

## **Geo-spatial of Terrorism and Radicalism in Indonesia -A Preventive Efforts-**

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**ABSTRACT:**The issue of terrorism has become more prevalent in the media since the collapse of the world trade center building in the United States on September 11, 2001. This event had changed the orientation of the US foreign policy with almost a worldwide recognition of having a "fight against terrorism" and siding with the US, including Indonesia. However, are the efforts made by Indonesia to combat terrorism been appropriate? Alternatively, has it become one way to silence the political opposition by labeling it as a terrorist movement? This research attempts to identify the development of the terrorist movement based on different perspectives, namely the pattern of terrorist movements and radical belief which is often used as a justification for the acts of murder committed by terrorist groups. By looking at the movements and spread of terrorist groups, it is hoped that there will be more concrete efforts to reduce and eliminate terrorist and radical movements. The most concrete approach is to include anti-radicalism in the learning curriculum. The Geography Information System (GIS) Analysis is expected to assist in the identification of the distribution patterns of radicalism and the best efforts to confront terrorist and radical movements based on spatial data.

**Keywords:** Terrorism, Radicalism, Education, Curriculum, GIS Analysis

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Date of Submission: 17-06-2020

Date of Acceptance: 03-07-2020

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### **I. INTRODUCTION**

Communal effort in combating terrorism is essential as acts of terrorism can have a very significant impact on society. Negative stigma is often given, not only to individuals who act as terrorists but also to Islam and Muslims in general. Community movements that take up arms and brainwash society can have a negative impact on national stability. Many attempts have been made to oppose terrorism, not unlike fighting against guerrilla groups, where the state is fighting enemies and unclear opposing strategies [1] [2].

In the technological advances of today's world, the paradigm of terrorism and radicalism that develops in society is unavoidable, one of which is the terrorist and radical propaganda. Terrorism is an extraordinary crime that also requires extraordinary measure, based on the following reasons; (1) Terrorism is the greatest danger of human rights, (2) Targets of terrorism are random or indiscriminate which tend to sacrifice innocent people, (3) Possible weapons of mass destruction using modern technology, (4) Can endanger national and international peace and security [3] [4].

The government needs to focus on developing national unity and welfare to avoid the threat of radicalism that exploits gaps in injustice. [5] Also, the high use of social media through smartphones has shifted the social behavior of the community to a certain extent; what is often and commonly accessed with high intensity may impact ideas, patterns of thought and views of society about a situation. [6]

This study has 3 (three) stages of analysis, namely; (1) Exploring information related to the pattern of distribution of terrorism and radicalism in Indonesia through the Geography Information System (GIS) Analysis approach, (2) Identifying and analyzing ways to counterterrorism and radicalism, and (3) Mitigating terrorism and radicalism through campus curriculum approaches. Nowadays, every element of society must find a way to synergize all the elements in preventing terrorism and radical beliefs.

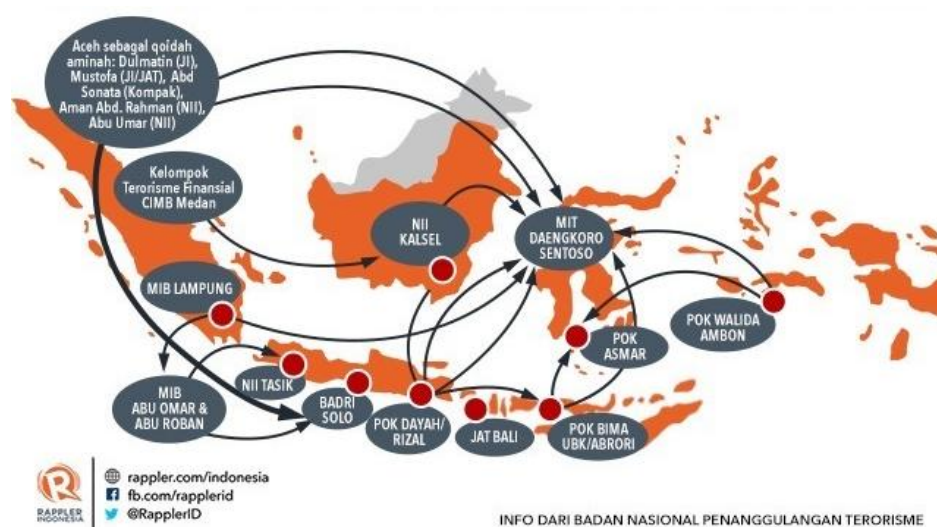
### **II. LITERATURE REVIEW**

Society has a norm where each religion claims absolute truth while denying others the right to claim theirs as well. This is, of course, contradictory to human values and human rights. History has proven that having an exclusive attitude about one's group raises conflicts or even wars between religious groups. Thus, the

