From Total Islam to the Islamic State: Radicalization Leading to Violence Dynamics as a Subject of Reciprocal Affordance Opportunities

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Abstract

This article aims to clarify the role of the so-called Islamic State's (a.k.a. ISIS) online activities on radicalization. To that effect, all empirical endeavors on the underpinning phenomenon in Vox-Pol's library were systematically reviewed and assessed. This exhaustive review suggests that Radicalization Leading to Violence (RLV) offers a nuanced conceptualization of the complex, emergent, and non-linear and dynamic phenomenon. Findings of the included studies were recorded, visualized, and clustered, allowing the discussion of possible scenarios, and thus, the inference of a utilitarian model of RLV dynamics based on the conceptual map of the literature. On the basis of connectivity and affordance opportunities (online and offline [beyond the digital realm]), Total Islam (i.e., a totalizing identity marker rather than an indicator of religiosity) is posited to be a critical element of the inferred model. ISIS is argued to use both affordance opportunities in a way that capitalizes on the manifestations of Total Islam to mobilize those embracing this form identity across different RLV trajectories. To that end, the paper is concluded by discussing its implications, limitations, and recommendations for future research.

Introduction

In the public discourse, the so-called Islamic State (a.k.a. Islamic State of Iraq and al Sham [ISIS]) has cultivated the reputation for a sophisticated and out of this world ability to hypnotize bored youth over social media (for nuanced reading see, Gilsinan 2015, Byman 2017, Amarasingam and Berger 2017). One would expect that scholarly work would not act as an exaggeration machine for such an ill-conceived notion. Employing 12 confusing tweets (contents posted on twitter, the micro-blogging social media platform) of a single user, a

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study went on to claim, "extremism Islamic propaganda can radicalize… the target young Islamic males by strengthening the in-group identification … and hatred against other groups, and by magnifying the external threats from other groups" (Chatfield, Reddick, & Brajawidagda, 2015, P. 245). Commentators (Brooking & Singer, 2016; WIRED, 2016; Warrick, 2017), academics (Farwell, 2014; Fernandez, 2015; Berger, 2015; Ali, 2015), and governmental agencies (Comey, 2015; The Permanent Subcommittee on Investigations, 2016; Homeland Security and Governmental Affairs Committee, 2016) noted the ISIS' adaptive use of the internet, including:

I. Social media platforms, especially twitter (Vidino & Hughes, 2015).
II. Encrypted messaging applications including, Telegram (Bloom, Tiflati, & Horgan, 2017), Wickr (Homeland Security Committee Homeland Security Committee, 2016), and WhatsApp (Shane & Hubbard, 2014).
III. The dark web (Weimann, 2016).

The cited resources outlined experts', politicians', and journalists' arguments that ISIS' online activities (operations over the internet) and its ability to disseminate propaganda allow the organization to incite violence, radicalize, and recruit individuals to serve its causes. For instance, on May 26, 2017, the G7 asserted that "we will combat the misuse of the Internet by terrorists. While being one of the most important technological achievements in the last decades, the Internet has also proven to be a powerful tool for terrorist purposes" (Medium, 2017). In the aftermath of June 3, 2017 terrorist attack in London, Theresa May, Prime Minister of the UK, declared "enough is enough," and that the government would increase its counterterrorism measures to deny terrorists "the safe spaces it needs to breed," both online and offline (Erlanger, 2017).

Much has been written on ISIS' online operations and the mobilization of individuals down their violent radicalization paths (e.g., Berger & Morgan, 2015; Alexander, 2016; Hughes & Meleagrou-Hitchens, 2017; Gill, et al., 2017; Berger, 2016; Smith, et al., 2015;

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Huey & Witmer, 2016; Vidino & Hughes, 2015; Ducol, et al., 2016; Reynolds, 2016; Conseil du statut de la femme & Centre for the Prevention of Radicalization Leading to Violence, 2016). Yet elements and processes governing the dynamics of such mobilization remain ambiguous in both the online (over the Internet) and offline (beyond the digital realm) milieus. Cases of ISIS recruitment in the west offer little support to overwhelming mobilization trajectories that take place exclusively online (e.g., Alexander, 2016; Hughes & Meleagrou-Hitchens, 2017; Gill, et al., 2017; Smith, et al., 2015; Vidino & Hughes, 2015). To that end, research on this phenomenon faces numerous challenges, including but not limited to sensitivity and complexity of radicalization and little publicly available primary and secondary data.

However, notwithstanding such obstacles, scholars compiled data on individuals in the legal system through government records and press material (e.g., Alexander, 2016; Hughes & Meleagrou-Hitchens, 2017; Gill, et al., 2017; Smith, et al., 2015; Vidino & Hughes, 2015; Reynolds, 2016). Moreover, researchers are also using interviews with returnees and/or defectors and big data to assess violent extremism related factors (e.g., Berger & Morgan, 2015; Berger, 2016; Conseil du statut de la femme & Centre for the Prevention of Radicalization Leading to Violence, 2016; Gómez, et al., 2017). Answers to questions about mobilization dynamics and the role of online activities in violent radicalization trajectories remain unclear and demand still more research. Therefore, the current effort systematically reviews and probes available findings and observations to infer a model of such dynamics, based on the findings of the meta-analysis and the examined conceptual map of the literature.

Method

Giving Vox-Pol's[2] (Virtual Centre of Excellence for Research in Violent Online Political Extremism) focus on online violent extremism and its effort to compile various materials on

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[2] Vox-Pol is the academic network of the European Union Framework Program that focuses on researching violent online extremism and measures to counter it.

the phenomenon (e.g., videos, government reports, academic research, etc.), its library was selected to obtain studies focusing on: ISIS, radicalization, online activities, and mobilization trajectories. Vox-Pol is "€5+ million project that integrates the world's leading researchers and research groups in Violent Online Political Extremism (VOPE), to include those researching the intersection of terrorism and the Internet (incl. violent jihadists, violent separatists, etc.), the online activities of the extreme Right, the potential for violent online radicalisation, etc." (European Commission 2014).

To avoid search bias, all studies on ISIS with the term Radicalization were obtained and assessed. To that effect, material published between 2014 (the year ISIS declared its caliphate) and 12 May, 2017 (the date of search). 103 out of the 514 library entries were published during this period. The current study aims to include all empirical work on radicalization and the role online activities (e.g., propaganda, recruitment, etc.) on the mobilization trajectories of ISIS recruits, supporters, and/or sympathizers. In an effort to minimize inclusion bias, all empirical efforts, regardless of the methods and number of cases, were assessed. After reading the abstracts/executive summaries and introductions of the 103 reports/papers, only 21 efforts were found to meet the inclusion criteria. That is to say, empirical and included at least one case of an ISIS' recruit, supporter, and/or sympathizer. The dearth of empirical endeavors on the phenomenon is hardly surprising and corresponds to earlier reports (von Behr, Reding, Edwards, & Gribbon, 2013). It is noteworthy that the Rand's report included studies on various forms of radicalization (i.e., jihadist-based and right-wing extremists). The 21 studies were examined further to determine whether they presented any empirical evidence. After reading the 21 articles and reports, only 19 withstood this scrutiny. Studies that survived the reduction were thoroughly reviewed. Then, a data file of the 19 studies was created using Microsoft Word (47 pages: 10 points, single space). The studies were presented in a table demonstrating: the study's number, citation, main field(s), method, number of subjects/cases, variables/themes, and thorough review of the study. The data file was submitted to this journal to allow the reviewers and editor to assess the steps taken to carry out later analyses.

