance, and quality of the developed instruments. **Results:** The study produced a prototype of the TMSM Anti-Radicalism (TAR) Model equipped with two supporting tools: the Training Implementation Plan (TIP) and the Weekly Training Pocket Book (WTPB). The mentoring-based training activities significantly contributed to enhancing students' understanding, strengthening their mental resilience, and cultivating moral attitudes to develop an anti-radicalism character. **Conclusion:** The TMSM TAR Model can be applied as a structured, systematic, and sustainable mentoring framework to prevent radical tendencies among university students. However, further empirical testing is required to validate its effectiveness and adaptability in broader academic contexts, ensuring the sustainable implementation and long-term impact of the TMSM anti-radicalism (TAR) model.

**Keywords:** development, anti-radicalism, TMSM model, character building.

### To cite this article:

Nurhilaliyah, Rahman, A., Suwahyu, I., & Anam, M. Y. (2025). Countering Radicalism in STEM: Design and Validation of the *Tarbiyah* Mentoring System Model for Mathematics Students. *Jurnal Pendidikan Progresif*, 15(4), 2272-2287. doi: 10.23960/jpp.v15i4.pp2272-2287.

## ■ INTRODUCTION

Islam is one of the religions that is present in life, accompanied by the mission of *rahmatan lil alamin*. Thus, the existence of Islam prompts humans to consider a socio-cultural movement paradigm that seeks to embody the face of Islam, *rahmatan lil alamin*, in the context of community life, both personally and within the broader community (Seedat, 2020; Syaifudin et al.,

2025). Islam is also a form of value, not just an opinion or thought. The Islamic religion itself aims to draw its people, who are less or not closely affiliated with their faith, closer to it (Abbas et al., 2021; Rothman & Coyle, 2020). Islam can also interact with other religions without losing the essence of the teachings taught by the religion (Saada, 2022; Sijamhodžić-Nadarević, 2023). The most important thing is in conditions where

other religions do not dominate. Islam can also strive to connect life to achieve peace and foster an attitude of tolerance.

The value system originating from Revelation must be implemented in community life, not just as an ideal and abstract theory (Buchanan et al., 2023; Elmahjub, 2021). In addition, in its history, cultural Islam has also been stated to be an alternative that is preferred in community life in the Muslim community, considering that today's world is full of secularism and capitalism (Javaid, 2022; Roose, 2020). Essentially, the introduction of Islamic teachings in Indonesia employed a socio-cultural and trade approach (Aditya & Mutho, 2025; Azis et al., 2021). The understanding of society in Indonesia at that time transformed with the arrival of Islam, and many people continued to adhere to Hinduism.

In Indonesia, religious understanding and sects have given rise to various movements, both positive and negative, through social interactions within the community (Lewis et al., 2023; Van Buren et al., 2020). Various religious understandings have begun to emerge recently, including those that have the potential to address a sectoral problem. They sometimes refer to their group as reformist Islam, or an understanding of Islam that is considered ideal. However, among them, several teachings are inversely proportional to the teachings of Islam, *rahmatan lil alamin*, so that this often becomes a cause for various responses from religious adherents who feel disadvantaged or believe this is unacceptable.

The various problems that have been explained have given rise to several new terms in Islam, namely radical Islam, hardline Islam, secular Islam, liberal Islam, and various other forms of Islam. For laypeople and those who adhere to the Pattimuran culture established by the Republic of Indonesia, based on Pancasila and the 1945 Constitution (Sedubun, 2020; Tarigan & Gaol, 2025), these terms will become labels for opponents of social harmony within a religious framework. Thus, various radical

religious beliefs can harm society, where various religious materials, when implemented, are sometimes considered incorrect. This also often happens to young Muslims in public universities who still have a minimal understanding of religion.

Recent needs assessment studies in several Indonesian public universities indicate that more than 23% of students have been exposed to exclusive or intolerant religious narratives, and 14% express agreement with the use of violence for religious goals (Aprilianto et al., 2025; Mulyana, 2023). This data shows that university students, as a critical generation, can become vulnerable targets for radicalization, particularly when their religious knowledge is shallow and uncritical. Therefore, systematic and structured interventions are needed, rather than incidental campaigns.