paradigm of religion needs to be straightened. When one wants to understand Islam or other religions, the individual should withhold judgments and preconceived conceptions, as Islam is a religion that brings mercy and peace to all nature, likewise in other religions[7].

The most noticeable impact lately is the occurrence of radicalism, which leads to the politicization of religion. In this case, religion is indeed very sensitive; it is easy to fuel fanaticism, to conduct extreme actions - both in social life- between individuals, and groups- creating radical Islamic groups. [7] Absolute truth belongs only to the group, only those certain sects of Muslims, and those outside the group is categorized as deviant, hypocritical, or even infidels. Is this kind of action justified in Islam?.

In the end, religion contains many rules, as a result of the construction of thoughts from the thinkers and adherents of the religion. This situation is prevalent as only basic teachings are written in the scriptures, without further detailed elaborations [8] [9].In the era of globalization and the industrial revolution 4.0, the act of radicalism is not only intended to change the order of an area or country, but also the world order. As stated by Mustafa Muhammad Athahan, today, radicalism has become an international phenomenon. He revealed that action-wise, radicals have several assumptions, the most important ones are monopolizing the truth, dogmatic thinking, rejecting differences from other groups or rejecting plurality, using idioms or harsh terms such as betrayal, *kufir*, *kafir*, and others. [10]



**Figure-1.**Map of terrorist networks in Indonesia

Figure. 1 shows the map of the distribution of terrorism in the name of religion [11]. Based on the available data, Aceh was the most strategic place in supplying jihad groups in the name of religion and then carrying out its terrorist movement. Aceh has a history of military operations in the New Order, making it easier for individuals or groups to carry out acts of violence using firearms in the present time.

All elements of society must cooperate to combat terrorism and prevent the spread of radicalism. The objective of the State development paradigm is to achieve prosperity for its people in accordance with the mandate of the constitution of the 1945 Constitution. One trigger of religious radicalism is the narrow-minded belief of religious teachings. This can happen when information obtained by an individual or a group of people comes from wrong and incorrect sources.

Radicalism can trigger acts of terror. People who are already poisoned by this ideology tend to justify their actions despite harming, disturbing and hurting others such as insulting, *takfiri*, physical harm, or even killing for the sake of fighting for their own version of values and principles. Their constructed paradigm, based on their belief causes damage to the community's social order [12].

### III. METHOD

This study has 3 (three) stages of analysis, namely; (1) Obtaining information related to the pattern of distribution of terrorism and radicalism in Indonesia through the GIS Analysis approach, (2) Identifying and analyzing ways to counter terrorism and radicalism, and (3) Mitigating terrorism and radicalism through campus curriculum approaches. Figure 1 and 2 shows that the distribution of terrorism in Indonesia has primarily been concentrated on Java, and only a small portion is in Sumatra, plus the Santoso network on Sulawesi Island.