Furthermore, on the basis of methodological rigor, the included studies were systematically assessed. A number of the included studies resorted to computational science, solely, to detect radicalization-associated factors (Ghajar-Khosravi, Kwantes, Derbentseva, & Huey, 2016; Saif, Fernandez, Rowe, & Alani, 2016; Ferrara, 2017; Awan, 2017; Berger, 2016; Berger & Morgan, 2015). In line with an earlier report (von Behr, Reding, Edwards, & Gribbon, 2013), this category of research was found to suffer theoretical and empirical challenges hindering its contribution to the fields of violent extremism or counterterrorism. However, among the studies using computational science and satisfying the inclusion criteria, two reports emerged as methodologically rigorous endeavors (Berger & Morgan, 2015; Berger, 2016). Both studies disclosed and detailed the methods and associated caveats and thus, were retained and utilized in further analyses. That said, the phenomenon was not always investigated by focusing only on social media or the online milieu. Empirical studies indicate interactions between the two milieus rather than exclusively online radicalization dynamics (Alexander, 2016; Hughes & Meleagrou-Hitchens, 2017; Gill, et al., 2017; Smith, et al., 2015; Huey & Witmer, 2016; Vidino & Hughes, 2015; Ducol, et al., 2016; Reynolds, 2016; Conseil du statut de la femme & Centre for the Prevention of Radicalization Leading to Violence, 2016). What appears to be a uniting factor among such studies is that the significant influence takes place offline. However, data on ISIS supporters' intentions, motives, and behavior throughout their radicalization trajectories remain scarce, even for those in the legal system.

To that end, findings of 11 studies that were carried out in an empirically robust manner were recorded to visualize them in terms of networks and demonstrate their connectivity. The analysis was carried out using NodeXL (Smith, et al., 2010). The 11 studies' observations and findings, not data, were recorded into NodeXL. The software accepts entries in terms of edges. Each edge constitutes 2 nodes (Vertex or node 1 and 2). For instance, members of a newly formed offline cluster (e.g., a group of likeminded friends, relatives, and/or acquaintances who are supportive of ISIS) were found to consume online jihadist propaganda (e.g., Vidino & Hughes, 2015). In NodeXL, the aforementioned findings

were recorded through 2 nodes: Cluster Formation (Vertex 1 or node 1) and Jihadi Propaganda (Vertex 2 or node 2). All nodes were registered manually to NodeXL. In total, 321 edges (2 connected nodes) were recorded based on the findings and observations of the 11 included studies. It is noteworthy, that due to the use of similar/identical cases and/or arriving to similar findings the initial number of edges was more than 700. After removing identical edges only 321 edges remained.

Given the nature of the phenomenon, the resulting network was expected to show a level of complexity, making its reading and inspection challenging. Accordingly, grouping clusters on the basis of organic and emerging connections is believed to remediate the aforementioned issue, should it emerge (Smith, et al., 2010). To that effect, interactions and connectivity between themes and factors across the networks are thought to allow developing scenarios around mobilization trajectories, where such a transformation takes place. Extrapolating on the discussed scenarios and based on the conceptual map of the literature, this effort endeavors to infer a model that outlines possible dynamics between emerging groups and networks. That said, it is noteworthy that the inferred model is expected to be associated with a number of caveats. This paper is limited by the scope of the included studies. The 11 studies' focus is overwhelmingly narrowed to the online milieu, specifically social media. Disparities and caveats in the resulting networks are outlined in detail in the study's discussion.

Radicalization

Radicalization remains a contested term in academia (Schuurman & Taylor, 2018; Meleagrou-Hitchens & Kaderbhai, 2017; Kundnani, 2012; Hörnqvist & Flyghed, 2012; Neumann, 2003). The studies satisfying the inclusion criteria offered varying exemplifications. A number of endeavors opted to clarify the term using the definition of U.S. Department of Homeland Security (Smith, et al., 2015; Ghajar-Khosravi, Kwantes, Derbentseva, & Huey, 2016). In that sense, radicalization is a process of forming a belief

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system that indicates a willingness to facilitate, support, or use violent actions as a mean to bring about societal change (Chertoff, 2007).

Furthermore, giving the varying objectives of the included research, defining radicalization or engaging in the debate on the concept was not always on the agenda (Berger & Morgan, 2015; Alexander, 2016; Hughes & Meleagrou-Hitchens, 2017; Gill, et al., 2017; Berger, 2016). Notwithstanding that in a number of cases the decision to refrain was justified, for others defining radicalization and engaging in the debate was rather necessary and yet the authors ignored the importance of providing a working definition (Ghajar-Khosravi, Kwantes, Derbentseva, & Huey, 2016; Saif, Fernandez, Rowe, & Alani, 2016; Awan, 2017; Ferrara, 2017). That said, two studies provided their own working definitions to allow for their research questions to be addressed (Rowe & Saif, 2016; Huey & Witmer, 2016). For instance, Huey and Witmer (2016) posited that radicalization refers to the engagement in criminal behavior on behalf of ISIS or migrating to join the group. As such, it is safely argued that the term is equated with violent extremism. Additionally, Rowe and Saif (2016) opted to define radicalization signals, that is to say, sharing and using pro-ISIS language.

To that end, there seems to be some level of agreement that adheres to the complexity and varying dynamics of radicalization, albeit, the reviewed studies adopted that view either explicitly (Vidino & Hughes, 2015) or implicitly (Reynolds, 2016; Ducol, Bouchard, Davies, Ouellet, & Neudecker, 2016; Conseil du statut de la femme & Centre for the Prevention of Radicalization Leading to Violence, 2016). While narrowed to actors who engaged with, supported, or facilitated ISIS in some capacity, studies ascribing to this perspective did not posit that violent extremism is a definite outcome of radicalization.

Moreover, empirical research on individuals in the legal system, for attempting to or traveling to ISIS-held territories, providing material support, or intending to or plotting domestic terrorist attacks, demonstrate diverse profiles, 'triggering' factors, and mobilization trajectories (Smith, et al., 2015; Vidino & Hughes, 2015; Reynolds, 2016; Huey & Witmer, 2016; Ducol, Bouchard, Davies, Ouellet, & Neudecker, 2016). Building on the included studies, it is argued that given the differences and highly diverse profiles of those involved

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with ISIS, they are likely to differ in terms of motivational, attitudinal, and behavioral factors eliciting and facilitating such involvement. As such, radicalization remains highly individualized and complex process (Dechesne & Meines, 2012; Heydemann, 2014; Rahimi & Graumans, 2015; Pressman, 2016) and is often the manifestation of poorly known structural and personal variables (Vidino, 2010). To that effect, Radicalization Leading to Violence (RLV) was explored by Conseil du statut de la femme and Centre for the Prevention of Radicalization Leading to Violence (2016) to provide a more nuanced perspective on the phenomenon.