In fact, the Islamic religion itself provides a sense of comfort, security, calm, and tranquility to all creatures on earth. There is no single religious teaching that gives orders to its adherents to hurt or hate other people. If there is something like that, perhaps it is just a problem between individuals, rather than a problem with the religious teachings themselves. Muslims believe that the *Al-Qur'an* and the *Sunnah* of the Prophet are the primary sources for addressing various life problems.

Muslims are faced with new challenges due to the emergence of various political problems related to Islamic radicalism and fundamentalism. In fact, the international community has been discussing these problems for quite some time and is not overly aligned with Islam. However, the media plays a significant role in shaping people's perceptions of Islam worldwide. Islamic radicalism is not only a topic of discussion in historical, sociological, and political events and civilization in the world. There are various terms from observers from the United States and Western Europe to describe Islamic radicalism, starting with extremists, fundamentalism, terrorism, hardliners, and militants. After the Cold

War, Western society saw the Islamic change movement as something frightening. The most frightening political turmoil in the world is the rise of the Islamic movement called radicalism. Western nations that accuse and propagandize Islam as a religion that supports radicalism have developed into an international rhetoric.

Western media use the Islamic modernization movement to promote Islamic radicalism, which results in the term radicalism being deliberately used to promote Islam that opposes the West and its allies. As such movements are the resistance of the Palestinian people, the FIS Party of Algeria, the anti-US behavior of Mu'ammar Ghadafi and Saddam Husain, the Islamic Revolution of Iran, the Islamic movement in South Mindanao, the solidarity of Muslims in Indonesia who fell to the oppressed brothers, and the Muslim community movement and those who are anti-US (Haddade, 2020; Kazmi, 2022; Muthuswamy, 2022).

From the perspective of Western countries, the Islamic movement has become an event that needs to be questioned. Not only that, the term radicalism became very famous even almost all over the world after the World Trade Center (WTC) building in New York was destroyed with the alleged destruction of groups from extreme Islamic religions such as Al-Qaeda and the Taliban and this has an impact on the suspicion of the international community towards the Islamic movement, especially in the United States and western countries. The reason for this is that Western European countries and the United States can disseminate propaganda, influence public opinion, and collaborate with the media, which gives rise to various societal views of Islam (Carter & Carter, 2021; Chernobrov & Briant, 2022).

Within the context of higher education, "radicalism" is understood not only as support for violent extremism but also includes exclusivist interpretations, intolerance toward other groups, rejection of Pancasila, and refusal to participate

in civic values (Carter & Carter, 2021; Syam et al., 2020; Yani et al., 2024). Indicators identified in preliminary campus surveys include (1) rejection of national ideology, (2) low acceptance of religious diversity, (3) tendency to support extreme organizations, and (4) intolerance toward gender and minority groups.

Among different study programs, students in mathematics departments have shown unique patterns. According to a 2024 needs analysis at three state universities, mathematics students demonstrated lower levels of participation in interreligious dialogue programs. They exhibited lower literacy in critical religious thinking compared to students of social sciences or education. This may be related to the curriculum's cognitive orientation and limited exposure to reflective and social discourse, which can increase vulnerability to black-and-white religious narratives. This specific vulnerability underscores the need for an intervention model tailored to their characteristics.

Through various descriptions presented, researchers conducted an attempt to describe more broadly about Islamic fundamentalism which is suspected to be the starting point of the Islamic radicalism movement in all the world. The emergence of potential for creating radical movements is due to the thinking about fundamentalism within each society that believes in it. Because of this, there is an assumption within themselves about the evidence they perceive and interpret, or through their teachers.

While several national programs on deradicalization already exist, such as BNPT campus campaigns, *Pancasila* education modules, and student character education, they are often top-down, general, and not discipline-specific. The novelty of the TAR model lies in its integration of character formation, critical religious literacy, and participatory training modules specifically designed for mathematics students, supported by a structured development framework. Unlike conventional deradicalization

programs that rely on lectures or seminars, TAR focuses on internalizing anti-radical values through training, reflection, and peer mentoring mechanisms.

