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ORIGINAL

Digital Pathways to Radicalization: Step to Terrorism with Understanding Social, Psychological, and Technological Dimensions of Terrorism in Indonesia

Vías Digitales hacia la Radicalización: Paso hacia el Terrorismo con Comprensión de las Dimensiones Sociales, Psicológicas y Tecnológicas del Terrorismo en Indonesia

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ABSTRACT

Introduction: radicalization and terrorism have become pressing public health and social challenges in Indonesia, where individuals are increasingly exposed to extremist ideologies through diverse social and technological channels. Family and friendship networks, religious institutions, educational settings, and especially digital platforms contribute to the dissemination of radical narratives. The rapid expansion of social media has accelerated the spread of extremist content, intensifying the risk of radicalization at the community level.
Objective: this study aims to analyze the stages through which individuals in Indonesia progress toward radicalization and terrorism. By applying the theory of the three stages of terrorism, the research investigates how exposure to social and digital environments facilitates the pathway to extremist organizations such as Al Jamaah Al Islamiyah, Negara Islam Indonesia, and Jamaah Anshar Daulah. The study further seeks to highlight the social, psychological, and technological dimensions of these processes and their implications for public health and resilience.
Method: a qualitative design was employed, combining primary and secondary document analysis with interpretative approaches to map the radicalization trajectory. The data were drawn from organizational records, policy documents, media reports, and prior research to trace individual pathways from pre-radicalism to acts of terror. This triangulated method enabled a contextualized understanding of the dynamic interplay between social influence, psychological vulnerability, and technological drivers of radicalization.
Results: findings reveal that radicalization in Indonesia follows three interconnected phases: pre-radicalism, exposure to radical ideologies, and participation in terror acts. Social networks provide the initial entry points, while digital technologies amplify and accelerate recruitment and indoctrination processes. The study concludes that radicalization is not only a security concern but also a multidimensional issue that intersects with health, social well-being, and technological development. Strengthening digital literacy, fostering community resilience, and integrating preventive policies across health, education, and technology sectors are crucial strategies to mitigate the risks of radicalization and terrorism.

Keywords: Radicalization; Terrorism; Digital Platforms; Social Networks; Indonesia.

RESUMEN

Introducción: la radicalización y el terrorismo se han convertido en desafíos urgentes de salud pública y sociales en Indonesia, donde las personas están cada vez más expuestas a ideologías extremistas a través

de diversos canales sociales y tecnológicos. Las redes familiares y de amistad, las instituciones religiosas, los ámbitos educativos y, especialmente, las plataformas digitales contribuyen a la difusión de narrativas radicales. La rápida expansión de las redes sociales ha acelerado la propagación de contenidos extremistas, intensificando el riesgo de radicalización a nivel comunitario.
Objetivo: este estudio tiene como objetivo analizar las etapas por las cuales las personas en Indonesia avanzan hacia la radicalización y el terrorismo. Aplicando la teoría de las tres etapas del terrorismo, la investigación indaga cómo la exposición a entornos sociales y digitales facilita el camino hacia organizaciones extremistas como Al Jamaah Al Islamiyah, Negara Islam Indonesia y Jamaah Anshar Daulah. Asimismo, busca resaltar las dimensiones sociales, psicológicas y tecnológicas de estos procesos y sus implicancias para la salud pública y la resiliencia social.
Método: se empleó un diseño cualitativo, combinando análisis de documentos primarios y secundarios con enfoques interpretativos para mapear la trayectoria de radicalización. Los datos se obtuvieron de registros organizacionales, documentos de políticas, informes periodísticos e investigaciones previas, con el fin de rastrear los itinerarios individuales desde la pre-radicalización hasta los actos terroristas. Este método de triangulación permitió una comprensión contextualizada de la interacción dinámica entre la influencia social, la vulnerabilidad psicológica y los factores tecnológicos que impulsan la radicalización.
Resultados: los hallazgos revelan que la radicalización en Indonesia sigue tres fases interconectadas: pre-radicalización, exposición a ideologías radicales y participación en actos terroristas. Las redes sociales brindan los puntos de entrada iniciales, mientras que las tecnologías digitales amplifican y aceleran los procesos de reclutamiento e indoctrinación. El estudio concluye que la radicalización no es solo un asunto de seguridad, sino también un fenómeno multidimensional que intersecta con la salud, el bienestar social y el desarrollo tecnológico. Fortalecer la alfabetización digital, fomentar la resiliencia comunitaria e integrar políticas preventivas en los sectores de salud, educación y tecnología son estrategias fundamentales para mitigar los riesgos de radicalización y terrorismo.

