ARTICLE

Psychological Risk Factors of Terrorist Offenders in Indonesia

Zora A. Sukabdi*

University of Indonesia, Indonesia

ARTICLE INFO

Received: 30 May 2021
Accepted: 28 June 2021
Published Online: 15 July 2021

Keywords:
Terrorism
Risk assessment
Risk factors
Motivation
Ideology
Capability

ABSTRACT

Psychological criminogenic factors for identifying terrorist offenders at risk of recidivism in Indonesia remain unclear; hence the adequate assessment to those involved with terrorism and measurement of effective terrorism rehabilitation are questioned. ‘MIKRA’ Risk Assessment was developed to identify individual criminogenic risk factors and needs of terrorist offenders in Indonesia. It is formulated to set up future parameters of effective terrorism rehabilitation. MIKRA study involved thirty-two eminent Indonesian counterterrorism experts and practitioners in semi-structured interviews and qualitative data analysis. The study identifies 18 individual risk factors and needs of ideology-based terrorist offenders that are grouped into one of three higher order domains: Motivation, Ideology, and Capability.

1. Introduction

The number of research papers focused on terrorism has increased dramatically since the 9/11 tragedy [1]. They have produced many etiological theories and opinions regarding pathways to terrorism [2]. Nevertheless, there remains a deficiency of empirical research into terrorism [3,4]. There has been limited valid and systematic examination of individual risk factors for terrorism [5]. The deficiency of empirical researches on terrorism risk assessment and effective rehabilitation is caused by many factors; however, it is assumed to be primarily because of the difficulty in engagement with terrorists [6] and confidentiality and the sensitivity of the issue [7], making research and publication very challenging. Furthermore, there is a potential that terrorism researchers may be subjected to close and critical observation and suspicion from both authorities and terrorism networks alike [8].

In terms of investigation into individual terrorism risk factors, there is an increasing debate among scholars (in Criminology and Forensic Psychology) regarding whether general criminal risk assessment methods are applicable to assessments of terrorism risk. LaFree and Dugan [9] highlight five conceptual similarities and six conceptual differences between terrorism and general crime. The similarities include (1) both studies of terrorism and common crime are intensively interdisciplinary, (2) both terrorism and general crime are social constructions, (3) for both, there are wide discrepancies between formal definitions and the practical applications of these formal definitions, (4) terrorism and general crime are committed by young males, and (5) sustained levels of terrorism and sustained levels of common crime destabilize social trust. The differences include (1) terrorism activities usually constitute multiple crimes, (2) the response to general crime seldom goes beyond local authorities, unlike terrorism, (3) the offenders of common crimes are
of Criminal Conduct (PCC) which emphasizes the identification of Risk and Need of criminal offenders, before Responsivity (RNR) or rehabilitation/treatment \(^{[25]}\). PCC itself is holistic and multidisciplinary and open to the contributions of any discipline in explaining individual differences in the criminal behavior of individuals \(^{[26]}\). The study was conducted in Indonesia which is aimed to increase knowledge to contribute to the risk assessment of ideology-based terrorist offenders in Indonesia, particularly to define their individual risk factors.

2. Causes of Terrorism

Schmid \(^{[27]}\) collected 109 academic definitions of terrorism and argued that the number of available definitions of terrorism might be similar to the number of published experts in the field. Hence, the lack of consensus is undeniable and expected, given the variety of terrorist offenders’ behaviors, the various declared or assumed motivations, and the question of whose perspective is accepted regarding the terrorist offenders’ behavior; in other words, one man’s terrorist is another man’s freedom fighter \(^{[28,29]}\). Nevertheless, two elements are commonly found in contemporary definitions of terrorism: 1. terrorism involves aggression against non-combatants, and 2. instead of accomplishing a political goal, the terrorist action in itself is expected by its perpetrator to influence a targeted audience’s behaviors, to meet the goals of the terrorist \(^{[30,31]}\).

Terrorism is complex and multifaceted, and actors involved can be classified across multiple variables. Schultz, in Victoroff\(^{[32]}\), suggested seven variables (cause, environment, goal, strategy, means, organization, and participation), could be used to classify terrorism into two higher-order types, revolutionary versus sub-revolutionary terrorism. Post, Sprinzak, and Denny \(^{[33]}\) divide political sub-state terrorism into 1. social revolutionary terrorism, 2. right-wing terrorism, 3. nationalist-separatist terrorism, 4. religious extremist terrorism, and 5. single-issue (e.g., environmental issue) terrorism and argues that each type tends to be linked to its own social-psychological dynamics. Victoroff\(^{[32]}\) identified numerous variables relevant to understanding terrorism and how dimensions of these variables could be classified, such as individual vs group, state vs sub state vs individual, secular vs religious, and suicidal vs non-suicidal.