There is an alternative to obtain a solution to the problem, namely by creating the development of a learning model through the use of one of its development approaches, namely the training, training, and cadreship model developed by PLOMP (Hidayat et al., 2022; Thalhah et al., 2022), which consists of 5 stages, namely: 1) Conducting an initial assessment, 2) Designing, 3) Realizing, 4) Evaluation or testing along with revisions, and 5) Implementing the capital. In this research activity, the researcher designed a prototype model to characterize anti-radicalism students by emphasizing the four initial stages of the PLOMP model.

## ■ METHOD

This research employed the R&D (Research and Development) type, referring to the PLOMP development model (Alamanda et al., 2023; Firdaus et al., 2023). This model was chosen because it enables researchers to systematically develop, test, and validate a training model, ensuring its effectiveness and applicability in the context of anti-radicalism character development.

### Participants

The participants consisted of 45 undergraduate students from the Mathematics Department, Faculty of Mathematics and Natural Sciences (FMIPA), Universitas Negeri Makassar, who are Muslim and enrolled in the 3rd to 5th semester. In addition, five experts in character education, religious moderation, and instructional model development were involved as validators during the model development process. Sampling was conducted using a purposive sampling technique to ensure that participants matched target group characteristics.

### Research Design and Procedures

The study followed the PLOMP model, consisting of four main stages:

1. Initial Investigation: Conducting a needs assessment through surveys and interviews with students and lecturers to identify indicators of radical tendencies and existing learning gaps.
2. Design: Developing the TAR model framework integrating anti-radical values, critical religious literacy, and peer mentoring elements.
3. Realization/Construction: Producing training materials, student activity modules, and implementation guides.
4. Evaluation and Revision: Validating the model through expert judgment, small group trials, and revising the model based on feedback.

### Instruments

The instruments used in this research included (1) a radicalism tendency scale adapted from the BNPT campus deradicalization indicator, (2) a religious literacy questionnaire, and (3) expert validation sheets to assess model feasibility. Instrument validity was ensured through expert validation (Aiken's V) and reliability using Cronbach's Alpha.

### Data Analysis

Quantitative data obtained from the pre-test and post-test Radicalism Tendency Scale were analyzed using descriptive statistics and a paired-sample t-test to measure the effectiveness of the model. Qualitative data from interviews and observations were analyzed through thematic analysis to support the interpretation of the findings. The TAR model development process is supported by a cadre training and character development approach designed to build awareness and resilience against radicalism. This approach is unique because it tailors the intervention specifically for mathematics students, emphasizing analytical and reflective thinking skills.

## ■ RESULT AND DISCUSSION

### General Conditions of FMIPA UNM Students

Students in the Mathematics Department of FPMIPA UNM are from diverse backgrounds, including various socioeconomic levels, organizational experiences, and geographical regions. These students are very heterogeneous in many ways, namely, they are all graduates of high schools or Islamic high schools.

Essentially, the attire of FMIPA students appears religious, as they exhibit characteristics typical of male students wearing long pants and female students wearing skirts, with some wearing closed attire, such as robes and veils. These students remain in the mosque when it is time to pray until it is finished to attend religious studies. During break time, many students and employees choose to stay in the mosque, waiting for the start of lecture activities. However, some people only take a break while waiting for prayer time to pray in congregation. In contrast, others discuss religious and academic issues, even making the mosque porch a place to study. Although such events can illustrate that FMIPA students are religious, some students simply stay in the mosque porch to rest from fatigue.

This is the beginning of the understanding of religion between FMIPA students and Islamic religious education lecturers tends to differ. They debate something with lecturers about the knowledge they gain from various places of study. The current situation is very different from the past; in the past, a student would have a thick book for reference during their debate activities, but now students often rely solely on *Google* on their smartphones for reference.

Other people's opinions are said to be wrong if they have adhered to a school of thought that is considered the most incorrect. Their understanding of religion declines until some of them choose to return home after studying at the chosen institution for a year, as studying general

knowledge is considered unimportant or useless for their future. They chose to move campuses to *STIBA*, which is considered a campus that can save them if they do not return home.

This is also the same as the situation of Mathematics Department students in their understanding of religious teachings, which tend to be textual; sometimes they are also given the nickname of heresy experts because they have the assumption that whatever heresy is done in every action is not based on the habits of the Prophet Muhammad SAW.