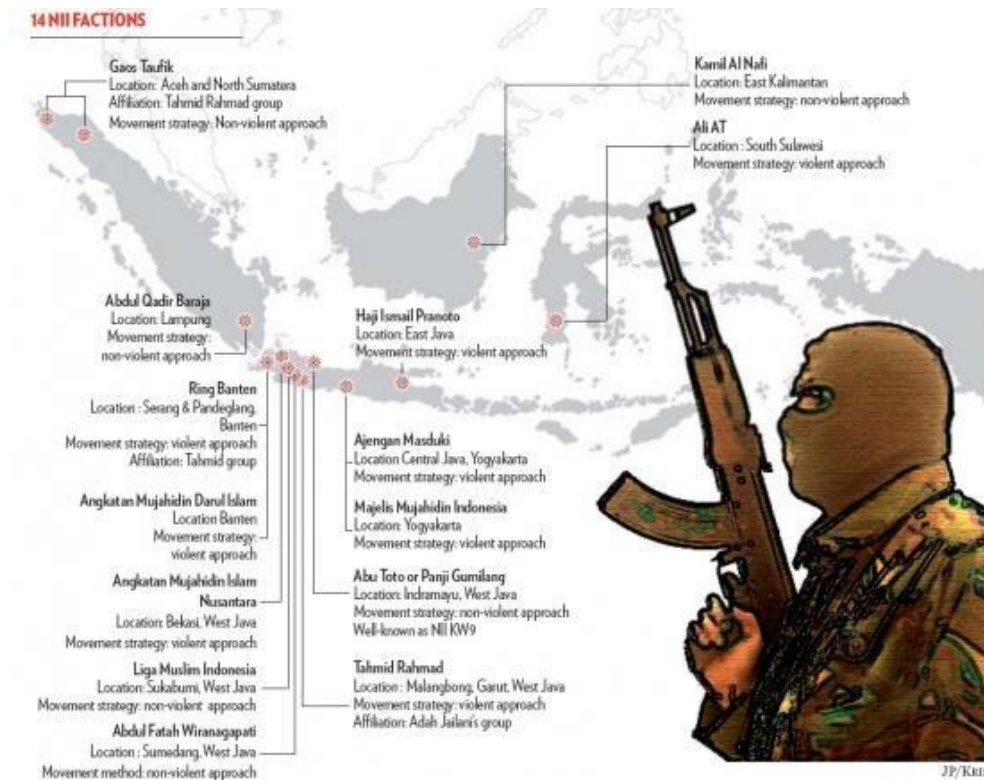


Figure-2. Distribution of terrorist groups in Indonesia

So far, the Islamic State Network in Indonesia is very broad because it was transplanted into a pre-existing jihadist organization. The existence of an old terrorist organization such as the Indonesian Islamic State (NII), Eastern Indonesian Mujahidin (MIT), Tauhid wal Jihad, and Jemaah Ansharut Tauhid (JAT) seemed to receive moral assistance after the establishment of ISIS in the Middle East. In 2015, JAD was formed as an umbrella organization led by Aman Abdurrahman, a radical preacher who had previously been involved in establishing a jihad training camp in Aceh in 2010, where he was sentenced to 15 years in prison on Nusakambangan Island. The leader of another terrorist group formed in 2004 and calling himself Tawhid wal Jihad. However, the leader was famous for his translation of the writings of the hardline Salafi cleric Jordan Abu Muhammad al-Maqdisi into Indonesian[13].

JAD is regulated territorially throughout Indonesia into zones, branches, and cells. This includes zones in Jabodetabek, Banten, Central Java, East Java, West Java, Lampung, and Kalimantan as well as cells in ToliToli (Sulawesi) and independent affiliated cells in Medan (Sumatra). Terrorism, in this case, is a hierarchical organization in the sense of being led by emirs and having a command structure at the local level. At the same time, it is also a loose organization that allows branches, cells, and individuals to operate independently of each other. JAD is the largest and most decisive group in the Islamic State network in Indonesia, which also includes a much smaller Katibul Iman - sometimes referred to as the Jemaah AnsharutKhilafah (JAK), led by Abu Husna - and based in Poso.

The Indonesian Timor Mujahidin (MIT) until the death of its leader Santoso, aka Abu Wardah, in July 2016. Overall, these groups have pursued local goals to establish sharia law and Islamic government in Indonesia. Considering the Indonesian government has a pluralistic nationalist ideology, with police as idols of worship, the supporters of the Islamic State view the state and the police as the main obstacle to achieving an Islamic Indonesia, and both have become primary targets of violence. Religious minorities such as Christianity and Buddhism have also been attacked, in a broader context in waging war on all the "disbelievers." While the focus of the Islamic State Network in Indonesia is domestic, some supporters of the Indonesian Islamic State also went to the southern Philippines to participate in the Marawi battle in 2017. [14]

The data of the growth of the terrorist movement mentioned above in Indonesia, force the population to accept its existence and take preventive actions. The movements of terrorist groups in Indonesia move with a distinctive pattern, namely (1) cross-country, (2) the movement ideology does not rely on one country, but instead on the concept of Khilafah, (3) dominated by fundamentalist and radical thinking, (4) placing the West as an ideological-political threat to the Ummah, (5) some take more subtle steps through the propaganda media on campus, school, and *taklim* assemblies. Referring to point 5, radicalism itself is divided into two major groups, namely static radicalism, and destructive radicalism.