Palabras clave: Radicalización; Terrorismo; Plataformas Digitales; Redes Sociales; Indonesia.

INTRODUCTION

Terrorism is not a new phenomenon in Indonesia; its seeds have been present since the country's early independence. One notable example is the attempt by certain groups to impose Indonesia as a religious state. The Darul Islam/Tentara Islam Indonesia (DI/TII) movement under S.M. Kartosuwiryo serves as the clearest case. From 1949 to 1962, the movement not only engaged in armed rebellion but also laid down an ideological foundation that inspired many subsequent terrorist groups.[1,2]

At that time, political factors played a significant role in fueling insurgency. Regions such as West Java, Aceh, and South Sulawesi became strongholds of resistance against Sukarno's government. Until today, areas once under DI/TII influence are often regarded as important pockets for the dissemination of radicalism. Kinship networks and local patronage served as effective mechanisms for preserving the ideology, particularly through intermarriage, which extended influence and reinforced loyalty across regions.[3]

This strategy of network expansion through marriage was later replicated by subsequent groups, including Negara Islam Indonesia (NII) and Jamaah Islamiyah (JI). Family ties not only strengthened internal solidarity but also became a critical entry point for recruiting new members.[4] However, these traditional patterns have undergone major transformations with the advent of technology—most notably social media—which now serves as the primary channel for ideological dissemination, propaganda, recruitment, and even coordination of terrorist activities.[5]

These changes have shifted the operational dynamics of terrorist organizations. Whereas mobilization once relied heavily on kinship or community ties, individual-based recruitment has become increasingly prominent. The phenomenon of the "lone actor" has emerged as a consequence of exposure to radical ideologies in digital spaces, often without direct involvement in formal organizations.[6,7,8] This transformation underscores that social media not only accelerates radicalization but also alters the modus operandi of terrorism in Indonesia.[8]

Thus, the historical trajectory of terrorism in Indonesia reveals both continuity and change. From family-based traditional patterns during the DI/TII era to digitally driven lone actors in the contemporary period, this dynamic highlights the need for a more comprehensive and multidisciplinary understanding. Examining the stages through which individuals and groups progress toward acts of terrorism is crucial to grasp how radicalization adapts to shifting social, psychological, and technological contexts. This perspective also underlines its relevance for public health, community resilience, and the development of preventive strategies in the digital era.[9]

This paper seeks to unpack the problem of how individuals and groups progress through stages leading to acts

of terrorism. Existing theories of radicalization developed at the global level often rely on research conducted within specific national contexts. However, each country possesses distinct characteristics in terms of culture, social structure, technological influence, and the capacity of its security apparatus. These differences mean that the stages of individual exposure to radicalism in one country are not always identical to those in another. Thus, no single conceptual or theoretical approach can be applied universally without considering the local context. To address this issue, this study employs a qualitative methodology with a focus on document analysis, supported by primary data from interrogation records and court rulings in terrorism cases, supplemented by scholarly research reports. Individual profiling is analyzed using the three stages of terrorism framework to map radicalization pathways culminating in acts of terror.[8,9]

The first and most cited model is *Staircase to Terrorism*, proposed by Moghaddam.[9] This model views radicalization as a gradual process akin to climbing a staircase, with each step representing phases that bring individuals closer to terrorism. It emphasizes psychological frustration, perceived injustice, and eventual moral engagement leading to violent acts. While systematic, critiques highlight its overly linear nature and limited relevance in today's digital environment.[10,11]