RLV is understood as the amalgamation of radicalized ideological commitment and the conviction that violence is a legitimate moral practice in defending that ideology (Conseil du statut de la femme & Centre for the Prevention of Radicalization Leading to Violence, 2016). In this sense, RLV is not equated with violent extremism. This distinction is helpful in outlining the complex (Campana & Lapointe, 2012; Amghar, Boubekeur, & Emerson, 2007; Bjørgo, 2004; Klausen, 2015), emergent (Bouhana & Wikstrom, 2011), and nonlinear and dynamic (Davis & Cragin, 2009; Horgan, 2008; Hafez & Mullins, 2015; Khalil, 2014) nature of RLV. In other words, the mobilization of individuals down the paths of RLV is not reduced or explained based on single-factor or deterministic causes; is inclusive of person, context, and their intersectionality; and is expected to differ in terms of the elements facilitating such a transition, their impacts, and the mechanism through which they operate. As such, violent extremism is viewed as a possible outcome of radicalized ideological commitment, particularly when that commitment manifests in an ascribed legitimacy to promoting, supporting, and using violence in defense of one's ideology against perceived environmental threats and/or in trying to cause a dramatic change to existing social and political systems. To that end, it is argued that RLV is a more inclusive and nuanced conceptualization that allows for a better understanding of violent extremism, discerning milieus (i.e. online and offline) and the dynamics operating within them, and ultimately in tailoring initiatives to counter violent extremism (i.e. intelligence, hard [e.g., suspension, removing, and filtering material], and soft [e.g., educational and psychological interventions, and counter messaging]).

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The Milieus

Among the included studies, there is a fair level of consensus that the complex, emergent, and dynamic and non-linear nature of the phenomenon extends to the milieus wherein the mobilization takes place. Cases within the included studies, with the exception of the ones utilizing computational science solely, indicate interactions between the two milieus (offline and online) rather than exclusively online RLV dynamics.

Online

Excluded Studies

As mentioned earlier, a number of the reviewed and assessed studies resorted to computational science, solely, to detect RLV-associated factors. Generally, this category of research suffers major theoretical and empirical challenges hindering its contribution to the fields of violent extremism or counter-terrorism. For instance, Chatfield, et al.'s (2015) paper aim is to examine "How do IS members/supporters use Twitter for terrorism communication: propaganda, radicalization, and recruitment?" (p. 239). To address the aforementioned qualitative question, the authors devised a descriptive quantitative method. The paper makes the claim that it carried out a systematic review of 56 articles. The number of the citation when unrelated articles and Australian press material were omitted came very short of the 56 studies. How their framework came to being is unclear. Their analyses are arguably problematic and misleading. For instance, they listed the following tweets as ones used by ISIS propaganda disseminator to recruit online: "This is the time for Muslim Kurds in Turkey to show whether they can ever counter PKK"; and "@Himalaya888 you do realize IS wants to destroy every single nation-state, Arab or Kurd or communist doesnt matter, that they come across?" (P. 247, Table 1). Moreover, the authors did not provide reliable contents, much less evidence, to support their claims.

In another attempt, Ghajar-Khosravi, et al., (2016) explored strategies and techniques that allow the analysis of the contents of ISIS fangirls' twitter feeds and used that technique to differentiate the feeds from two control groups, namely, a randomly selected group of age-matched girls and a group that posts ISIS-related content. The authors picked certain items to contrast differences between the groups in terms of sentiment towards concepts. Four concepts were selected to contrast the differences between the groups. These items are: Jihad, Unbeliever, Sport, and West. However, their hypothesis was not supported. In discussing their results, the authors continued picking the three items (jihad, sport, and unbeliever) for the groups even after uncovering that there was no significant difference. In addition, the researchers ignored that their supposed ISIS fangirls presented the most negative sentiments toward ISIS, Islam and punishment, compared to the other groups.

Furthermore, Canbegi (2016) endeavored to demonstrate the risks of radicalization by measuring the relationship between online social interactions and ISIS attacks. Rather than highlighting the risks of radicalization by measuring the nexus between ISIS attacks and online social interactions, the paper just provided graphical figures highlighting the public interest in such traumatic events. No support for the aforementioned claims was provided. The study also suffered from major inconsistencies regarding its aim and method. Under a similar veil, Rowe and Saif (2016) used data mining to determine pro-ISIS key terms. The authors equated the use of pro-ISIS terms with activation of radicalized behavior. There were not many differences between pro-ISIS and anti-ISIS accounts in terms of the use of unique terms, retweets and mentions. However, it was suggested that the frequencies were indicative of exhibiting pro-ISIS language. The previous argument poses a number of concerns and may raise false positives. Throughout the paper both 'pro' and 'anti' ISIS accounts were found to use similar terms. For instance, it is observed that the terms labelled by the authors as pro-ISIS language are also used by experts, online counter narrative disseminators, and governmental accounts (e.g., Official twitter account of the International Coalition for Operation Inherent Resolve [@CJTFOIR]).

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Moreover, Saif, et al., (2016) argued that by extracting entities (e.g., ISIS, United Nations, and Syria) from users' timelines and classifying them based on their semantic concepts (e.g., Jihadist group, Company, and Country), such terms would allow the automatic detection of radicalized stances. Besides being simplistic, their study raises other concerns regarding the utilized data and results. Notably, Badawy and Ferrara (2017) aimed to determine the nature of topics that ISIS focuses on and to examine how real events influence ISIS rhetoric online. Their analyses showed some form of correlation between tweets and 'real life' events. This aspect might warrant research if twitter users and ISIS existed in two different universes, but if, as claimed by the researchers, the analyzed accounts belonged to those affiliated with or supportive of ISIS such findings are expected. Though, it should be noted that based on their findings, many of those supposed ISIS members and supporters were unaware of events propagated by ISIS even after they long unfolded.

Ferrara (2017) endeavored to define a methodological online radicalization framework for collecting, validating, and analyzing data. Apart from providing some visual representation of the activities of suspended accounts, the study deviated significantly from its stated objectives. Additionally, Awan (2017) examined 2,050 results from 50 twitter accounts and the comments and posts of 100 Facebook accounts to determine and contextualize the impact that ISIS exerted on these social media platforms. It is unclear how the search of generic key words like country names (Iraq and Syria) or the use of the acronyms (ISIS and ISIL), which the terrorist group itself despises and punishes people who use, led the author to make across the board generalization and define classes of ISIS' supporters.