In Indonesia, Mufid, Sarwono, Syafii, Baedowi, Karnavian, Zarkash, and Padmo\(^{[34]}\) studied terror perpetrators by interviewing 110 terrorists. He found that 87.8% of the terror perpetrators in Indonesia were Muslims, while 12.2% were Christians involved in ethnicity-religion conflicts. The majority of terror perpetrators in...
Indonesia in this study were Indonesians (92.2 percent). The remainder were Malaysians (7%) and Singaporeans (0.9%). Further, most terror perpetrators were ethnically Javanese (43.6%), followed by Pamonese (12.7%) and Malays (10.9%). Buginese and Sundanese respectively constituted 5.5% of participants, while 4.5% were Betawi. The rest, 17.3%, came from various ethnic backgrounds, including Acehnese, Ambonese, Arab, Balinese, Bima, Indian, Kaili, Makassar, Madurese, Minang, and Poso. Moreover, related to age (age of respondents was calculated from the year of their involvement in acts of terrorism), the average age of terror perpetrators was 29.7, with the youngest 16 years and the oldest 64 years. If classified according to the age group, the majority (59%) were young, below 30. Related to level of education, Mufid et al. [34] found that the highest level of educational attainment of most terror perpetrators was senior high school (63.3%), followed by college and university (16.4%) and junior high school (10.9%). In addition, 5.5% of terrorist offenders attended, but did not graduate from a college or university and another 3.6% only graduated from primary school. These findings are similar to research in other countries. For instance, a study of 102 Salafi Muslim terrorist offenders from Saudi Arabia, Egypt, France, Algeria, Morocco, and Indonesia found that the average age of perpetrators (joining in terrorism acts) was 25.7 years, with 18 % described as ‘upper,’ 55% from ‘middle,’ and 27% from a ‘lower’ class [40].

Mufid et al. [34] found that in Indonesia most terror perpetrators had non-religious educational backgrounds. Around 48.2% of terror perpetrators interviewed graduated from secular senior high schools, 18.2% from non-religious colleges or universities, 10.9% from junior high schools, and 6.4% from vocational senior high schools. Only 5.5% graduated from pesantren (Islamic traditional boarding school) and 3.6% from a madrasah (Islamic school). On one hand, this finding does not confirm a common perception held by many (foreign) observers that most Indonesian terrorist offenders came from religious schools, such as madrasah and pesantren. On the other hand, this finding supports a 2010 survey reporting a significant level of radicalism among students of general secondary schools.

3. Motivations of Terrorism

Related to typology of terrorist offenders in Indonesia, Mufid et al. [34] reported that the roles of 110 terror perpetrators in Indonesia can be classified into leaders (9.1%), middle management (10%), and followers (80.9%). His study also found various factors that motivated individuals in Indonesia to engage in acts of terrorism: religious-ideological, solidarity-driven, separatist, ‘mob mentality’, and situational. An ‘ideological-religious motive’ is defined as the drive to establish the perfect model of religion-based government or society (the establishment of dawlah Islamiyah or the implementation of sharia) where acts of violence or terrorism are considered as a justified means to achieve these ideals. Included in this category is participation in terrorism that is driven by the abhorrence of the Western economy-political domination, cultural hegemony, and military interventions in Arab or Muslim-dominated countries. Participation in acts of terrorism for the purpose of protecting fellow believers from the threat of conversion attempts conducted by other religious communities is also included in this category.

A ‘solidarity motive’ is defined as the drive to participate in acts of terrorism to express empathy or to help fellow believers, especially in a situation when they are threatened or become victims in a conflict. The ‘revenge-seeking motive’ is identified as the drive to join in terrorism acts as an attempt to strike back against enemies for losses (of lives or property) that may have been experienced by the terrorist actor or their family. A ‘separatist motive’ is defined as the drive to participate in terrorism as a way to meet a political goal, of creating a separate state. ‘Mob mentality’ is the drive to spontaneously participate in acts of violence or terrorism conducted by others, even though the perpetrators do not have clear reasons, their behavior is simply in response to the behavior of others. Finally, ‘situational motives’ refers to factors that forcibly drive individuals to be involved in acts of terrorism. For example, individuals who are convicted of terrorism offences through association other terrorism perpetrators, even though they do not directly participate in acts of terrorism themselves [43]. Based on the above categories, most terror perpetrators in [44] study were driven by ideological-religious motives (45.5%), followed by a sense of community solidarity (20%), mob mentality (12.7%), revenge-seeking (10.9%), situational (9.1%), and separatist motives (1.8%). The finding confirms that religious-ideological motives, despite variation of their meanings, were predominant reasons that motivated perpetrators to participate in terrorism acts in Indonesia.

There is certainly no single explanation about why and how Islamic radicalism has come into its existence in Indonesia. Largely, two main factors give the reasons of the emergence of Islamic radicalism, internal and external factors [35]. The internal factors are disputes among Muslim elites which have driven Islamists to revive the spirit of Islam. On the contrary, external factors...
include outer drives, such as colonialism or invasion [36]. Roy [37] describes that among the leading factors causing the birth and rise of Islamic radicalism is external factors beyond religion such as economic discrepancy and social confusion. Ideology serves as a catalyst or mass-mobilizing factor that escalates radicalization level of religious understanding delivered by religious charismatic leaders or ideologues [38]. Dekmejian [39] also previously suggests that there is a continuing pattern of history in the form of a cause-and-effect correlation between social crises and the rise of religious, revolutionary, or revivalist movements. Mufid et al. [34] argue that in Indonesia economic factors such as poverty and social inequality are insufficient structural factors, and do not necessarily contribute to a rise in terrorism. Instead, a combination of structural factors at global, national, and sub-national levels are significant factors for the rise of terrorism.