Terrorism actions related to the Islamic State of Iraq and Syria (ISIS) have awakened the vigilance of many countries in the world. Indonesia faces challenges in dealing with terrorist groups that are members of the ISIS network. According to Deborah, the development of ISIS has threatened Indonesia. Thus, an effective strategy is needed to overcome the threat of terrorism in Indonesia. In particular, the government must immediately improve the capabilities of its anti-terror unit[15].

The variables used as questions in the study include; (1) Support IS, (2) Kill for glory, (3) Differences in religion, (4) Felling holy, (5) no mercy for 'kafir', (6) in the path of the truth, and (7) Always right. These questions are then used in the questionnaire to determine the level of radical belief for each new students.

After determining the potential of radical beliefs in students, the potential for change can be identified after counseling through the learning curriculum on the campus of research location, the KH Abdul Chalim Islamic Boarding Campus, Pacet, Mojokerto, Indonesia

#### IV. RESULTS AND DISCUSSION

According to Din Syamsudin (Chairperson of the 2015 MUI), organizations such as ISIS are against the nature of Islam which promotes peace and dialogue, not violence and war. He further states that this group is an advanced form of old radical Islam with a new label as it also makes its Muslim brothers enemies and radical targets if they do not agree with them.



**Figure-3.**Radical terrorist network in Indonesia

Groups claiming absolute truth can be found in society, including these types of groups. The most dangerous of these radical ideologies is their perspective that other Islamic sects besides them are not Islam. Therefore it must be fought, killed, and destroyed. In this case, members of ISIS provide two choices to Muslims outside their group, namely joining the ISIS "Islam" or be killed. Even ISIS has a policy of issuing a "Non-Kafir Sign Card" (KTBK) which is required for anyone who has just joined ISIS. The card is valid for 3 (three) months and contains instructions that the person concerned is not an infidel so that the ISIS army can release them from all punishments aimed the "infidels" [16] [17]. Efforts to handle static radicalism that spread through electronic media and formal networks such as campus and schools can be made from the beginning. These beliefs do not just come in a day or two, but it goes through a long process. Thus static radicalism may shift towards destructive radicalism; further toppling those influenced to conduct terrorist action based on orders from certain terrorist groups or networks. Figure 3 shows a map of radical terrorist networks in Indonesia, where the concentration of radical thoughts is still centered on Java, with several other points in Sumatra, Kalimantan, Sulawesi, and also Ambon Islands.

The use of Geography Information System (GIS) in the world of planning is prevalent among decision-makers. This can be seen from the widespread use of GIS Analysis for other purposes such as road networks, analysis of the movement of goods, economy, education, etc. [18]. In this study, the use of GIS Analysis is intended to map the areas with potential terrorism and radicalism exposure based on digital records related to the spread of terrorist acts in Indonesia. It uses the Kriging method, which is one of the fundamental extensions of the ArcGIS software version 10.

The figure below is the result of GIS Analysis, the spread of terrorism in Indonesia, and the potential for acts of radicalism and terrorism exposure. Figure 4 below shows the distribution of terrorist groups and acts of terrorism that have occurred in Indonesia. Based on the color distribution, ranging from dark red to dark green is a gradation of acts of terrorism. Starting from Aceh as Qoidah, CIMB Medan as financial support, NII Tasik, South Kalimantan NII, MIT Sentoso, JAT Bali, Pok Ambon, and PokAsmar.