To that effect, it is safely argued that most included studies from the field of computational science either intentionally or unintentional ignored existing research on radicalization, countering terrorism, or violent extremism. This often then leads to unhealthy exaggeration of the role of social media and might further lead to proposing counter measures that would hinder those leading the fight against ISIS more than ISIS members and sympathizers online (for the financial and manpower burden such studies poses on security services see, Munk, 2017). More fundamentally, it is important for researchers using

computational science to recognize that answers to questions of RLV, violent extremism, and/or terrorism are not confined within a sole discipline. Rather than appropriating terms and concepts from the literature on violent extremism or terrorism, researchers should consider the contextual and theoretical differences between these areas before treating the fields as recipients and donors.

Included Studies

Among the studies using computational science and satisfying the inclusion criteria, two reports emerged as the most methodologically rigorous endeavors in that category (Berger & Morgan, 2015; Berger, 2016). Both studies disclosed and detailed the methods and associated caveats. Furthermore, Berger and Morgan's report (2015) provided a snapshot of demographic information on ISIS supporters on twitter. The purpose behind their research was to provide preliminary data to allow future researchers to compare the ramification of accounts' suspension. Based on their observation, the authors suggested that the suspension reduced ISIS supporters' online operations (e.g., broadcasting its propaganda outside its core audience) and limited ISIS' network from growing and expanding. The report argued that suspensions also resulted in more inward online interactions between ISIS twitter supporters.

In a more recent study, Berger (2016) endeavored to provide a preliminary comparison between white nationalists, Nazi sympathizers and ISIS in terms of their use of twitter. The report noted the lower level of online cohesiveness of white nationalists and their smaller twitter concentration as compared to ISIS. ISIS was argued to have centralized social media strategies that provide users with guidelines for when they decide to meaningfully follow them. In terms of recruitment, ISIS appeared to use a systematic approach. Its supporters, including members of the organization, spread information that raised awareness about the group. ISIS recruiters seem to spot and observe potential recruits, providing them with a sense of belonging to the community before isolating them from pre-existing networks and communities. ISIS online recruitment activities were reported to aim to motivate targeted

potential recruits to join the group (becoming a fighter), carry out domestic attacks, and/or provide material support to the jihadi cause.

Hybrid Approach: Online and Offline

Included Studies

The RLV dynamics were not always investigated by focusing only on social media or the online milieu. For instance, based on 63 cases, Smith, et al., (2015) argued that almost always the mobilization of foreign fighters involved face to face interactions, either in person or virtually. Moreover, Vidino and Hughes (2015) presented two cases where social media seemed to play a significant role in the mobilization of those individuals down the paths of RLV. That said, in most cases the role of social media was complemented by offline interactions. In cases when social media played a complementary role, individuals did not embark on their RLV trajectories in front of their computers but rather through offline interactions with social contacts that had ties to the jihadi scene. In another study, Reynolds' (2016) analyses of 99 cases of German foreign fighters suggest that exclusive internet influence on RLV dynamics remains rare. Moreover, the mobilization of foreign fighters was not sufficiently predicted by their poor integration into German communities.

Furthermore, the investigation of RLV trajectories was argued to encompass pre-exposure stage (Push and Pull factors), stage of initial exposure (Offline and Online), and stage of engagement (Ducol, Bouchard, Davies, Ouellet, & Neudecker, 2016). The analyses suggested that two of the three ISIS-related cases maintained some level of autonomous internet exposure to look for and find answers. The findings also showed the internet was not the avenue through which individuals on RLV trajectories looked for co-conspirators. In some cases, the internet was found to be used to gain operational knowledge and build connections to plot attacks.

Moreover, Huey and Witmer (2016) endeavored to identify the characteristic and roles of ISIS' fangirls and their RLV dynamics. Of the 20 fangirls in their sample, 2 displayed indisputable signs of RLV. In both cases, the authorities were alerted by school officials about

the fangirls. The authors made a mention of extensive offline connection to ISIS recruiters and involvement in romantic relationships with ISIS members in the cases of the two arrested girls.

In an effort to explore the radicalization trajectories of women who traveled or desired to go to jihadi-held territories in Syria, Conseil du statut de la femme and Centre for the Prevention of Radicalization Leading to Violence (2016) employed data from a dozen of semi-directed interviews. ISIS propaganda was not presented as the sole influential factor on the RLV trajectories of the interviewed sample. The young interviewees reported that their interest in immigrating to ISIS-held territory was also associated with implicit messages from a charismatic figure at a local community center. Similar peers also maintained an influence over each other. To that effect, it is noteworthy that it was only when the interviewees were faced with doubts and when they were seeking answers regarding the conditions of life in Syria that they started to look online for answers. Some of the interviewees started discussions with women affiliated with ISIS and in Syria when they could not find answers. The realistic disclosure that was provided by recruiters seemed to motivate the interviewees and convince them of the importance of immigrating to Syria. ISIS' female recruiters helped the interviewees to plan their escape. There was no evidence of encouragement or assistance in plotting attacks domestically.

Alexander's report (2016) is another gender-differentiated effort. Her study aimed to examine the roles of 25 cases of American females in the legal system for various jihadi-related charges. The study showed a diverse demographic makeup of that group, suggesting an indiscernible overarching profile of female jihadists in America. Based on the review of available material, the report classified the cases into: Plotters, Supporters, and Travelers. The study argued that online and offline dynamics complement one another. The cases presented in the three categories indicate a complementary role of the internet in the mobilization of female jihadi Americans.

Hughes and Meleagrou-Hitchens (2017) investigated the role of ISIS' virtual entrepreneurs in plotting and providing encouragement and facilitation to ISIS supporters in

the United States. The term virtual entrepreneur was used to encapsulate the varying roles played by such operatives. Their roles spanned across a number of functions including, but not limited to: assisting sympathizers to travel to ISIS held territories, carrying out attacks, connecting plotters, and encouraging cooperation and domestic attacks. Though, such roles and influences came in later in the RLV dynamics. The use of social media and encrypted messaging application was highlighted and present in the analyses.

Extrapolating on the notion that terrorists vary in terms of their capabilities, criminal sophistication, needs, and preferences, the affordance opportunities that extremists seek in the cyber-space was expected to differ (Gill, et al., 2017). That study updated an existing list of convicted/killed terrorist who planned or carried out attacks in the United Kingdom. Their sample included right-wing extremists and jihadi extremists (al-Qaeda and ISIS inspired). The study cautioned about drawing a dichotomy of offline versus online RLV. Furthermore, the authors acknowledged that online and offline interactions go hand in hand in RLV dynamics and planning attacks. From that perspective, RLV is cyber-enabled rather than cyber-dependent. In other words, individuals would use the internet to reinforce their beliefs rather than challenge them.

Results and Discussion

Findings and documented observations of 11 studies (Berger & Morgan, 2015; Alexander, 2016; Hughes & Meleagrou-Hitchens, 2017; Gill, et al., 2017; Berger, 2016; Smith, et al., 2015; Huey & Witmer, 2016; Vidino & Hughes, 2015; Ducol, et al., 2016; Reynolds, 2016; Conseil du statut de la femme & Centre for the Prevention of Radicalization Leading to Violence, 2016), not their data, were registered (for more see the method's section). Subsequently, these findings and observations were visualized to capture the connection between factors related to ISIS, the online and offline milieus, and RLV mobilization (see Figure 1). The 11 studies were discussed in earlier sections. The selection was not done

haphazardly but rather on the bases of the methodological rigor (for more see the previous sections). The analysis was carried out using NodeXL (Smith, et al., 2010).