Religious radicalism in Indonesia has such an extensive history [34]. In contrast with the current Indonesian society, religious radicalism in the colonial period gained support from the majority of people in the country as the radicals was to fight against Western colonialism and to achieve Indonesia’s independence in 1945. After Indonesia value freedom of speech in the Era of Reformation followed by economic recession in 1997, Islamic radicalism proves its existence after ‘devoid leadership’. The economic crisis was used by some Islamic ideologues to bring together a wider audience. Hizbut Tahrir Indonesia (HTI), for instance, came to Indonesia’s political stage with a distinguished slogan: “Selamatkan Indonesia dengan Syari’ah” (Save Indonesia by Applying Sharia Law). Due to the financial crisis, radical Islamists gained support from their sympathizers in promoting their ideology [40].

Ideology-based terrorism in Indonesia is related to a desire to establish an Islamic state or create khilafah Islāmiyah ‘alā minhajin nubuwwah (an Islamic caliphate on the precepts of prophethood). An underground movement in Indonesia, such as Jamaah Islamiyah (JI) and its affiliations, set this goal. JI became an umbrella organization for radical movements with long historical and ideological ties to DI/NII (Darul Islam/Negara Islam Indonesia) [23]. The expansion of terror attacks in Indonesia occurred by targeting individuals including Muslims whom are perceived as thaghut (evil) [23,41,42]. Pepy Fernando’s group, for example, committed terror actions through ‘book bombs’ against individuals suspected of having close relations with the Western thoughts. Packages of book bombs were sent to Ulil Absar Abdallah (an activist of Liberal Islam Network), Ahmad Dani (a musician accused of having Jewish descent), Yaptto (a leader of a youth organization), and General Gorries Mere (a police officer regarded as the Western ‘puppet’ in the war against terrorism in Indonesia) [34].

According to Imam Samudra, Mukhlas, and the perpetrators of the 2002 Bali bombing, the terror actions in Indonesia were justified according to six fundamental teachings of Salafi-Jihadist: 1) the United States and its allies lead a conspiracy to destroy Islam, 2) non-Muslims, including Protestants and Jews, are infidels and enemies of Islam, 3) killing of civilians is allowed if it is part of revenge against the United States and its allies for the killing of Muslims over the world, 4) both Americans and non-Americans who cooperate with the United States government are enemies because they pay taxes to make war possible and through elections, they choose the government officials who lead the war against Muslims; hence there is no difference between civilians and combatants, 5) Muslim leaders who cooperate with the United States and its allies are thaghut or the enemy of Islam, and must be regarded as infidels, and 6) the death of innocent Muslims during the Mujahidin attacks are acceptable for the sake of Muslim interests [34].

Acts of terrorism committed by Indonesian religious militants in diverse places, targeted various foreigners, involving different actors, with different recruitment techniques; this is demonstrated by the first Bali bombing in 2002, the JW Marriott bombing in 2003, the Australian Embassy bombing in 2004, the second Bali bombing in 2005, and the JW Marriott and Ritz Carlton bombing in 2009. Their goal remains the same, to establish of dawlah Islāmiyah (Islamic State) and implement Shariah (Islamic law) [43-45]. As terror actors engage in various types of crimes (e.g., fa‘i and robbery, bombing, murders, and so forth) linked to military trainings/tactics and global networks, terrorism is accordingly seen as a ‘non-ordinary’ crime [46,47].

During criminal investigation offenders claim that what they did was not an act of terrorism but based on their understanding of the word ‘jihad’. Jihad alone, according to their ideological perspective, is an instrument to pursue a goal to establish an Islamic state and to apply Islamic law [44,47-49]. An act of terrorism committed by a religious group can be regarded as a religious activity since it is based on religious doctrines/principles. Therefore, many perpetrators of terrorism deny that their group’s activities contain terrorism [50].

The review of ideology-based terrorism in the context of Indonesia shows that the terrorist offenders are driven or inspired by many factors including religious doctrines, in this case is Islam as the most common religion in the country. The literature review indicates that there are at least three psychological domain of offenders in
Indonesia which can be assessed for identifying risks: 1) motivation, related to internal/individual’s drivers which may connect with external factors such as political turbulence and economic discrepancy; 2) ideology, related to individual’s belief systems and radical doctrines; and 3) capability which includes an individual’s hard and soft skills which can be used to support terrorism; therefore this study focuses on ‘Motivation, Ideology, Capability (MIC or MIK in Indonesian spelling) Risk Assessment’ or ‘MIKRA’. These MIC psychological domains lie within micro level (individual level) regardless the affiliation they are in such as JI, ISIS, and Al Qaeda (external factors).

As this study aims to identify individual terrorism risk factors of offenders in Indonesia, findings may be used by service providers responsible for the design and implementation of terrorism rehabilitation efforts, such as reducing the level of each risk factor to prevent recidivism. The study collected information from Indonesian eminent counterterrorism experts and practitioners, including terrorism intelligence analysts, investigators, and heads of security units who first-handedly examined terrorist offenders’ cases. The major question in this baseline study is “What are the psychological criminogenic risk factors of terrorist offenders in Indonesia?”.