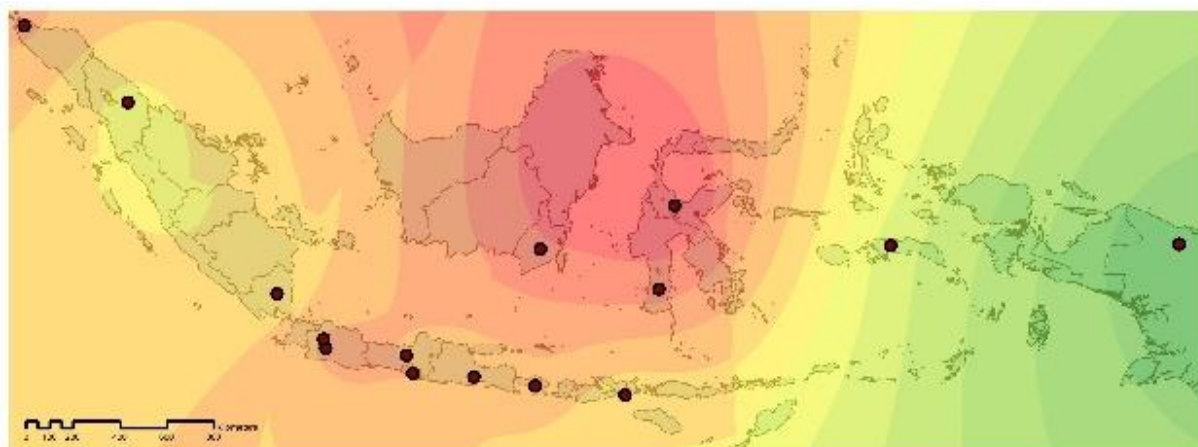


Figure-4.KrigingGIS Analysis map of terrorist actions and movements

The acts of terrorism include the Bali Bombing, Surabaya Bombing, Thamrin Jakarta, Poso, and so on. Dark red indicates the intensity of events at that location. Although Aceh and Medan have no acts of terrorism such as in Jakarta, Surabaya, Poso, and Bali, its strategic position as an entrance and funding, supports their label of a dangerous zone for the terrorist acts and movements. In analyzing the spread of radicalism through both electronic mass media and formal campus such as campus, several analysis were conducted in campus with the belief of *ahlussunahwaljama'ah*, which holds the original principles of Islam. The figure below represents the number of students from 2015-2018 at the KH Abdul Chalim Islamic Boarding Campus Institute, Mojokerto, Indonesia. (See Fig. 5)

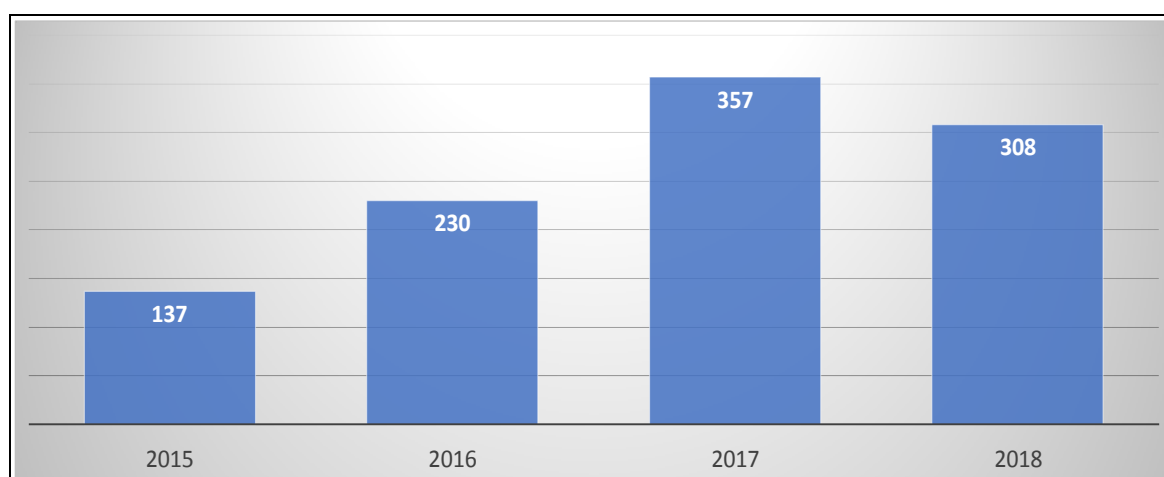


Figure-5. IKHAC students from 2015-2018

Figure 6 under is a stage of radical thinking in individuals [19]. In the study, observations were made of new students since 2015. The questionnaires and interviews identified that some students tended to have radical belief, could not accept differences, felt only they were the right ones, and groups other than himself and his group were heretical. This research was carried out sequentially from 2015, 2016, 2017 to 2018. Observations were made on new students, second-year students, third and also fourth-year students. Referring to the radical beliefs, as shown in Figure 5, Table 1 below is the recapitulation of IKHAC student's tendency for radical beliefs. However, after intensive counseling, there was a significant downward trend; even the second year students had a very drastic decline.