Figure 1 shows dense and complex networks of connections between ISIS, the two milieus (online and offline), mobilization, and factors associated directly and indirectly with the four major groups. The illustration depicts, to some level, the complex, emergent, and nonlinear and dynamic nature of the RLV phenomenon. To that effect, the links between the online milieu, particularly social media, with mobilization, and other groups and elements are the densest and most complex.

Several factors are believed to result in disparities in the density and complexity of connectivity. First, the scope of the selected studies is overwhelmingly and disproportionately narrowed to the online milieu and its associated influence on the mobilizations of individuals across their RLV trajectories. Second, the roles and functions of social media received the most significant scrutiny. This is hardly surprising given the role of social media in disseminating ISIS' message and the reinforcement of its brand. Vox-Pol's focus on violent online political extremism undoubtedly crystalized in such disparities.

Third, data on events and interactions in the offline milieu remain scarce. Faced with this gap, previous researcher resorted to governmental documentations, court documents, interviews with individuals familiar with the perpetrators, and media releases. Such efforts helped, to a certain level, in outlining the influence of offline forces, in drawing connection between the two milieus, and in identifying mobilization dynamics and the different roles ISIS plays in facilitating RLV mobilization. However, a clearer understanding of attitudinal, motivational, and behavioral elicitors of different RLV dynamics remains challenging, giving the dearth of access and availability of such data (For more see the review above).

Fourth, extrapolating on Gill, et al.'s (2017) assessment, the internet provides affordance opportunities wherein safer interactions take place between sympathizers, supporters, propagandists, and recruiters. For instance, an online affordance opportunity could be related to the sophistication of methods that an individual far down in the RLV trajectory aspires to use. Given ISIS', and other terrorist organizations', devotion to providing

instructional materials for wannabe domestic terrorists, such an individual might seek guides online. Such guides are an instance of online affordance opportunities. Though, it should be noted that ISIS is pushing for less sophisticated methods to minimize the potential of plots getting thwarted by security services. To that end, it is important to acknowledge that RLV is cyber-enabled rather than cyber-dependent. Moreover, as shown in the following figure, online and offline affordance opportunities often complement each other in RLV dynamics.

Fifth, it should be noted that a caveat is thought to result from the reading of the results using this technique. In other words, the inserted data and its reading are highly subjective and may vary if the analysis is carried out by different authors. Efforts to minimize the ramifications of the subjectivity of the utilized findings and their interpretation were made.

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Figure 1: Findings and Documented Observations of Connectivity between ISIS, Mobilization, and Offline and Online Affordance Opportunities.

That said, the readability of networks depicted in figure 1 is challenging given its density and complexity. For that reason, the network was further grouped to detect interactions that take place across the groups and between different elements of RLV trajectories (see figure 2). This technique allows clustering connections that are evolving or emerging organically as opposed to connections imposed on the networks (Smith, et al., 2010). To that effect, elements of the network that are weakly connected would appear in their own separate groups based on their defined influences and roles.

As displayed in figure 2, there are a number of cross-group interactions. Line thickness indicates the strength of the connection and the individual lines suggest interactions (Smith, et al., 2010). The single group with the strongest interactions with other groups is mobilization. That box, on the left side of the figure, also shows the densest in-group connections. It presents the different ends of mobilization categories, namely: foreign fighters, supporters, attackers, travelers, recruiters, virtual entrepreneurs, plotters, returnees, and sympathizers. Some of these categories can be collapsed into others. For example, while the distinction between travelers and foreign fighters is useful, the studies defined a foreign fighter as an individual who traveled or intended to travel to ISIS-held territories in support of the group (e.g., Smith, et al., 2015). Plotters and attackers were also defined similarly. To that end, attackers/plotters mobilization is thought to be associated with existing networks in real life and connection to an ISIS recruiter or virtual entrepreneur (e.g., Hughes & Meleagrou-Hitchens, 2017; Vidino & Hughes, 2015; Smith, et al., 2015). Virtual entrepreneurs are operatives whose roles spanned across a number of functions including, but not limited to: assisting sympathizers to travel to ISIS held territories, carrying out attacks, connecting plotters, and encouraging cooperation and domestic attacks (for review see, Hughes & Meleagrou-Hitchens, 2017). As shown in the network, plotters are also instrumental in creating propaganda material outside ISIS strongholds. The box also outlined the diverse demographic makeup of mobilized individuals (e.g., Alexander, 2016; Smith, et al., 2015). However, it should be stressed that the connectivity and influence extend beyond the assigned boxes of networks.

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As shown in figure 2, the online milieu is divided into three groups. The division, which appears in the boxes in the top center and right and the bottom right side of the figure, is arguably assigned on the basis of the affordance opportunities. The box centered on the online group suggests that online affordance opportunities allow mobilized potential plotters to obtain operational knowledge regarding targeting and instructional material of sophisticated attack methods (e.g., Improvised Explosive Devices [IEDs]) and to connect with co-conspirators (e.g., Gill, et al., 2017). It also connects them to pro-ISIS clerics, allows them to build connections, surveil targets, reinforces their hostilities towards out-groups, encourages them, and allows them to prepare for their attacks (e.g., Hughes & Meleagrou-Hitchens, 2017). The box that revolves around the affordance opportunities provided by social media shows denser in-group connections compared to the former. That is possibly due to the interactive nature of social media and the overwhelming focus on the subject by the selected studies. Three functions of ISIS' strategic use of social media can be seen in the box. These are namely: nodes, shout-outs, and amplifiers (Vidino & Hughes, 2015). Another ISIS mobilization role that is connected through its echo chambers is also present; social media operatives who spot potential recruits are showed and believed to be instrumental (Berger & Morgan, 2015; Berger, 2016). The last box on the bottom right of the figure is reflective of ISIS centralized social media strategies. As the box shows, that factor allows ISIS to strengthen awareness regarding the group and isolate potential recruits by nurturing their sense of belonging and answering their inquiries (Vidino & Hughes, 2015; Berger & Morgan, 2015; Berger, 2016).

Above that box (on the bottom right side of the figure) outlining the connectivity of ISIS centralized social media strategies, the figure presents a box designated to ISIS as a group. Elements of ISIS' brand (cool, adventurous, and romantic), among other factors, which facilitate the mobilization of ISIS fangirls are demonstrated (e.g., Huey & Witmer, 2016). In the bottom center, the figure shows two boxes; one demonstrates the offline milieu and the other presents Total Islam.

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The box designated to the affordance provided offline demonstrates the roles of peers and family members in forming clusters and thereby, offline echo chambers (e.g., Vidino & Hughes, 2015; Conseil du statut de la femme & Centre for the Prevention of Radicalization Leading to Violence, 2016). That box also suggests the influence of connections (Salafists, mosques, community centers, ISIS members) in mobilizations across RLV trajectories (e.g., Reynolds, 2016). Compared to the online milieu, networks and connection in the offline milieu are tied to multi-actor attacks rather that lone actors (e.g., Gill, et al., 2017).