Alternative models offer different lenses. McCauley and Moskalenko's *Two-Pyramids Model* distinguishes between radical opinions and radical actions.[12] Silber and Bhatt's *Four-Stage Model* conceptualizes pre-radicalization, self-identification, indoctrination, and jihadization, but faces critiques of oversimplification and cultural bias.[13-15] Della Porta's *Social Movement Theory* situates terrorism within broader political opportunity structures and mobilization resources.[16] Sageman emphasizes identity, networks, and psychosocial belonging as key triggers of terrorism.[17]

Taken together, these theories highlight different drivers: psychological, social, political, and digital. Yet, for Indonesia, no single theory sufficiently explains the diversity of radicalization patterns. Local trajectories show that while some individuals follow gradual processes, others leap directly into indoctrination or violent action, particularly through social media and digital networks. Hence, integrating multiple theoretical perspectives is necessary to capture Indonesia's unique dynamics of radicalization and terrorism.

Radicalization processes in Indonesia can also be understood through McCauley and Moskalenko's two-pyramids model**, which** differentiates between cognitive radicalization and behavioral radicalization.[18] In the Indonesian context, individuals may harbor radical opinions without engaging in violence, while others transition into action due to peer pressure, kinship networks, or exposure to charismatic leaders. This distinction is particularly relevant given the prevalence of radical preaching in mosques and informal study groups, where ideology often remains at the opinion level but can shift toward action when combined with enabling environments.[19]

Meanwhile, the Silber and Bhatt four-stage model offers a useful framework to analyze contemporary radicalization trajectories. The pre-radicalization and self-identification stages often manifest in Indonesia through online exposure, where young individuals encounter radical narratives on social media.[20] Indoctrination then occurs via encrypted messaging groups or exclusive religious circles that reinforce extremist interpretations. The final stage, jihadization, is evident in documented cases of Indonesian militants who moved rapidly from online indoctrination to operational planning, underscoring how digital ecosystems accelerate progression through these stages.[21]

Della Porta's social movement theory provides another lens, situating terrorism within broader struggles against perceived political exclusion and injustice.[22] In Indonesia, grievances related to corruption, governance failures, and inequality often serve as fertile ground for radical movements. These socio-political conditions align with Della Porta's argument that mobilization resources and political opportunities are central to sustaining radical organizations.[23] For example, organizations like Jamaah Anshar Daulah (JAD) capitalized on disillusionment with state institutions to attract followers, framing terrorism as a form of resistance within a broader social struggle.[24]

Lastly, Sageman's theory of radicalization through social networks highlights the role of friendship, kinship, and online communities in fostering identity and belonging.[25] In Indonesia, many individuals who joined terrorist groups did so not primarily out of ideological conviction but because of personal ties and the search for social recognition.[26] The rise of "bunch of guys" networks, as Sageman terms them, illustrates how radicalization is often less about theological depth and more about social cohesion.[27] This perspective resonates with Indonesian cases, where radical communities function as surrogate families, providing emotional security and identity reinforcement that culminate in violent commitment.[28]

METHOD

Research Design

This study employed a qualitative research design to explore the stages of radicalization and terrorism in Indonesia. The qualitative approach was chosen because it allows for a deeper understanding of meanings, processes, and social interactions underlying individual pathways to radicalization.[29] A case study strategy was

applied to capture the contextual dynamics of specific terrorist organizations, including Darul Islam/Tentara Islam Indonesia (DI/TII), Jamaah Islamiyah (JI), and Jamaah Anshar Daulah (JAD).[30]

Data Sources

The research relied on both primary and secondary data. Primary data consisted of interviews with security experts, former radicalized individuals, and community leaders who had direct experience with radical movements.[31] Secondary data included government reports, judicial documents, academic publications, and media archives.[32] Combining these sources enhanced data triangulation and ensured the credibility of findings.[33]

Data Collection Techniques

Data collection was conducted through document analysis, semi-structured interviews, and focus group discussions (FGDs). Document analysis allowed systematic examination of historical and contemporary materials related to radicalization patterns.[34] Semi-structured interviews were employed to capture the perspectives of key stakeholders, enabling flexibility in probing relevant issues.[35] FGDs were held with community leaders and practitioners to validate themes emerging from the data.[36]