4. Methods

4.1 Participants

A total of thirty-two people between the age of 35 and 68 (mean: 46) participated in this study. These participants were eminent Indonesian counterterrorism experts (i.e., counterterrorism senior advisors, intelligence analysts, criminologists, and members of government think tanks), practitioners (i.e., in deradicalization programs and rehabilitations), and professionals (i.e., heads of government counterterrorism agencies and units) (twenty-seven males, five females). The names of participants were carefully selected based on their nation-wide recognized and documented products (i.e., researches, analysis, investigations, deradicalization programs, open-sourced or security unit internally-used) and official positions in Indonesian counterterrorism. Participants’ roles in counterterrorism were diverse, including security analyst, advisor, investigator, deradicalization and disengagement program designer (inside and outside prisons), military commander, theology, counter narrative designer, terrorism prosecutor, special task force/field officer, forensic analyst, intelligence operator, cyber terrorism analyst, and senator member at the House of Representatives. The participants’ experiences in counterterrorism ranged from five to thirty years.

4.2 Procedure and Material

This study involved counterterrorism experts, practitioners, and professionals. The study included procedures of data collection such as reviewing nation-wide names in the field of Indonesian counterterrorism, approaching and corresponding with candidates of participants, gaining informed consent from participants, and conducting thirty-two semi-structured interviews with participants as data was gathered using this technique.

After reviewing names recommended by Indonesian counterterrorism forums, security units, and executive government think tanks, fifty names of potential candidates were collected. The potential candidates were approached and provided with a description of this study. Thirty-two people expressed their appreciation and interest in taking part in the study; all committed to participate in the study. Appointments in Jakarta, Indonesia, to conduct interviews were then established. Each participant was given a copy of the informed consent form to be signed and asked about the use of recording equipment during the interview. From a total of thirty-two participants, thirty-one participants signed the consent form, whilst one in top-rank ministry position was unwilling to sign which reflects the sensitivity of terrorism research in Indonesia. He requested to have his photograph taken with the researcher to replace his signature in the form. In those cases where the participant refused to sign a consent form, the preparedness to organize a time and place for the interview and participation indicated consent. Given the participants were mostly seniors, these conditions assured consent was informed and voluntary. Furthermore, all participants refused to have the interview recorded. Thus the researcher performed note-taking.

The interviews used the list of questions set in interview guideline shown in Table 1. The interviews initially asked for participants’ comments in open-questions and then probed the participants with further questions. Thirty-two semi-structured in-depth interviews were conducted in four months, from late September until December 2015, and renewed in September 2020 through online during the Covid-19 pandemic. All interviews took place in Indonesia and were conducted in Bahasa Indonesia. Each interview lasted between thirty to ninety minutes. During interviews, most participants provided simple answers due to the sensitivity of issue, culture (Indonesians are not outspoken), and concern of their safety; hence, probes to stimulate participants were needed. The 1st probe was related to the “central eight” risk/need factors in PCC Theory. The 2nd probe was focused on Motivation, the 3rd
was Ideology; and the 4th was related to Capability. Before ending each interview, the researcher read the written notes and showed it to the participant as a verification.

Table 1. Interview guidelines for study on risks and needs of ideology-based terrorist offenders

<table>
<thead>
<tr>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Given your expertise and experiences in the terrorism field, what do you think are the risk factors to be considered when assessing ideology-based terrorist offenders? Can you define each of these risk factors?</td>
</tr>
<tr>
<td>1st probe:</td>
</tr>
<tr>
<td>- What about anti-social attitudes?</td>
</tr>
<tr>
<td>- What about anti-social peers?</td>
</tr>
<tr>
<td>- What about anti-social personality?</td>
</tr>
<tr>
<td>- What about history of anti-social behavior?</td>
</tr>
<tr>
<td>- What about family or marital factors?</td>
</tr>
<tr>
<td>- What about the lack of achievement in education or employment?</td>
</tr>
<tr>
<td>- What about the lack of pro-social leisure activities?</td>
</tr>
<tr>
<td>- What about substance abuse?</td>
</tr>
<tr>
<td>2nd probe:</td>
</tr>
<tr>
<td>- What about chances to do violence?</td>
</tr>
<tr>
<td>- What about motives such as solidarity, revenge?</td>
</tr>
<tr>
<td>- What about vulnerability?</td>
</tr>
<tr>
<td>- What about superiority or level in terrorism group?</td>
</tr>
<tr>
<td>- What about support from terrorism group?</td>
</tr>
<tr>
<td>- What about outreach in terrorism network?</td>
</tr>
<tr>
<td>3rd probe:</td>
</tr>
<tr>
<td>- What about doctrines?</td>
</tr>
<tr>
<td>- What about targets of enemies?</td>
</tr>
<tr>
<td>- What about the understanding on contexts?</td>
</tr>
<tr>
<td>- What about militancy?</td>
</tr>
<tr>
<td>- What about attitudes?</td>
</tr>
<tr>
<td>- What about loyalty to leaders?</td>
</tr>
<tr>
<td>4th probe:</td>
</tr>
<tr>
<td>- What about reputation in terrorism group?</td>
</tr>
<tr>
<td>- What about weapon skills?</td>
</tr>
<tr>
<td>- What about military training?</td>
</tr>
<tr>
<td>- What about negatively-interpreted knowledge about religion, war, and strategies?</td>
</tr>
<tr>
<td>- What about social domination skills, such as recruiting, influencing, and manipulation skills?</td>
</tr>
<tr>
<td>- What about experiences in combat areas?</td>
</tr>
</tbody>
</table>

4.3 Analysis

This study used qualitative analysis on participants’ answers. Qualitative thematic analysis was used to define criminogenic psychological risk factors. A total of 222 risk factors were revealed prior to thematic analysis (TA). As the research is a baseline study which involved multidisciplinary experts/practitioners in counterterrorism, many words mentioned by participants were very technical; hence, the researcher asked for clarification.