As for Total Islam, the box shows that the concept is the center of its in-group connectivity. Total Islam is a phenomenon in which an individual embraces a rigid Islamist socio-political view that becomes the exclusive source of ones' identity and relationships that impels the rejection of all that deviates from that supposed pure interpretation of Islam (for review see, Conseil du statut de la femme & Centre for the Prevention of Radicalization Leading to Violence, 2016). The concept is extrapolated on religiosity of rupture and reflective of identity rather than spirituality (Kepel, 2000). It is best viewed as a spectrum wherein it ranges in strength. On one end of that spectrum, Total Islam becomes the sole identity marker of those embracing it, giving its totalizing nature over one's beliefs, behavior, and relationships with the social and political worlds. In this sense, Total Islam is a manifestation of identity shell. That is to say, a type of identity that provides individuals with purpose and protection from identity anxieties and uncertainties generated from social and political environments (Conseil du statut de la femme & Centre for the Prevention of Radicalization Leading to Violence, 2016).

The box outlining Total Islam connectivity and its group indicates that traumatic events and hardship, identity dilemmas, questions of identity, and the search for meaning facilitate the embrace of this identity marker (Conseil du statut de la femme & Centre for the Prevention of Radicalization Leading to Violence, 2016). Moreover, embracing that form of identity shell is associated with increased conflicts with family members, perceived purity, social alienation, and stigmatization, rejection of others, and the formation of or joining a cluster as a support system. To that end, the clarification of the aforementioned instances of

in-groups' connectivity is thought to be an appropriate point of departure to reading and interpreting outgroups interactions, and thereby inferring and discussing a model of RLV dynamics based on the conceptual maps of the literature.
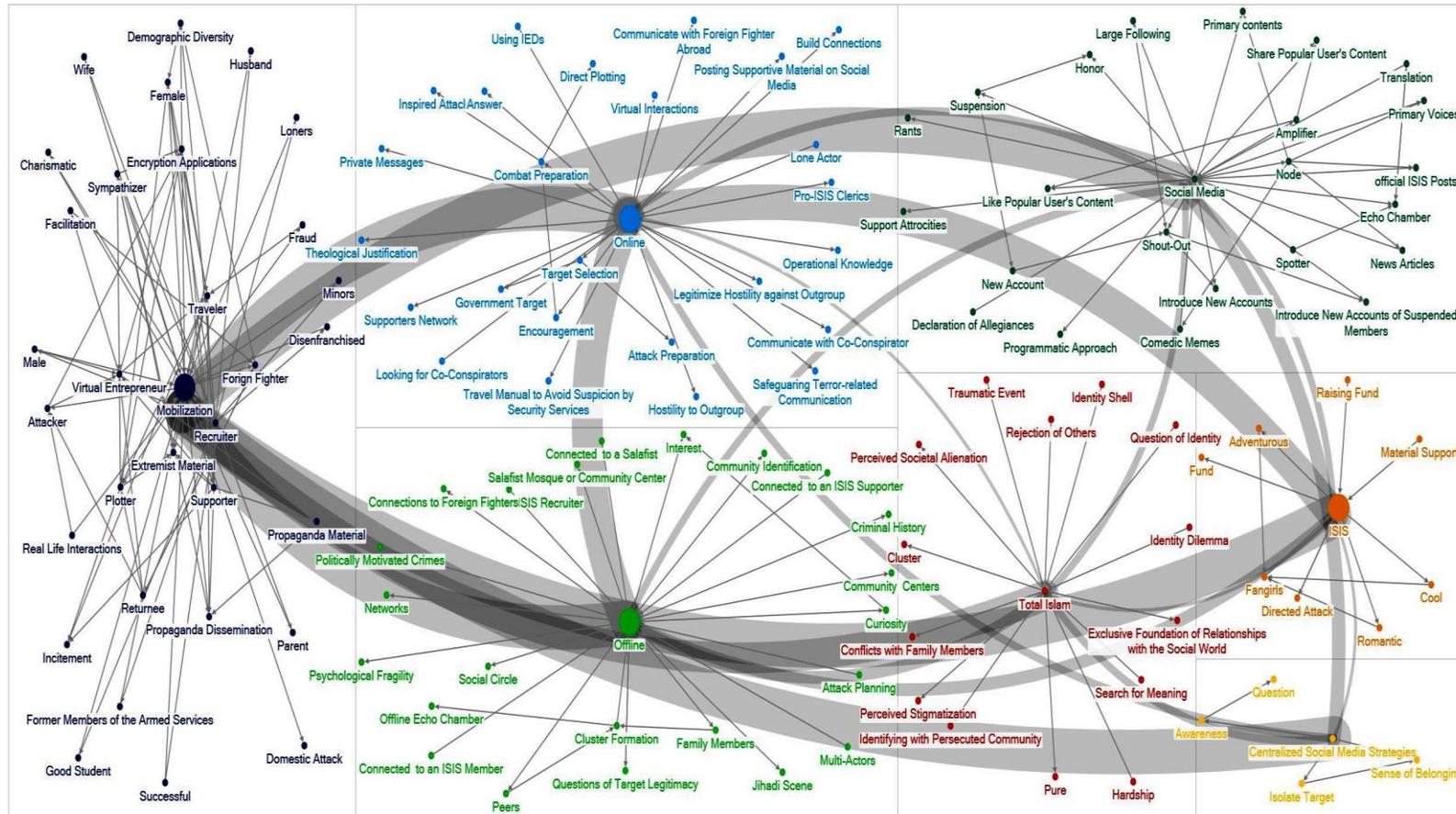
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Figure 1: In-group and Outgroups Interactions.

Extrapolating on the perspectives of 11 studies from which this analysis drew its data, in reconciliation with the visualization of group clusters, the concept Total Islam is employed in inferring a number of scenarios, and ultimately, in developing a model of RLV dynamics. Figure 2 shows sparse and thick lines that indicate direct connectivity between the RLV mobilization trajectories and affordances provided through the online and offline milieus. Total Islam direct connections are present in the seven boxes in the figure, including social media and ISIS-centralized strategies to manage such platforms. It is believed that while many of the connections are sparse, exploring Total Islam connectivity is appropriate and a useful step.

Documented observations and findings of the 11 utilized studies indicate support for the aforementioned argument. Elements outside the box that outlines Total Islam in-group connections are associated with factors of varying intensity within and outside their groups. In other words, Total Islam is thought to have wider connections to elements beyond the ones that appear in figure 2. The direct and indirect connectivity to elements across groups are assessed and visualized in a number of figures.