In the beginning, each new student received a question to measure the tendency of radical belief. Surprisingly, even at the beginning of the campus year in 2015, around 41.6% of new students supported the Islamic state movement carried out by ISIS. The results began to change in 2017, where new students supporting the Islamic countries movement under ISIS dropped to 33.9% and around 31.8% in 2018. This is an interesting phenomenon as the campus is affiliated with Islamic ideology *ahlus sunnah waljama'ah*, but the students still tend to support the Islamic state movement like ISIS.

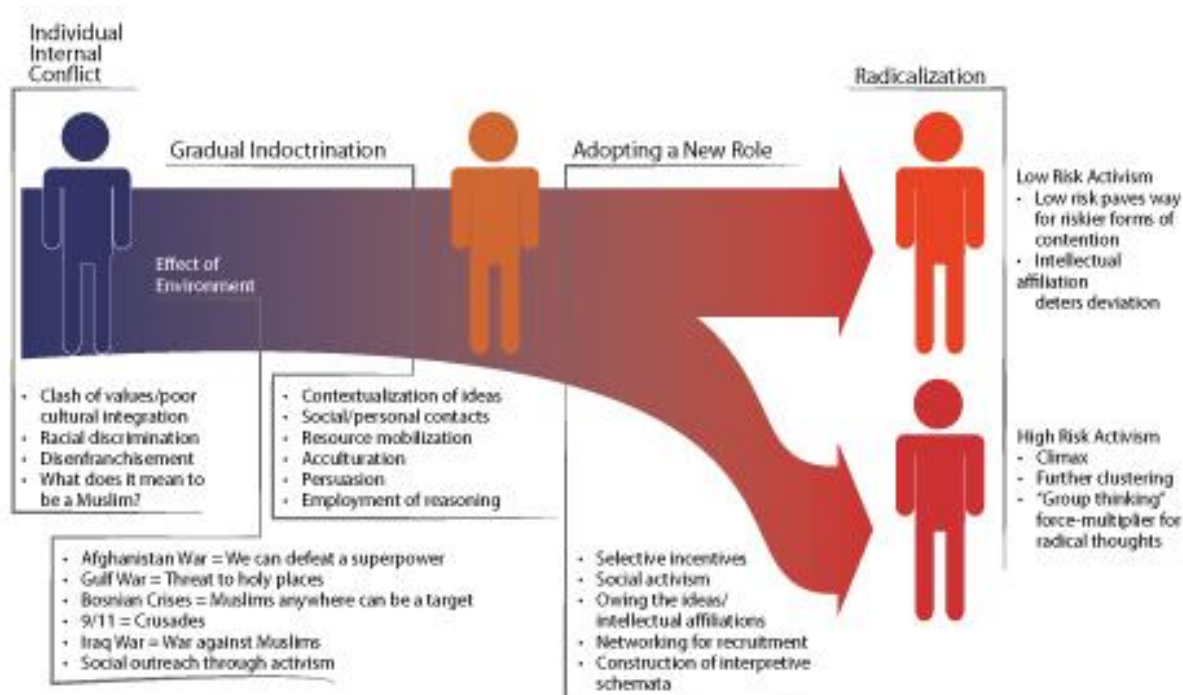


Figure-6. The tendency of radical beliefs

This is also shown in the radical belief of killing for glory. In the concept of jihad, killing for glory is permitted, but it is always in the context of war and against clear enemies. However, here, the respondents were given the freedom to position themselves, and the results were quite surprising. For variables with questions, 'Kill for glory,' the percentage of students who agreed with the concept was around 21.89% in 2015, and this figure was relatively stable until 2018 with a percentage of around 24.35%.