Various ideas emerge and become part of public discourse, which is considered valid because society is in a state of crisis, where the truth is obscured by various issues that are increasingly popular. This has an impact on students because they are influenced by increasingly sophisticated technology. They prefer to study religion on social media rather than with teachers or clerics. This has an impact on their attitudes, which can sometimes be negative when they behave, speak, or act in specific ways.

The rapid development of the era has led humans to exhibit both patient and fast behavior, following whatever is emerging in the current era until it causes a shift in life values. Humans are social creatures who always need help from others; they cannot live alone. Students are required to pay special attention to themselves regarding how to maintain good behavior and customs in order to return to society. This can instill good morals in students for society.

It is wise to think and behave wisely, which is the most important component for students, as they are required to position themselves through the direct practice of wise values. Thus, they will be given a lot of insight and knowledge to develop good moral values. This is what is carried out in TMSM activities in the Mathematics Department. Students can play a significant role in society if they are equipped with extensive knowledge, guided by the teachings of *Al-Qur'an*, and engage in reading *Tahsin*. Mathematics Department

students will strive to develop themselves as progressive scholars who have made efforts to actualize themselves as individuals of high quality in terms of knowledge and character. This is done so that in the next life, they can have a good and advanced role for the nation and state.

Students with good morals and a positive personality will be recognized through the provision of knowledge, accompanied by faith, as presented in TMSM activities. The church is the best place to help achieve this, including having a pious and faithful personality, carrying out good deeds, and avoiding bad deeds. In line with this, Mathematics Department students are also required to have strong faith and piety in Allah subhanahu wa ta'ala accompanied by efforts to carry out the teaching and learning process well so that they can deepen their knowledge, both general knowledge and religious knowledge and understand the various academic regulations on campus, which will then be realized in community life to become students who are very successful in the future.

Through this, students in the Mathematics Department will develop increased piety, faith, and knowledge, and applying these principles to their lives is a necessity. Therefore, there will always be a flow of benefits from the existence of this, and one can realize a bright civilization in line with the words of the Prophet Muhammad SAW, namely, "The best people among you are those who are most useful to others."

### Media Development Result

The TMSM model development followed the first four phases of the PLOMP framework. Expert validation confirmed the appropriateness of content, construct, and design (Aiken's  $V = 0.87$ ). Reliability testing showed high internal consistency for both instruments ( $\alpha = .91$  for radicalism tendency and  $\alpha = .88$  for religious literacy). The model produced two main outputs: the Training Implementation Plan (RPT) and the Weekly Training Pocket Book (WTPB), which

integrated interactive mentoring and reflective learning activities.

### TMSM Mathematics Department Form

The form of approach that needs to be taken towards TMSM training and learning consists of two forms, namely as below:

#### *Classical every Saturday*

In college, as the majority of teaching and learning activities are carried out classically, meaning that educators provide explanations to students verbally, many assume that various forms of classical learning are very appropriate forms. In general, classical learning forms, such as those used by educators, can organize learning into group models if the number of class members is large. For example, the TMSM model, which consists of 4 classes, can be employed. During classical teaching and learning activities, students are required to do two things: listen to explanations from lecturers and take notes or summaries (Opdal, 2022).

The lecture method, along with the question-and-answer method, is a technique often used in classical teaching and learning activities. The question-and-answer method is implemented to ensure that students' attention is focused on asking questions that are relevant to the material being explained. The *tahsin* activity of reading the *Qur'an* is a routine activity carried out on Saturdays, led directly by the activity coordinator. This is carried out because, essentially, the new students of the Mathematics Department have a reading level of the *Qur'an* that is still below standard. However, there are also some of these students who have memorized the 30 *juz* (chapters) of the *Qur'an*, and their reading is already proficient. The *Qur'an* is the holy book of Muslims, revealed by Allah through the intermediary of the angel Gabriel to the Prophet Muhammad SAW, which is the greatest miracle; therefore, students are encouraged to be available to study the *Qur'an* well.

Muslims are required to believe in the holy book of the *Qur'an* and are even required to study it, its readers, and practice it in their lives (Felsenthal & Agbaria, 2023; Rafiq, 2021). When the process of understanding the *Qur'an* in the classical learning model involves various efforts to learn the *Qur'an*, which vary, including improving makhraj, memorizing treasures, and studying it between courses.