In the TA, participants’ answers were then tabulated, coded, and categorized into similar themes. External ‘un-controllable’ risk factors (e.g. recruitment style in groups, networks, chance to commit terror act, support from violent groups, and anti-social associates) were excluded as this study only focused on internal risk factors. The TA combined inductive (themes were chosen taking from one of the participants’ answers which represented the whole idea of risk factors), deductive (themes were taken from existing concepts of terrorism from previous researches), latent (themes were taken from concepts and assumptions underpinning the risk factors raised by participants), and constructionist approaches (themes constructed certain reality created by participants’ answer). In other words, a name of the theme might be chosen even though the term was weak in quantity (but strong in quality) because it incorporated a broader meaning or concept, for example the theme ‘Mechanical and Electrical (M and E) Skills’ was chosen to incorporate these terrorism skills stated by participants: 1) “aeromechanical”, 2) “weapon/gun-assembling”, 3) “auto-mechanical”, 4) “electromechanical”, 5) “mechatronic”, 6) “technical”, 7) “aerodynamic”, 8) “drone-assembling”, and 9) “bomb-crafting” skills, although the word “mechanical and electrical skill” was only mentioned once. This is due to its coverage and presented the eight other words mentioned above.

Themes were then presented to each participant for verification. A round-typed diagram to illustrate themes of risk factors, as seen in Figure 1, was drafted and presented to participants for verification. An interrater judgment by two psychologists (forensic and clinical), eight ‘grassroots’ deradicalization practitioners, and a psychometrician was conducted for validating themes (content validity) and diagram.

5. Results

The results of this study show that there are 18 factors grouped into the following domains: Motivation, Ideology, and Capability. Six risk factors could be located within the higher order Motivation domain, six into Ideology, and six into Capability. The six Motivation factors are Economic, Justice, Situational, Social, Superiority, and Actualization Motives. The six Ideology risk factors include Values, Beliefs about Purpose, Attitudes, Militancy, Understandings on Philosophy, and Layers in Ideological Groups. The six Capability risk factors include skills in Intelligence, Information and Communication Technology (ICT), M and E, Military, Language, and Social Domination Skills. These 18 risks and need factors and the three higher order domains are presented in a circular model, Figure 1 describes risk factors in this study. Moreover, participants suggested that fulfilment of the needs of offenders in 18 factors would lead to risk reduction which reduces the chance of offenders being visited by counterterrorism practitioners.
The study suggests the contentment of needs of terrorist offenders to fill the gap between risk assessment and risk reduction.

**Domain: Motivation.**

The domain of Motivation covers all motives driving the act of terrorism. Motivation is symbolized as “Heart”, meaning interests, will, drives, feelings of discontentment, and emotions.

**Risk factor 1: Economic Motives.**

Economic Motives is defined as motives of terrorism associated with economic and biological needs. The scope of this risk factor includes the following concepts or terms: unfulfillments of basic biological needs, financial motives, poverty, employment problems, perceived economic discrepancies, and economic dissatisfaction.

**Risk factor 2: Justice Motives.**

Justice Motives is defined as motives of terrorism associated with the needs to search for justice. The scope of this risk factor includes revenge and rejection of law, social rules, and regulations.

**Risk factor 3: Situational Motives.**

Situational Motives is defined as motives of terrorism associated with the needs for safety and security. The scope of this risk factor includes the following concepts or terms: unfulfillment of safety needs, insecurity, stress, individual crisis leading to grievance, criminal history, personal vulnerability, emotional instability, personal issues (e.g., family, broken-home, education, immigration, troubled peers, delinquency, adjustments, substance abuse), troubled backgrounds, subjective discrepancy (personal dissatisfaction), and escaping motives (fugitivity).

**Risk factor 4: Social Motives.**

Social Motives is defined as motives of terrorism associated with the needs of social support, sense of belonging, and social identity. The scope of this risk factor includes the following concepts or terms: unfulfillment of social needs, feeling marginalized or lonely, self-confidence issues, attribution of kindship, affiliation preferences, solidarity, social vulnerability, self-identity issues, and online networks.

**Risk factor 5: Superiority Motives.**

Superiority Motives is defined as motives of terrorism associated with the needs for power or reaching a higher position in a social hierarchy. The scope of this risk factor includes the following concepts or terms: unfulfillment of controlling needs, prestige, pride, need for power, seeking for social status, needs to control others, and political motives.
Risk factor 6: Actualization Motives.
Actualization Motives is defined as motives of terrorism associated with the needs to give impact to others. It includes the following concepts or terms: unfulfillment of actualization needs, needs to contribute, outreaching motives, lack of positive involvement in society, lack of positive organizational experience, lack of self-actualization, adventurous motives, curiosity, and needs for existence.

Domain: Ideology.
The domain of Ideology includes religious or spiritual concepts, a system of ideas, commitment, experiences, attitudes, mindsets, and positions constructing legitimation to acts of terrorism. Ideology is symbolized as “Head”, which explains justifications, knowledge, rationalizations, sense of values or definitions of “right or wrong”.