To that end, Total Islam's direct and indirect connectivity with elements across all groups was inspected and visualized (see figures 3, 4, 5, 6, and 7). As mentioned earlier, Total Islam is best understood as a spectrum; at its extreme it becomes the identity marker that defines individuals ascribing to this form of identity. Evidence from the selected studies suggests Total Islam associations with endured hardships and trauma, questions of identity, identity dilemma, and search for meaning, and ultimately identity shell. That identity marker has a number of manifestations, namely: perceived societal alienation and stigmatization, purity, rejection of others who do not ascribe to such an identity, and identification with a persecuted community that is thought to be targeted for their embrace of the same identity. When it becomes the total foundation of relationships with the social world, it is believed to cause fracturing with family members and friends if such individuals do not ascribe to the same totalizing identity. Those who cannot coerce and/or persuade their family members into

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accepting or embracing Total Islam are thought to gravitate to clusters of like-mindedness that operate as an identity-based support system.

Figure 3 depicts the interactions between the groups that emerged after accounting for clustering in terms of connectivity. Particularly, the figure demonstrates affordance opportunities provided in the online milieu and interactions with Total Islam. For instance, the online milieu may provide those ascribing to that identity marker with theological and persuasive justification that strengthens their hostility and legitimizes violence towards those deemed 'impure.' Furthermore, figure 4 indicates the use of social media by those on the Total Islam identity spectrum. Being part of ISIS echo chamber is thought to allow ISIS recruiters to spot them. Spotting potential recruits on ISIS social media accounts is part of ISIS' centralized social media strategies. Spotted targets are isolated further from connections that do not ascribe to Total Islam as the totalizing marker of identity. ISIS endeavors to make those on that identity marker's trajectories aware of the group's dogma and life in the 'pure' caliphate to advance their isolated and potential recruits' sense of belonging to the group.

Figure 5 details offline affordance opportunities and their connectivity to those on Total Islam spectrum. Such affordance opportunities encompass factors including, but not limited to: connection to Salafist networks, foreign fighters, cluster formation, and offline echo chambers. In the offline milieu, individuals ascribing to this identity marker may form or join clusters which may strengthen their identity shells, making Total Islam their sole driver in the social world.

Moreover, figure 6 indicates that such individuals may endeavor to get involved in financial schemes to support ISIS. As demonstrated in figure 7, the mobilization of those ascribing to Total Islam as their sole identity marker present a variety of RLV trajectories. The figure categorizes them into: plotters/attackers, returnees, foreign fighters, supporters, and sympathizers.
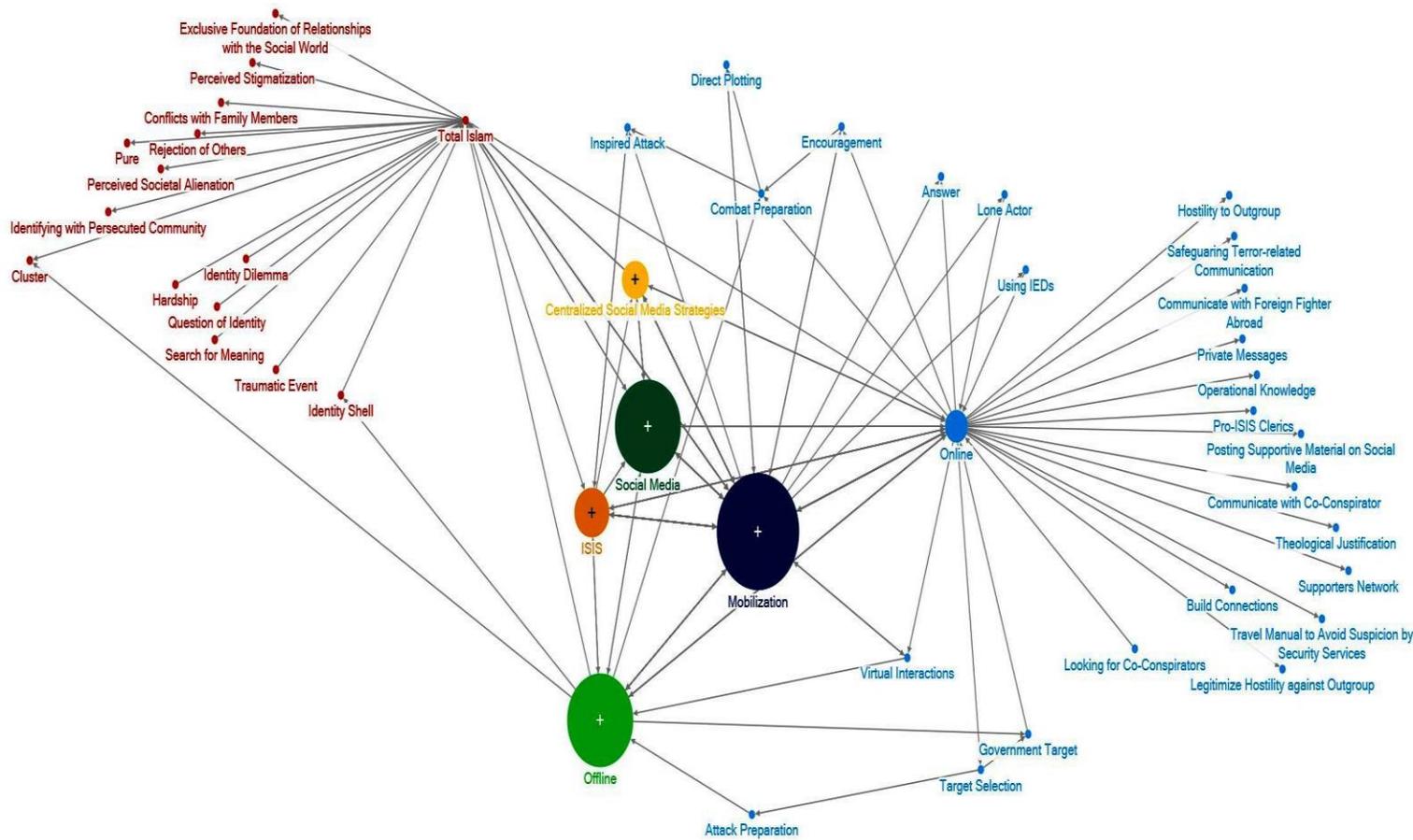
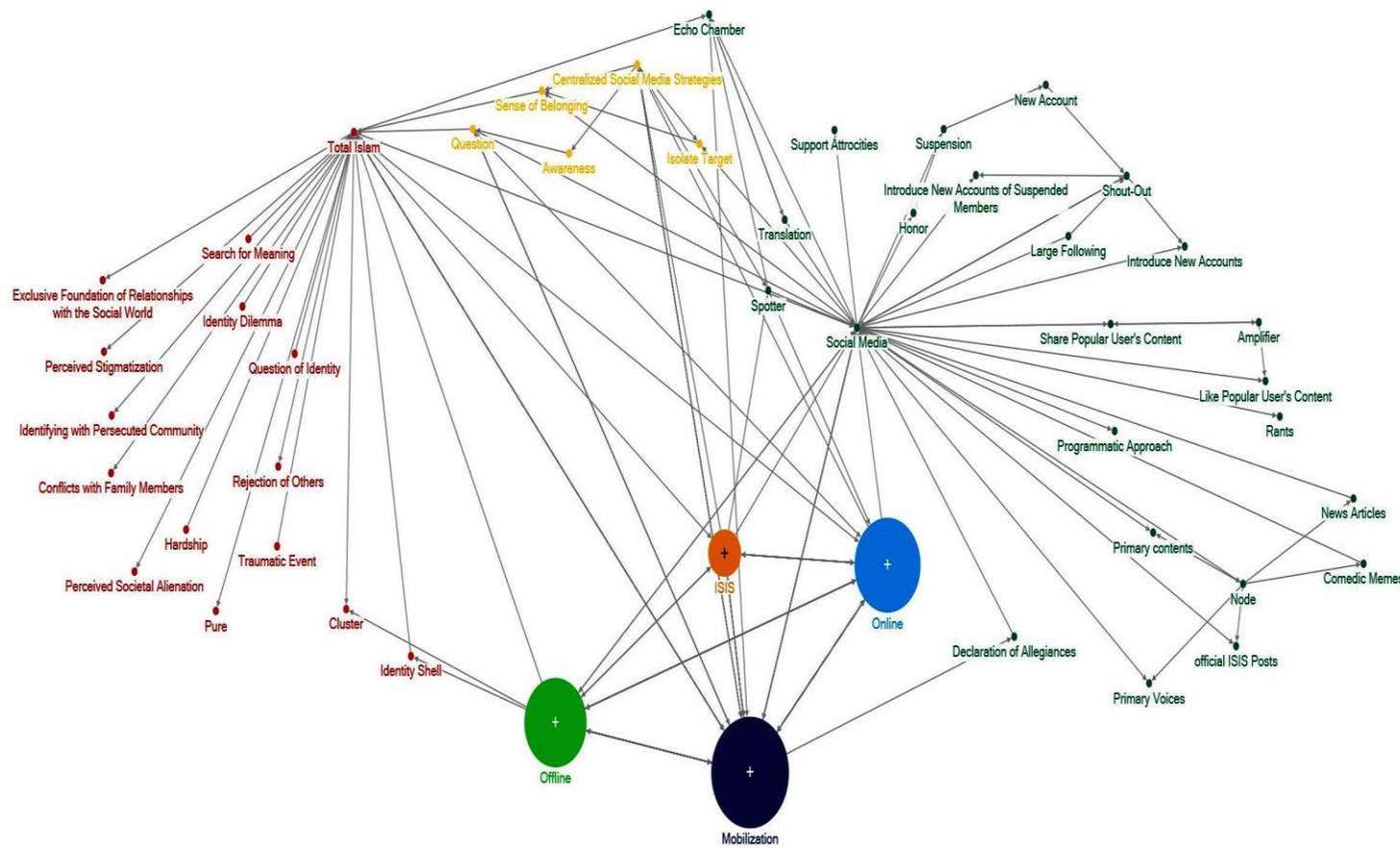Figure 2: Total Islam and Online Affordance Opportunities.