### ***Mentoring every working day from Monday to Friday***

Every week, the Islamic religious education course has two to three credits or teaching hours. State and private universities should be able to provide religious education rights for students. This is a spiritual need to live their lives, as there is much material that needs to be re-examined in adulthood.

An essential thing to be re-explored by students is an understanding of worship; some of them are often found to be less fluent in reading the *Qur'an*, and some are even illiterate in the *Qur'an*. This is related to their social life in the campus environment, students are part of the academic community that must be based on various noble values of religious teachings (Mulyana, 2023; Rahmah & Ilham, 2022), not just if the arrangement only uses the student code of ethics compiled by the campus. This is because on-campus life requires more time compared to a student's daily life.

Through the mentor system coaching technique, educational teaching will be more focused for students. The teaching will provide awareness and provide direction and religious reinforcement for Muslim students. The rise of scientific culture from mentoring activities, whether in the form of studies or those directly fostered by mentors, is a very positive activity (Montgomery et al., 2022; Pizzolato & Dierickx, 2023), because mentoring activities can provide a much broader insight into Islam than just

prioritizing religious learning activities in class, which only reach 2 to 3 credits.

Mentoring is one of the coaching techniques used to develop character and enhance students' knowledge (Gamage et al., 2021). In various educational institutions, ranging from junior high schools to universities, mentoring has been widely implemented. Another term for mentoring is *halaqah*, which refers to a group of individuals sitting in a circle with a mentor or teacher at the center for learning activities. The implementation of mentoring activities is a form of coaching that guides students in reading the Quran in groups, and it is applied regularly and continuously, every Monday to Friday (Fildzah & Makrufi, 2021; Septiawan et al., 2024). Each group has 3 to 5 members, one teacher, who has obtained a certificate from the department and been declared to have passed TMSM.

The implementation of this mentoring also collaborates with the TMSM coordinator, who serves as a moral mentor and leads a small group system supported by religious activities on campus. This is done with the hope of increasing students' understanding and faith, thereby forming better Muslim personalities. This activity is also supported by the department head and the faculty head because it has a significant impact on the character of students in the Mathematics Department. There is an argument regarding the importance of mentoring written in the *Al-Qur'an Surah Al-'Ashr* (103: 1-3) (Cahyani et al., 2024; Hasnah et al., 2024), which reads:

وَالْعَصْرِ إِنَّ الْإِنْسَانَ لَفِي خُسْرٍ إِلَّا الَّذِينَ ءَامَنُوا وَعَمِلُوا الصَّالِحَاتِ وَتَوَّصَوْا بِالْحَقِّ وَتَوَّصَوْا بِالصَّبْرِ

Translation: For the sake of time. Indeed, humans are truly at a loss, except for those who believe and do righteous deeds and advice advises them to obey the truth and advice advises them to be patient.

During mentoring activities, mentors also offer each other advice to remind one another of various good things.

### Pilot Study

A small-scale pilot study involving 15 students evaluated the clarity of the instruments and the training flow. Observations indicated positive engagement, with participants suggesting

clearer contextual examples. Revisions were made accordingly before conducting the main trial.

### Effectiveness Test Results

The paired sample t-test revealed significant improvements in students' religious literacy and reductions in radicalism tendencies. The effect sizes were large, indicating a substantial educational impact of the TMSM model.

**Table 1.** Effectiveness test results

Variable	Pre-test (M ± SD)	Post-test (M ± SD)	t	df	p	Cohen's d
Religious Literacy	68.44 ± 7.12	81.90 ± 6.58	6.42	44	<.001	1.01
Radicalism Tendency	72.33 ± 6.77	61.22 ± 5.91	5.87	44	<.001	0.94

### Qualitative Findings from FGDs

These findings provide qualitative support to the quantitative results, showing that the mentoring process strengthened reflection, empathy, and critical awareness.