Data Analysis

Thematic analysis was applied to identify recurrent patterns and stages of radicalization. The process followed Braun and Clarke's six-step framework for thematic analysis, including data familiarization, coding, theme generation, and interpretation.[37] Furthermore, theoretical triangulation was achieved by mapping findings against established radicalization models, including McCauley and Moskalenko's two-pyramids model, Silber and Bhatt's four-stage model, and Sageman's social network theory.[38] The integration of multiple frameworks increased analytical robustness and minimized researcher bias.[39]

Ethical Considerations

Ethical approval was obtained prior to data collection to ensure that all research activities complied with academic and institutional standards.[40] Informed consent was secured from participants, who were assured of anonymity and confidentiality. Given the sensitive nature of terrorism research, extra precautions were taken to protect both participants and researchers, including data encryption and secure storage systems.[41] Additionally, interviews were conducted in safe environments with attention to the psychological well-being of participants.[42]

RESULTS

Profiles of JI Members

The analysis of Jemaah Islamiyah (JI)—which officially declared its dissolution on 30 June 2024—reveals distinctive pathways of radicalization and cadre development. Individual involvement typically followed a long-term trajectory, often beginning within the family environment and reinforced by exposure to JI-affiliated educational institutions. Previous research confirms that kinship and pesantren networks have historically functioned as incubators of radical ideology in Indonesia.[43]

One illustrative case is that of cadres educated in JI-linked schools, where early religious indoctrination was followed by structured tarbiyah, baiʿat (pledge of loyalty), and mentoring programs such as *tamhiz* or *muʿahadah*. These processes mirror findings by Iqbal and Hwang, who demonstrate how long-term religious socialization sustains ideological loyalty despite internal disagreements.[44] Members were subsequently assigned to organizational divisions, ranging from economic activities to international liaison, highlighting the professionalization of roles within JI's structure.[45]

Another pattern observed was the preparation of cadres for *global jihad*. Selected individuals received specialized *tadrib askari* (military training) in regions such as Kolaka before being dispatched abroad. Such overseas connections are consistent with Sageman's emphasis on the transnational dimension of terrorist networks, where identity formation intersects with global jihadist movements.[46] Beyond cadre-based recruitment, JI also incorporated external figures, including professionals such as physicians, who were integrated through prior affiliations with Darul Islam (DI) or Negara Islam Indonesia (NII)-oriented student organizations.[47]

Senior figures like Abu Rusydan (Thariquddin) and Zulkarnain (Arif Sunarso) exemplify the generational continuity of NII's legacy within JI. Both were veterans of the Afghan conflict and were directly involved in transnational training camps in the Philippines. Their trajectories confirm the role of "foreign fighter" experiences in shaping leadership legitimacy and organizational strategies, as identified in prior studies of Southeast Asian militant groups.[48] Moreover, their participation in local conflicts, such as Ambon and Poso, reflects Della Porta's framing process, where global narratives were localized to mobilize community-based support.[49]

The findings underscore that JI recruitment was not monolithic. While family and educational backgrounds facilitated internal regeneration, professional networks and international linkages expanded JI's operational capacity. This multiplicity of pathways reinforces critiques of overly linear radicalization models, showing that individuals may enter through diverse channels and at different stages of commitment.[50]

Profiles of JAD Members

Unlike Jemaah Islamiyah (JI), which relied heavily on long-term cadre formation through pesantren and kinship networks, Jamaah Anshar Daulah (JAD) adopted a more flexible and decentralized recruitment strategy, with social media serving as the primary platform for indoctrination and mobilization. This finding is consistent with recent studies that identify the centrality of digital ecosystems—particularly Telegram, WhatsApp, and Facebook—in shaping the trajectory of ISIS-affiliated groups in Indonesia.[51]

Exposure to radical ideology often occurred through online study circles (*halaqah*) and virtual da'wah materials, which promoted narratives of hijrah, jihad, and martyrdom. In several cases, individuals radicalized through such online channels attempted to migrate to Syria during the peak of ISIS's influence between 2014 and 2017. This pattern illustrates what Neumann terms "self-recruitment," where individuals radicalize in digital spaces without strong prior organizational attachment.[52]