Table 1. Recapitulation of the 2015-2018 study

Questions	2015	2016	2017	2018
New Students	137	230	357	308
Support IS	57	105	121	98
Kill for Glory	30	75	81	75
Differences in religion	71	89	135	112
Felling holy	75	110	111	101
No mercy for 'kafir'	58	93	105	92
In the path of the truth	88	145	175	105
Always right	51	83	97	75

Table 2 is the result of correlation analysis between variables. Supporting the ISIS belief of Islamic country has a linear impact on other radical ideologies. Even the 'support IS' and 'no mercy for infidel' variables have very strong correlation values, as if they are the same variable. Table 3 shows the results of coaching for 2 (two) to 3 (three) years. Even so, radicalism belief cannot completely disappear; the percentage drops very drastically, although not more than one digit. Even so, respondents still had feelings of 'Always right' and 'feeling holy,' and 'in the path of the truth.' This belief is quite classic for followers of any religion, but a belief like this should not lead to an act of degrading other groups and even consider adherents of different religions worthy of being killed. Hopefully, no such ideas and ideologies will be found in the future.

**Table 2.** Correlation between variables

No	Questions	1	2	3	4	5	6	7
1	Support IS	1.00	0.97	0.85	0.98	1.00	0.89	0.99
2	Kill for Glory	0.97	1.00	0.80	0.97	0.98	0.75	0.93
3	Differences in religion	0.85	0.80	1.00	0.73	0.87	0.71	0.85
4	Felling holy	0.98	0.97	0.73	1.00	0.97	0.84	0.95
5	No mercy for 'kafir'	1.00	0.98	0.87	0.97	1.00	0.84	0.98
6	In the path of the truth	0.89	0.75	0.71	0.84	0.84	1.00	0.94
7	Always right	0.99	0.93	0.85	0.95	0.98	0.94	1.00

Table 3 under is the result of students who have studied for 2 (two) or more years (class of 2015 and 2016). It shows that the radical belief can be significantly suppressed and experienced a decline. Respondents and questions in the questionnaire were not changed from its original form as the same content can be expected to detect the trends of each individual after studying on campus for more than 2 (two) years.

**Table 3.** Percentage after counseling

Questions	2015	%	2016	%
Support IS	21	5.9%	11	3.6%
Kill for Glory	20	5.6%	15	4.9%
Differences in religion	27	7.6%	22	7.1%
Felling holy	38	10.6%	32	10.4%
No mercy for 'kafir'	28	7.8%	8	2.6%
In the path of the truth	32	9.0%	35	11.4%
Always right	48	13.4%	40	13.0%

**Table 4.** Assessment of 2015 students

Questions	2015	2016	2017	2018
Support IS	57	30	11	5
Kill for Glory	30	23	8	2
Differences in religion	71	55	15	3
Felling holy	75	40	22	12
No mercy for 'kafir'	58	31	13	4
In the path of the truth	88	71	40	35
Always right	51	40	35	33