Risk factor 7: Values (Doctrines).
Values is defined as thoughts, concepts, dogmas, doctrines, and ideas which are favorable to violence. This includes the following concepts or terms: violent-related beliefs/doctrines, low sense of spirituality, spiritual immaturity, takfiri, hakimiyyah, intolerance to outer circle, anti-coexistence, anti-establishment, religious radicalism, lack of personal introspection, narrow-mindedness, rigid thinking, black-and-white way of thinking, violence-dominated interpretations of sacred texts, tendency to choose the most harsh religious practices, undermining bloodshed, rejection of ethics/norms/laws, non-citizenship behavior, and exclusiveness.

Risk factor 8: Violent Attitudes.
Violent Ideology-Driven Attitudes is defined as attitudes toward outside social group driven by thoughts, concepts, dogmas, doctrines and ideas which are favorable to violence. The scope of this risk factor includes the following concepts or terms: non-cooperativeness to outer circle, aggressions, rejection of contacts/visits and favors from outer circle, selective kindness (only to inner circle), anti-social attitudes, and hatred toward outer circle.

Risk factor 9: Beliefs about Objectives (Targets of Missions).
Beliefs about Objectives is defined as goals or targets in life driven by thoughts, concepts, dogmas, doctrines, and ideas favorable to violence. Their scope includes the following concepts or terms: purpose of life, ultimate goals, violence-related visions, destructive plans, violence-related missions, instrumental goals, targeted victims/perceived enemies, targeted media/equipment, targeted modus operandi/means, violence-related deadlines, and planned actions.

Risk factor 10: Layers in Ideological Groups.
The definition of this risk factor is positions in violent ideological group(s) which describe roles, status, involvement, grades, layers, levels, tasks, and ranks. Its scope includes the following concepts or terms: roles in terrorism, status in terrorism networks, involvement in terrorism networks/criminal offense/military training/local or global conflicts, levels of seniority in terrorism groups, duties/ranks/grades in ideological groups, outreach in terrorism networks, and reputation in ideological groups.

Risk factor 11: Terrorism Militancy.
Militancy is defined as resistance to alter thoughts, concepts, dogmas, doctrines, and ideas which are favorable to violence. Its scope includes the following concepts or terms: devotion to higher figure(s) in terrorism networks, violence-related risk-taking, resistance to positive changes, anti-dialogue/negotiation, and rejection of positive opportunities.

Risk factor 12: Understandings on Philosophy and Contexts.
This risk factor is defined as the lack of understandings of religious philosophy and its implementation in various contexts. In Indonesia, this factor means the lack of contextual insights and understandings on 1) Pancasila the national constitution; 2) Undang-Undang Dasar 1945 the basic law; 3) Negara Kesatuan Republik Indonesia (NKRI), the official name of the country; and 4) Bhinneka Tunggal Ika or “Unity in Diversity”, the official national motto. These are four fundamental national consensuses set by the founding fathers of Indonesia. The scope of this risk factor includes the limited understandings of religious concepts/teachings, various contexts (time and place) of religious practices, local wisdom, the philosophy of Islam, the spirit of national consensuses of Indonesia, Pancasila, UUD 1945, NKRI, and Bhinneka Tunggal Ika, Indonesian history, anthropology of religions in the world, Islamic history (tarikh Islam) and anthropology, and interpretations of sacred texts. It is also described by lacks ability in conceptual/abstract thinking regarding philosophies of religious values, critical thinking, accepting critiques and feedback, and performing cost-benefit analysis in making decisions.

Domain: Capability.
The aspect of Capability covers skills used in terrorism. Capability is symbolized as “Hand” reflecting the fact that these capabilities are things that can be performed by hand or equipment, power, or physical sources.

Risk factor 13: Intelligence Skills.
The definition of this risk factor is skills to acquire, collect, manage, store, retrieve, combine, compare, distribute, build, and use information including complex data, which can be to manage a terrorism activity. Their scope includes skills in data gathering, processing, analysis, interpretation,
and management. The scope also includes skills in Big Data management, disinformation, spying, conditioning, counterintelligence, surveillance, decision making, problem solving, and counter-radicalization.

**Risk factor 14: Language Skills.**

The definition of this risk factor is skills of listening, reading, speaking, and writing in multiple languages, which can be used to manage a terrorism activity. Their scope includes listening, speaking, writing, reading, translating, journalistic, literacy, and public speaking using multiple languages.

**Risk factor 15: ICT (Information and Communication Technology) Skills.**

This risk factor is defined as skills in using and creating Information and Communication Technology, such as computers, programs, cyberspace, Information Technology (IT) and Dark Web, which can be used to manage a terrorism activity. Their scope includes skills in Information Technology (IT), social engineering, computer coding and decoding, digital forensic, cyber defense and security, ICT security-analysis, cryptography, crypto analysis, cyber-virus making, steganography and watermarking, web development, cyber-attack/hacking, Big Data development, and drone-making.

**Risk factor 16: Military Skills.**

Military Skills are skills operated in physical fighting, battlefield, warfare, and conflicts, which can be used to manage a terrorism activity. Their scope includes knowledge and experience in physical toughness, field engineering, defense, martial arts, battlefield, war tactics, psychological warfare, weapon shooting, Chemical Biological Radioactive Nuclear and Explosive (CBRNE) such as poison-making, bombs designing, survival, war strategies, weapon technology, guerilla, disabling security, trap making (e.g., booby trap), and military training.