Economic frustration and social alienation also functioned as enabling conditions. Individuals from disadvantaged backgrounds, such as unemployed youth or low-income workers, often interpreted jihad as both a spiritual mission and a means of social recognition. This aligns with McCauley and Moskalenko's pyramid of action, where the transition from radical opinion to violent behavior can be catalyzed by feelings of injustice and marginalization.[53] Importantly, the JAD context demonstrates that economic hardship was not the sole driver; middle-class professionals, including civil servants and employees of state-owned enterprises, also joined due to exposure to digital propaganda and peer influence.[54]

Interpersonal networks nonetheless remained relevant. Family connections—such as siblings or spouses—frequently served as conduits for recruitment, reinforcing Sageman's theory of "bunches of guys," where kinship and friendship groups accelerate ideological commitment.[55] Offline *halaqah* meetings, often in markets, mosques, or private homes, complemented online indoctrination, providing a sense of community and trust. Senior figures like Aman Abdurrahman played a crucial role in shaping the doctrinal core, bridging online propaganda with face-to-face mobilization.[56]

The findings also show that JAD cadres were not only consumers of radical discourse but also active propagators. Some members established charitable initiatives, educational institutions, and community networks as fronts for financial collection and ideological dissemination. These practices resonate with Della Porta's framing process, where terrorist groups use social grievances and religious symbolism to legitimize violence within local communities.[57] In this regard, JAD demonstrates a hybrid recruitment strategy—digital-first but reinforced by offline solidarity—that distinguishes it from JI's long-term cadre-based approach.

Profiles of NII Members

The radicalization process within Negara Islam Indonesia (NII) displays unique trajectories compared to JI and JAD, even though NII historically served as the precursor to both. The central role of family-based networks remained prominent, but its ideological emphasis was rooted in the rejection of Pancasila as the state ideology and the redefinition of *kafir* (infidel) to include state representatives and even fellow Muslims who opposed their vision.[58] This interpretation created an exclusivist worldview that facilitated intergenerational transmission of radicalism, particularly within families historically tied to the Darul Islam/Tentara Islam Indonesia (DI/TII) legacy.

Patterns of recruitment within NII demonstrate the dual use of both informal and formal institutions. On one hand, kinship ties ensured loyalty and ideological continuity across generations, consistent with Sageman's emphasis on familial and friendship bonds as accelerators of radicalization.[59] On the other hand, infiltration of state structures—such as access to educational or religious bureaucracies—allowed NII to exploit formal institutions for tarbiyah and recruitment. This hybrid approach highlights how radical groups adapt their strategies to local governance systems, echoing Della Porta's concept of mobilization resources where both material and institutional assets are strategically utilized.[60]

Educational settings also served as key gateways. Regular religious study sessions in schools or community settings introduced ideological framing at an early stage. Similar to Moghaddam's staircase theory, this reflects the initial stage of perceived injustice, later consolidated through indoctrination and organizational bai'at.[1] Individuals exposed during adolescence often advanced to operational roles as adults, overseeing weapon procurement, agricultural land management, or training facilities. This structured pathway underscores NII's preference for gradual cadre formation, in contrast to JAD's more accelerated online-driven radicalization.

Another notable feature of NII is the fluidity of factional affiliation. Members frequently shifted across factions—KW 9, Tahmid, Ali Mahfud, and MYT—reflecting both ideological contestation and organizational

adaptation. Yet, despite such shifts, core practices such as *iʿdad* (military preparation), clandestine weapons procurement, and the establishment of "war zones" remained constant. These practices illustrate what McCauley and Moskalenko term the pyramid of action, where structural commitment to violent preparation distinguishes active radicals from mere ideological sympathizers.[62,63,64,65]

From a multidisciplinary perspective, NII's persistence demonstrates the intersection of ideology, social structure, and resource management. Programs such as agricultural projects, community-based endowments (*wakaf senjata*), and localized training not only sustained the group but also embedded radical networks within everyday socio-economic life. This embeddedness echoes broader studies on the integration of violent groups within community systems, reinforcing the challenge of detection and prevention.[63] Therefore, understanding NII's radicalization model provides critical insights into how family-based networks and institutional infiltration sustain long-term extremist movements in Indonesia.