### Student Cadre Development Model Prototype

Prototype in KBBI comes from the word "prototype/pro·to·ti·pe/n the original model (original model), which is an example; standard

**Table 2.** Effectiveness test results

Theme	Description	Verbatim Evidence
Reflective Understanding	Students developed a more contextual and critical comprehension of Islamic teachings.	"I realized that being critical about religion helps deepen faith, not weaken it."
Tolerance and Empathy	Improved respect for peers with diverse backgrounds.	"Before joining, I used to avoid discussions about differences. Now I am more open."
Resilience against Radical Narratives	Strengthened ability to filter intolerant or extreme messages.	"I used to follow harsh online preachers, but now I can assess information critically."

example; typical example". Thus, the term prototype model refers to a form of model book that is produced temporarily and has not yet been applied. There are three aspects of the material offered in this model: matriculation, standardization of religious understanding, academic regulations in higher education, and participants' mental readiness to adapt to changes in learning patterns.

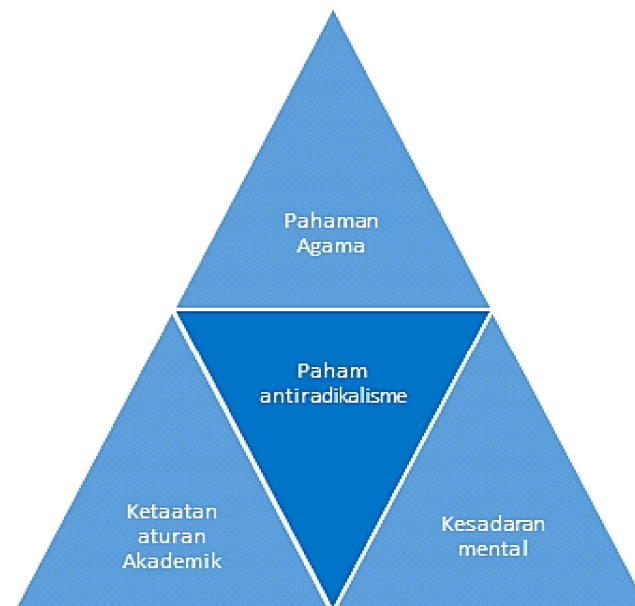
The three aspects offered above are the main reasons for creating student behavior that obeys academic regulations on campus, so that they are aware of the importance of independent behavior and attitudes in order to determine the key to success in the future, and instill the basic concept of the religion of *rahmatan lil alamin* to avoid radical attitudes. Teaching and learning activities in the classroom that focus on



knowledge and mental preparation of students are the approaches used in training among the three aspects mentioned above. This is because the teaching and learning atmosphere, as well as the maturity and self-awareness that can emerge, can align with the governance of student development in the mathematics department, which has inherited a pattern of cadreship and the acceptance of new students with violence.

There is also a classical approach that focuses on understanding students' knowledge

in academics, religion, and their mental state. For these three aspects, the training material is presented by UNM lecturers or other materials that are considered to have competence in the field. Regarding Islamic religious education, UNM tends to be a material in the field of Islamic religion; heads of departments or faculties, and universities tend to be academic materials. At the same time, UNM lecturers with competence, for example, in areas such as free association, will be presented by UNM psychology lecturers to address the mental aspect.



**Figure 1.** The pyramid of the combination of the three TMSM materials

The combination of the three aspects in the image can be hypothesized to encourage students to become anti-radical. Several aspects still require refinement and modification based on the experience of implementing the three aforementioned aspects through materials that underwent significant changes from September 2014 to March 2020. This description states that several aspects still need to be changed and maintained in order to instill an understanding of anti-radicalism in students.

There are several advantages and disadvantages to implementing TMSM, despite

its development and implementation by various parties. The advantage of TMSM is that the material presented is not monotonous or boring on a single main topic, but instead is designed to transition between the three aspects. The disadvantage is that no curriculum serves as a reference for implementing TMSM in each semester for new students.