**Risk factor 17: Social Domination Skills.**

This risk factor is defined as skills of influencing others, such as persuading, negotiating, recruiting, mobilizing, leading, manipulating, controlling, and financing people, which can be used to manage a terrorism activity. Shown in its name, this risk factor’s scope includes skills in human-approaching, social networking, financing, propaganda, and micro expressions (understanding people). Their scope also lies in skills in directing, coordinating, guiding, and even brainwashing people.

**Risk factor 18: M and E (Mechanical and Electrical) Skills.**

This risk factor is defined as skills of using and creating technical, mechanical and electrical equipment, which can be used for managing a terrorism activity. Their scope is described by aeromechanical, weapon/gun-assembling, auto-mechanical, aerodynamic, mechatronic, electromechanical, and bomb-crafting skills.

### 6. Discussion

There remains a deficiency of empirical research into terrorism related to structured examination of psychological risk factors for terrorism [5]. These risk factors are beneficial to formulate risk assessments to terrorist offenders and design interventions/responsivity [13]. Monahan [13] suggests that criminogenic psychological risk factors for terrorism must be identified prior to create terrorism risk assessment/instruments. In Indonesia, assessments to terrorist offenders and foreign terrorist fighters are still unclear. Current instruments for CVE in the country are basically focusing on religious radical extremism, not the risk and need factors of offenders after being detained [13].

This study examines psychological criminogenic risk factors and needs (“Risk-Need”) of terrorist offenders in Indonesia inspired by Risk-Need-Responsivity (RNR) Model by PCC Theory by Andrews, Bonta, and Hoge Bonta [25,51] which emphasizes the identification of Risk and Need of criminal offenders prior to Responsivity or rehabilitation. This study can help in setting up future parameters of effective terrorism rehabilitation in Indonesia. Moreover, the study can be replicated in any countries to understand the risk/need factors in other contexts.

This study identifies 18 individual risk/need factors of ideology-based terrorist offenders in Indonesia that are grouped into three higher order domains: Motivation, Ideology, and Capability. Participants described Motivation as the “heart” which means interests, wills, drives, feelings of discontentment, unfulfillment of certain needs, and emotions favorable to support terrorism. Moreover, Ideology domain or the “head” encompasses religious and spiritual concepts, a system of ideas, knowledge, the definitions of “right or wrong”, and a sense of values determining attitudes. The last domain, Capability or the “hand” contains all abilities supporting terrorism which can be hard and soft skills.

The results of this study reveal 18 individual risk factors and needs of ideology-based terrorist offenders in which the first six are classified as Motivation, the second six as Ideology, and the rest as Capability. The first six risk factors are: 1) Economic, 2) Justice, 3) Situational, 4) Social, 5) Superiority, and 6) Actualization Motives. These risk factors are closely related to motives by Maslow [52] as basic human needs before introduced to any knowledge on religious teachings.

The second six risk factors found in this study are:
7) Doctrines, 8) Targets of Missions, 3) Attitudes, 4) Militancy, 5) Understandings on Philosophy and Contexts, and 6) Layers in Ideological Groups. This supports several scholars’ studies that ideology and belief systems play an important role in causing terrorism including in Indonesia [24,34,43,45-48,53-60]. The findings also support Rokeach’s [61] Belief System Theory which highlights the importance of values/ideology in the study of social attitudes and behavior. In Indonesia, the description of terrorism ideology of terrorism focuses on violent doctrines which are in contrast with the sacred foundational philosophical values of Indonesia: Pancasila [24,62-64]. Pancasila as an abstraction of Indonesian ancient wisdom and philosophy (Pancasila means “Five Fundamental Commandments”) includes Five Principles: 1. Belief in one God, 2. Human Rights, 3. Unity in diversity, 4. Consent and democracy, and 5. Social prosperity; therefore, it has adopted religiosity as its elements [65-68]. Unfortunately, Pancasila still cannot satisfy the mind of Indonesian Islamic violent extremists as it does not literally state the implementation of sharia laws; hence, the Indonesian government and its people are perceived as secular (deserve attacks) according to them [44,69].

The last six risk factors identified in this study are skills in: 1) Intelligence, 2) ICT, 3) M and E, 4) Military, 5) Language, and 6) Social Domination. In this finding, the study shows its uniqueness by listing the terrorist offenders’ possible technical skills in details, such as auto-mechanical, coding, digital forensic, drone-making, hacking, financing, and CBRNE skills. The results include the previous findings of terrorism capabilities [70-75].

Due to the limited research on terrorism risk factors locally and internationally [51], this baseline study can be regarded as a reference for future development of terrorism risk assessments. Published information about terrorism risk assessment and their items are limited [76,77] and risk/need assessments of terrorist offenders within security agencies usually are not released or available for public review, collection, or comparison [78], therefore this study becomes considerably important. Furthermore, as the study uses qualitative approach, the results provide a rich information about targeted risk/need factors of terrorists which can accordingly become the future objectives for rehabilitation or deradicalization in Indonesia. Referring to Meehl’s [79] view about risk factors, the risk factors explored in this baseline study were dynamic or clinical rather than actuarial (“statistical”). The results provide guidance for assessors to consider risk and need factors in each domain of offenders and to help assess progress (by comparing risk/need factors before and after rehabilitation). If quantification is considered beneficial then further research needs to be conducted to elucidate the quantification of MIC risk assessment.