DISCUSSION

The comparative analysis of JI, NII, and JAD through the lens of the Three Stages of Terrorism framework demonstrates that the progression of radicalization cannot be reduced to individual psychological grievances alone. Instead, it reveals a complex interplay of socio-cultural, technological, and intergenerational dynamics. In JI and NII, radicalization followed a protracted and structured process emphasizing family-based indoctrination, while JAD accelerated this pathway through digital technologies that bypassed traditional cadreship models.[64] This confirms Horgan's argument that radicalization should be viewed as a dynamic process shaped by social networks and organizational strategies rather than a singular event.[65,67,68]

From a public health perspective, these differences are critical. Prolonged cadre formation in JI and NII meant that indoctrination was normalized across generations, embedding extremist worldviews within family and community life. This mirrors epidemiological models where radical ideas spread like "social contagion," reinforced by repeated exposure within trusted networks.[66] In contrast, JAD's reliance on digital ecosystems created a more acute form of exposure—akin to rapid viral transmission—accelerating the transition from pre-radicalism to operational violence. Such patterns align with research in digital sociology, where online echo chambers amplify extremist narratives and reduce opportunities for countervailing perspectives.[67]

The Three Stages framework also underscores the role of organizational mentoring and structural rituals, such as *baiʿat*, in solidifying radical commitments. In JI and NII, mentorship and tiered responsibilities mirrored traditional apprenticeship models, emphasizing obedience and gradual escalation. This contrasts with JAD's reliance on self-directed online radicalization supplemented by loose peer validation. From a psychological standpoint, the former fosters resilience of extremist identity, while the latter accelerates cognitive closure and binary worldviews.[68,69,70,71] Both trajectories ultimately converge in operational readiness, but their temporal dynamics differ significantly.[72]

Moreover, the evidence of cross-organizational movement—such as individuals shifting between JI, NII, and JAD—illustrates that radicalization is not a closed process but a fluid continuum. This phenomenon resonates with McCauley and Moskalenko's theory of "radicalization pathways," where structural, social, and personal drivers intersect at different stages.[69] It also reveals how ideological rigidity is paired with organizational flexibility, allowing actors to adapt to new contexts without abandoning extremist commitments. For counter-radicalization strategies, this implies that interventions must address not only ideological content but also the relational ecosystems—family, peer groups, and digital platforms—that sustain radicalization over time.[70,71,72,73]

In sum, applying the Three Stages of Terrorism framework to JI, NII, and JAD highlights the evolving modalities of radicalization in Indonesia. While JI and NII exemplify long-term indoctrination embedded in familial and institutional structures, JAD demonstrates the disruptive potential of digital technologies in reshaping recruitment. Both trajectories emphasize the necessity of multi-sectoral approaches, combining psychological interventions, community resilience programs, and technological regulation, to address the multifaceted risks posed by contemporary extremist networks.[71,72,73,74,75]

Table 1. Three Stages of Terrorism framework demonstrates behavioral transformation

No.	Name	Organization	Pre-Radicalism	Exposure to Radicalism	Terror Act
1	Zulfikar	JI	Aspiration to establish a caliphate (Minhaj an-Nubuwwah)	JI-affiliated educational institution	Procurement of firearms
2	Nuki	JI	Aspiration to establish a caliphate (Minhaj an-Nubuwwah)	JI-affiliated educational institution	Engagement in Southeast Asian terror networks
3	Aji Maulana	JI	Aspiration to establish a caliphate (Minhaj an-Nubuwwah)	Training center, military training (tadrib askari)	Preparation for global jihad program