The description of the three main materials above is accompanied by various special topics that focus on instilling an understanding of anti-radical rationalism. The selection of the three main components, academic, religious, and mental

(Hussain et al., 2023; Khaki & Sadeghi Habibabad, 2021), in TMSM is based on a holistic character-building approach. The academic aspect strengthens students' critical and rational thinking skills, enabling them to resist accepting exclusive religious narratives without a thorough analysis process (Altinyelken, 2021). The religious aspect instills Islamic values, such as *rahmatan lil alamin*, which emphasize tolerance, compassion, and diversity, thereby forming a moderate spiritual foundation

(Habibulloh, 2024). Meanwhile, the mental aspect fosters psychological resilience, enabling students to resist ideological pressure and the lure of radical groups (Zembylas, 2021). Theoretically, the integration of these three components forms a strong cognitive-affective and moral structure, making students more resilient to extreme ideologies. In this study, the researcher provides suggestions for each of the four topics related to the main materials, which are presented in the table below.

**Table 3.** Weekly TMSM material schedule

No	Package	Material
1	General	Opening & Placement Test for <i>Qur'an</i> Recitation
2	Academic	Lecture rules & department administration management
3	Religion	The <i>Qur'an</i> is a guide that is <i>rahmatan lil alamin</i>
4	Mental	Personality of mathematics students
5	Academic	UNM Academic Rules
6	Religion	Maintaining the <i>sunnah</i> in thinking and acting
7	Mental	Comparison of studying at domestic and foreign universities
8	General	Mid-test Season Break
9	Academic	UNM student regulations
10	Religion	Organizing life according to the creed of <i>Ahlussunnah wal Jamaah</i>
11	Mental	Free association vs Islamic <i>silaturrahim</i>
12	Academic	UNM Statutes
13	Religion	Grounding good morals in everyday life
14	Mental	Becoming an Islamic organizer
15	General	Closing & Handover of TMSM & Memorization Certificates

## Model Support Devices

### **Training Implementation Plan (RPT)**

The design of RPT aims to facilitate lecturers or mentors in mentoring new students. Various essential things are included in RPT, including: a) introductory info: title of material, how long the training is, what techniques are used, and the name of the person providing the material (if available); b) Core material: activities carried out with mentors or lecturers during training; c) Closing: making conclusions from the results of the day's activities and preparing for the next day's activities.

### **Training Week Pocket Book (WTPB)**

In this research activity, a project is underway to design a book with a simple form that can be carried anywhere and is sufficient for understanding the material presented at each weekly meeting (on Saturdays). This pocket book is similar to books in general, but for its size, it is simpler. That way, this pocket book consists of a cover sheet, introduction, table of contents, content, references, additional reading, and author history. Of the 7, some are the core of at least writing a weekly pocket book. However, there is a possibility that websites or

links may provide downloads of additional enrichment materials, such as presentation slides, various books, and videos.

### **Model Implementation Pattern**

The design of the Anti-Radicalism Success Management Training Model in Mathematics (TSM) is intended solely for new students in the Mathematics Department, FMIPA, at UNM, for a period of one semester. Originating from the academic system of Makassar State University, it states that the total number of meetings arranged for one semester is 16, with two scheduled exams: the mid-term and final semester exams. Up to 14 lecture meetings can be used to discuss presenting materials, practice questions, or take daily tests. Through this, the TAR Model is arranged in 12 meetings, excluding the opening and closing ceremonies. The total of 12 meetings is arranged with the presentation of various materials related to academics, religion, and mentality (in sequence).

The emergence of the term "Saturday" is due to the presentation of heterogeneous weekly materials, usually done every Saturday with different topics and an extra focus on the psychological development of students. The purpose of this is to enable students to develop their sense of awareness, starting with self-awareness or internal awareness of their own achievements, and progressing to awareness of their external surroundings or the general world. All of these awarenesses are contained in three main aspects in the material presented in training activities, namely academic, religious, and mental.

### **Achieving Self-Awareness**

To achieve the goal of student self-awareness, the TAR capital program is designed with six weekly materials. The weekly materials include regulations related to the department or academic material, as well as the priority of the *Qur'an* and its *Sunnah* in thinking and acting in relation to religion. Additionally, they cover

personality traits of students in the Mathematics Department and the learning efforts of students both abroad and at home, including mental material. There is the final material, which follows the completion of the six weekly materials, namely a comparison between the teaching and learning styles of students in Indonesia and those outside Indonesia.