Taking place in Indonesia as the largest Muslim population before and during pandemic, the study sharply prioritizes both online and offline risk factors. It focuses its attention only on relevant risk factors in the domains of Motivation, Ideology, and Capability. The study eliminates several variables when examining terrorists, such as marital status, gender, and social class [32,80-88].

The study facilitated open discussion among cross-sectional Indonesian professionals in terrorism and gave these participants the opportunity to provide opinions on sensitive issue such as Islamic radicalism. The qualitative approach of this study gives each risk factor an equal value/quality, which means there is no risk factor that is more/less important than others. For practical advantages, this will help Indonesian practitioners coordinate and eradicate ‘sectoral-ego’ in counterterrorism efforts because everyone’s role (e.g., psychologists, lawyers, clerics, police, social workers, military officers) is important to modify the behaviors of terrorists.

The results of this study are in line with findings in the previous study by Sukabdi [87] which involve terrorist offenders as participants. When asked about the differences/changes before and after deradicalization, the offenders in the study explained that the following issues were critical that needed intervention in the beginning of their arrestment: Lack of positive purpose of life, Lack of self-introspection, Limited critical thinking ability, Lack of independence against radical networks, Incomplete achievement in society, and Lack of life improvement. All these risk factors have been included comprehensively in the current study. Moreover, using humanistic psychology approach and viewing each offender as an active agent capable of generating a ‘free will’ and independent responses to a variety of stimulations/environments [88-93], the study excludes external risk factors such as recruitment style and terrorism networks/affiliations. Therefore, the study takes no account of networks-grouping issues such as ‘ISIS vs non-ISIS’.

Qualitative method used in this study helps in generating ‘systematic broader, clearer, and operational’ risk factors which gather together and combine all issues identified by various scholars in terrorism field [23,5,69,97]. Borum [94] in his Four-Stage Model of the Terrorist Mindset, for the 1st example, suggested that Grievance that is transformed into three issues: 1) Perceived injustice (“It’s not fair”), 2) Target attribution with external Locus of Control/LoC (“It’s your fault”), and 3) Devaluation of people (“You’re evil”) would facilitate a justification for aggression. The 2nd example, Horgan [56], hypothesises that these following issues: Values, Dissatisfaction (e.g., social or political),
Vulnerability, Identification with victims (Solidarity and Needs for justice), Social motives, and Targets are crucial in the psychology of terrorist offenders. The 3rd example, McGilloway, Ghosh, and Bhui [3], highlight individual’s Vulnerabilities as the variable that increases the exposure to radicalisation. The 4th example, Monahan [5], states that Ideologies, Affiliations, Grievances, and Emotions are individual variables that need assessment in the offenders. The 5th example, Pressman and Flockton [95] set Beliefs and Attitudes, Context and Intent, History and Capability, Commitment and Motivation, and Protective Factors as categories of items in Violent Extremism Risk Assessment (VERA). The last example, Silke [96], underlines Social identity, Marginalisation, Discrimination, Perceived injustice or Revenge, Status and personal rewards as elements determining why certain individuals involve in terrorism.

A further research on the most appropriate skill set when assessing each risk/need factors is accordingly necessary. Further studies in other regions with different systems, replicating the current research, are also needed to examine the generalizability of certain risk factors. Economic and Justice Motives for example, is crucial in the context of Indonesia where poverty, malnutrition, and inequality are still issues faced by the country [97-101]. Moreover, further studies of MIC risk factors in the countries where an ideology other than Islam (i.e., Buddhism, Communism, Judaism, Supremacism) is used to justify violence is recommended. These studies may capture different risk factors for each type of terrorism mentioned earlier by Victoroff[32].

7. Conclusions

This study recognizes eighteen individual risk and need factors of ideology-based terrorist offenders. The eighteen risk and need factors are clustered into three higher domains: Motivation, Ideology, and Capability. Motivation is the interests, wills, drives, feelings of discontentment, unfulfillment of certain needs, and emotions favorable to support terrorism. Ideology is religious and spiritual concepts, a system of ideas, knowledge, the definitions of “right or wrong”, and a sense of values determining attitudes to support terrorism. Capability consists of abilities which may support terror actions.

The results of this study disclose eighteen individual risk and need factors of offenders. The first six factors are in Motivation, the second six are in Ideology, and the last six are in Capability. The first six risk factors are: 1) Economic, 2) Justice, 3) Situational, 4) Social, 5) Superiority, and 6) Actualization Motives. The second six risk factors are: 7) Doctrines, 8) Targets of Missions, 3) Attitudes, 4) Militancy, 5) Understandings on Philosophy and Contexts, and 6) Layers in Ideological Groups. The last six risk factors are skills in: 1) Intelligence, 2) ICT, 3) M and E, 4) Military, 5) Language, and 6) Social Domination.

References


ogy, 20, 508–515.
DOI: 10.1080/13501760902771217.
DOI: 10.1080/13501760902771258.


DOI: 10.1111/j.1467-9221.2009.00698.x.


[63] Amirullah. (2018, July 3), BNPT dikritik soal pemakaian kata radikalisme oleh Sekjen PBB [BNPT is criticised by the UN on the use of term radical-