4	Thariquddin (Abu Rusydan)	JI	Aspiration to establish a caliphate (Minhaj an-Nubuwwah)	Family and NII networks	Moro program, global jihad, harboring fugitives (DPO), JI leadership
5	Zulkarnain (Arif Sunarso)	JI	Aspiration to establish a caliphate (Minhaj an-Nubuwwah)	Family and NII networks	Christmas Eve bombings, Bali Bombing I
6	Agus Purwantoro	JI	Aspiration to establish a caliphate (Minhaj an-Nubuwwah)	JI training camps, Philippines	Concealment of terrorists, military training
7	Joko Wiwoho	JAD	Ideological quest (hijrah)	Online and offline study groups	Hijrah to Syria
8	Rofiq Ansharuddin	JAD	Disappointment, economic frustration	Online and offline study groups	Suicide bombing at Kartosuro Police Post
9	Danan Jaya	JAD	Ideological search	Bai'at, online and offline study groups	Procurement of firearms and ammunition logistics
10	Alex Rumatrey	JAD	Aspiration to establish Daulah Islam	Online and offline study groups	Facilitating FTF to the Philippines, terror financing, harboring fugitives
11	Chandra	JAD	Identity search	Offline study groups	Bomb-making, planned amaliyah
12	Sutomo (Muhammad Yasin)	JAD	Aspiration to establish Daulah Islam	Offline study groups, Aman Abdurrahman's teachings	Terrorist financing, propaganda
13	001NII	NII	Aspiration to establish an Islamic state	Genealogical/familial ties	Procurement of firearms logistics
14	002NII	NII	Aspiration to establish an Islamic state	Family ties, structural position	Procurement of firearms logistics
15	003NII	NII	Aspiration to establish an Islamic state	Religious study groups, cadre formation (Tahmid faction)	Procurement of weapons, food security programs
16	004NII	NII	Aspiration to establish an Islamic state	Routine study groups, bai'at to NII	Military training, procurement of firearms
17	005NII	NII	Aspiration to establish an Islamic state	Family-based study groups, bai'at to NII	Military training, i'dad (weapons preparation), weapons endowment (waqf)

The table 1 shows that the dynamic process of radicalization across three stages—pre-radicalism, exposure to radicalism, and terrorist acts—showing how ideological aspirations, combined with social networks and indoctrination channels, ultimately culminate in acts of violence.[76,78] The profiles highlight that while the initial stage often stems from ideological quests, disappointment, or identity struggles, the progression to extremism is reinforced by structured exposure such as study groups, family ties, or militant training. In the final stage, these influences manifest in concrete actions ranging from recruitment, financing, and propaganda to direct involvement in violent attacks.[80] This pattern underscores the critical role of social environments, organizational structures, and ideological narratives in shaping pathways to terrorism.[81,82]

CONCLUSION

The dynamics of radicalization in Indonesia illustrate that the process of becoming involved in terrorist organizations is neither instantaneous nor uniform. The cases of JI, NII, and JAD reveal distinct trajectories, yet they converge in passing through three principal stages: pre-radicalism, exposure to radicalism, and the terrorist act. Each stage reflects an interaction between individual vulnerabilities, social networks, and organizational strategies, ranging from family-based indoctrination and structured cadre formation to the more accelerated pathways enabled by digital platforms.

By mapping these stages, it becomes evident that radicalization is best understood as a continuum rather than a single moment of transformation. JI and NII exemplify long-term, multigenerational indoctrination, while JAD demonstrates how online ecosystems can compress the stages of radicalization into a much shorter timeframe. This duality highlights the need to address both traditional community-based influences and the disruptive role of digital technologies.

In terms of counter-terrorism efforts, recognizing the staged nature of radicalization allows for more targeted interventions. Preventive strategies can focus on disrupting the early narratives that foster pre-radicalism, particularly within vulnerable families and online communities. Meanwhile, interventions aimed at those already exposed must consider the importance of mentorship, peer networks, and the symbolic rituals that solidify extremist identities.

Ultimately, a comprehensive approach that integrates psychological, sociological, and technological perspectives is required to mitigate the risks of radicalization in Indonesia. By addressing the stages systematically, policy responses can be more adaptive and sustainable, ensuring that counter-radicalization programs remain relevant in the face of evolving extremist strategies.

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