Through this material, it is hoped that students' awareness will grow, as there are aspects that need to be changed within each of them, enabling them to compete with students from other countries. Students' self-awareness will have a greater opportunity to grow because the last material builds upon five other materials. The most important self-awareness for students includes 1) mental awareness that mentality is something that needs to be prepared for oneself, 2) self-awareness regarding religion that the *Qur'an* and its *sunnahs* are the most important foundations for living life, 3) self-awareness related to academics that through an orderly attitude to the regulations in the Mathematics Department is one of the foundations for success in college.

### **Achievement of Achievement Awareness**

For new students, the TAR model can also help enhance their sense of awareness in maintaining academic achievement. Awareness of achievement is a sense of awareness that can serve as a foundation for strengthening one's behavior and attitude when achieving academic success in college. The TAR model itself is designed with several materials, a total of 5 weekly materials, namely starting from a comparison of learning between learning in Indonesia and learning outside Indonesia (previously, to continue to grow self-awareness)

### **Achieving Noble Moral Awareness**

The global phenomenon can no longer be avoided, as new forms of colonialism have been combined through various aspects of human life,

including the economic, socio-cultural, and educational aspects. Essentially, the lives of society and students have been shaped by the widespread use of information technology, which is often used without restrictions. This is the cause of the emergence of changing human behavior and various religious values and human values that are lost.

Various methods are continually developed as part of an effort to foster morals by several educational institutions. For the Mathematics Department of FMIPA UNM, development is carried out through the TMSM training model, which serves as a form of training to enhance student morale and motivation. The training is carried out consistently and has been well-structured and programmed. This is carried out based on the idea that morals do not emerge spontaneously but are the result of efforts to cultivate oneself. Through training, noble moral attitudes, obedience to Allah and the Messenger, and greater respect for parents will be instilled in students. The effectiveness of the material in TMSM can be explained through pedagogical and psychological mechanisms. The regular mentoring process forms a habit of valuing that strengthens positive behavior. From a pedagogical perspective, this approach utilizes the principles of experiential learning and peer learning, where students learn through the mentor's example and reflective social interaction. Psychologically, this process fosters self-awareness, critical thinking, and a sense of belonging to moderate values. The repetition of material and the active involvement of students create an internalization of values, making changes in attitudes more permanent.

### **Achievement of Anti-Radicalism Understanding**

The country with the highest Muslim population is Indonesia, as a predominantly Muslim country. Indonesia guarantees its citizens the right to choose their religion and observe the

commands and prohibitions of their respective faiths properly, even though Indonesia is not a religious country. Therefore, radical activities in the name of religion are absolutely unjustifiable for religious life in Indonesia.

The deradicalization of Islamic religious understanding is clearly a shared task, including practitioners of higher education. The issue of terrorism that originates from the radicalization of religious understanding is a product of wrong preaching and education.

### **Implications and Limitations**

The TMSM model offers a scalable mentoring framework that can be adapted across disciplines to promote religious moderation. It offers practical implications for educators, policymakers, and campus mentors on fostering inclusive and tolerant academic environments. However, the study was limited by its single-institution scope and relatively small sample size, suggesting the need for replication with diverse participants and a longitudinal evaluation.

### **CONCLUSION**

This study has successfully developed the Tarbiyah Mentoring System Model (TMSM) as a structured and systematic mentoring model designed to build anti-radicalism character among students in the Mathematics Department at Universitas Negeri Makassar. The research findings indicate that integrating academic, religious, and mental components through weekly and daily mentoring activities has significantly strengthened students' understanding, increased their psychological resilience, and helped them internalize moral values that counter radical ideologies. The importance of this finding lies in its contribution to the field of education, particularly in higher education institutions, as it provides a practical, theoretically grounded, and contextually relevant framework for fostering moderate religious attitudes and critical thinking skills among university students. This research

suggests that TMSM can serve as an effective alternative model for student character development programs tailored to specific academic disciplines. By combining structured mentoring with value internalization and peer learning, the model can be replicated or adapted in other faculties to reduce students' vulnerability to radical ideologies. However, this study also has limitations. The implementation and testing of the model were limited to one department (Mathematics) and focused only on the first four stages of the PLOMP development model, without conducting a large-scale longitudinal impact evaluation. Future research should involve a broader range of participants, encompass multiple faculties, and examine the long-term effects of TMSM to strengthen its empirical validation and ensure its broader applicability across various academic contexts.

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