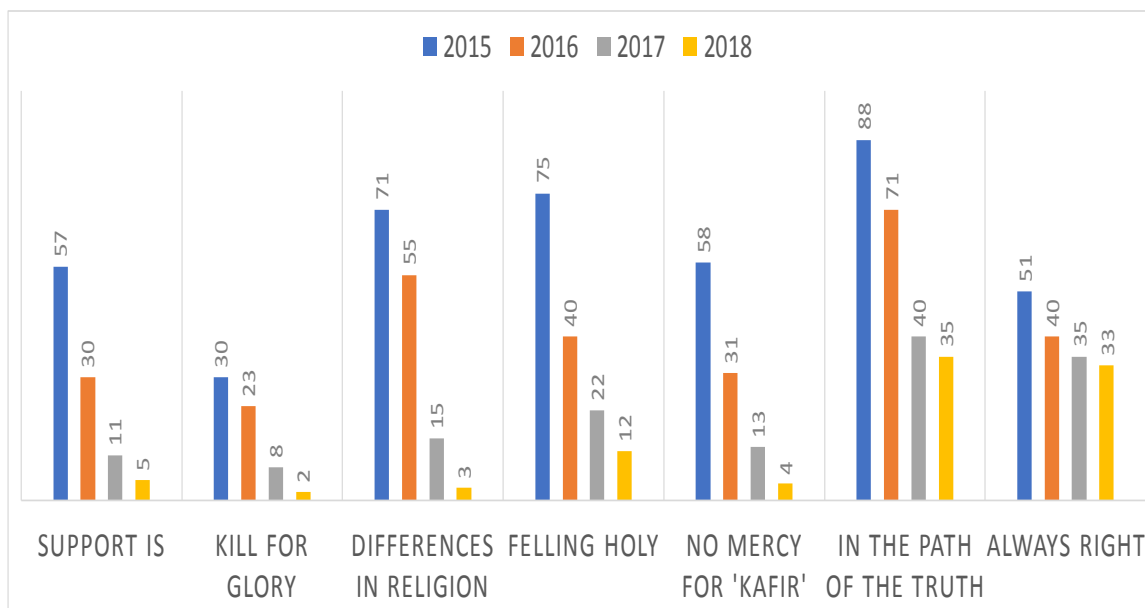


Figure-7. Assessment of 2015 students

The downward trend in radicalism belief on campus based on table 4 shows remarkable results. Measurements made for the 2015 class conducted in 2017 and 2018 illustrate that the curriculum and learning methods on the campus have provided direction to students so that they can minimize their radical belief. Table 4 shows the decreasing number of ISIS sympathizers among students. Likewise with other variables, the decline is very significant. The declining pattern of students with radical belief can be seen in Figure 7 above. The linear equation can be seen below:

$$\begin{aligned}
 Y &= -17.5X + 69.5 && (1) \\
 Y &= -9.9X + 40.5 && (2) \\
 Y &= -24.4X + 97.0 && (3) \\
 Y &= -20.7X + 89.0 && (4) \\
 Y &= -18X + 71.5 && (5) \\
 Y &= -19X + 106.0 && (6) \\
 Y &= -5.9X + 54.5 && (7)
 \end{aligned}$$

In the above equation, Y is a decrease in X where X is the current year; for example, year 1, 2, 3, and so on. Figure 6 above shows the number of students as the dependent variable (Y) while the order of year values as an independent variable (X). By using simple statistical calculations, a regression coefficient between the independent variable (X) with the dependent variable (Y) can be obtained as in some of the above equations.

Thus a question forms, what is used by the KH Abdul Chalim Islamic Boarding Campuscampus, Mojokerto to reduce radical belief in the campus environment?. An investigation was conducted for the existing learning system and curriculum used by the IKHAC campus. IKHAC campus is a form of higher education with a boarding campus where learning activities begin at 3:00 a.m. with evening activities (*qiyamullail*) until the time of sunrise, or around 6:30 a.m. 9:00 a.m is the time for yellow book material, and other religious lessons until 12:00 p.m., followed by lecture activities starting at 2:00 p.m. until 6:30 p.m. Upon further investigation, there were no specific material to counter the spread of radicalism in the campus environment. However, there were 4 (four) additional subjects without credits, namely courses (1) *ahlus sunnah waljama'ah*, (2) information technology, (3) English, and (4) Arabic.

The daily routine and busy schedule of students, coupled with the Education curriculum on campus have managed to reduce the tendency towards radical beliefs of absolute truth in one's group. Counseling through the curriculum at IKHAC has been able to reduce the radical belief that the students previously had as new students, but gradually became more concerned with fellow members even though they were different in their beliefs.



## V. CONCLUSION

The research was conducted in three stages, namely GIS analysis, an assessment of radicalism belief on the campus with the ideology of *ahlus sunnah waljama'ah*, and efforts to overcome and prevent the belief of terrorism and radicalism through education and structuring the learning curriculum.

The results of the spatial analysis using GIS identified the pattern of distribution of the terrorist movement was concentrated on the island of Java. However, the Kriging analysis concluded that the potential exposure for radicalism and terrorism belief could spread also spread to all areas of Indonesia.

The results of the student's exposure to radical beliefs showed that students in religious campuses even have a 41% tendency for radical belief. However, over time, after 2 (two) years of counseling, the number of students who sympathized with the terrorist movement decreased, with numbers approaching 5.9%, what is more, a 3 (three) year counseling results in a decline of 3.6%.

The success at the IKHAC campus in reducing the number of sympathizers of terrorism and radicalism belief has been done. It found that including the material of the *sunnah waljama'ah* and the tight daily campus schedules made the students abandon radicalism belief significantly.

## ACKNOWLEDGMENTS

The authors would like to express their greatest gratitude towards the Institution of Research and Community Service (LPPM), Islamic State University of Sunan Ampel, Surabaya, Indonesia and Institute KH Abdul Chalim Islamic Boarding Campus, Mojokerto, Indonesia for funding this research.

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