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Figure 3: Total Islam, Social Media, and ISIS Centralized Social Media Strategies.

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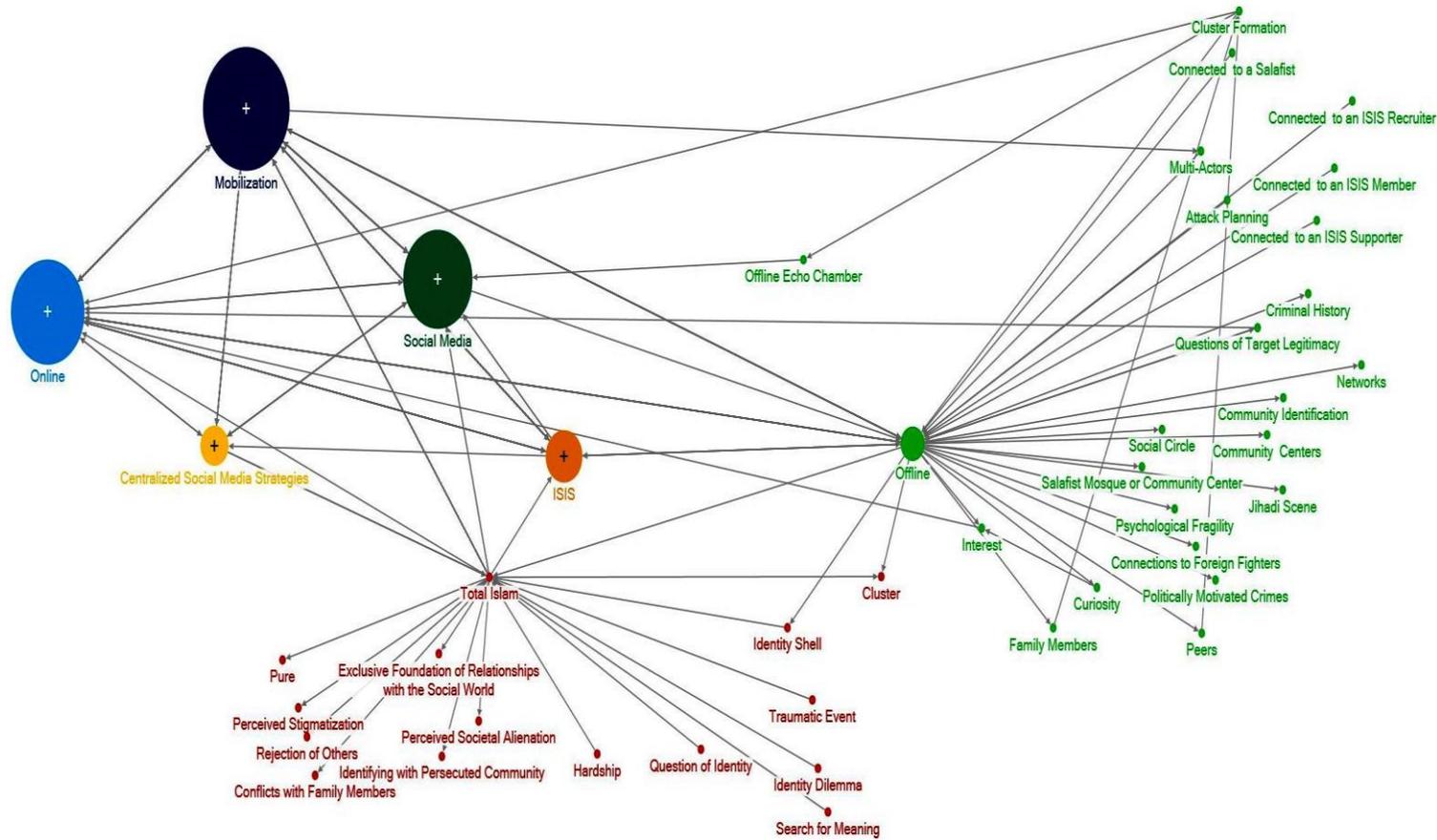
Figure 4: Total Islam and Offline Affordance Opportunities.
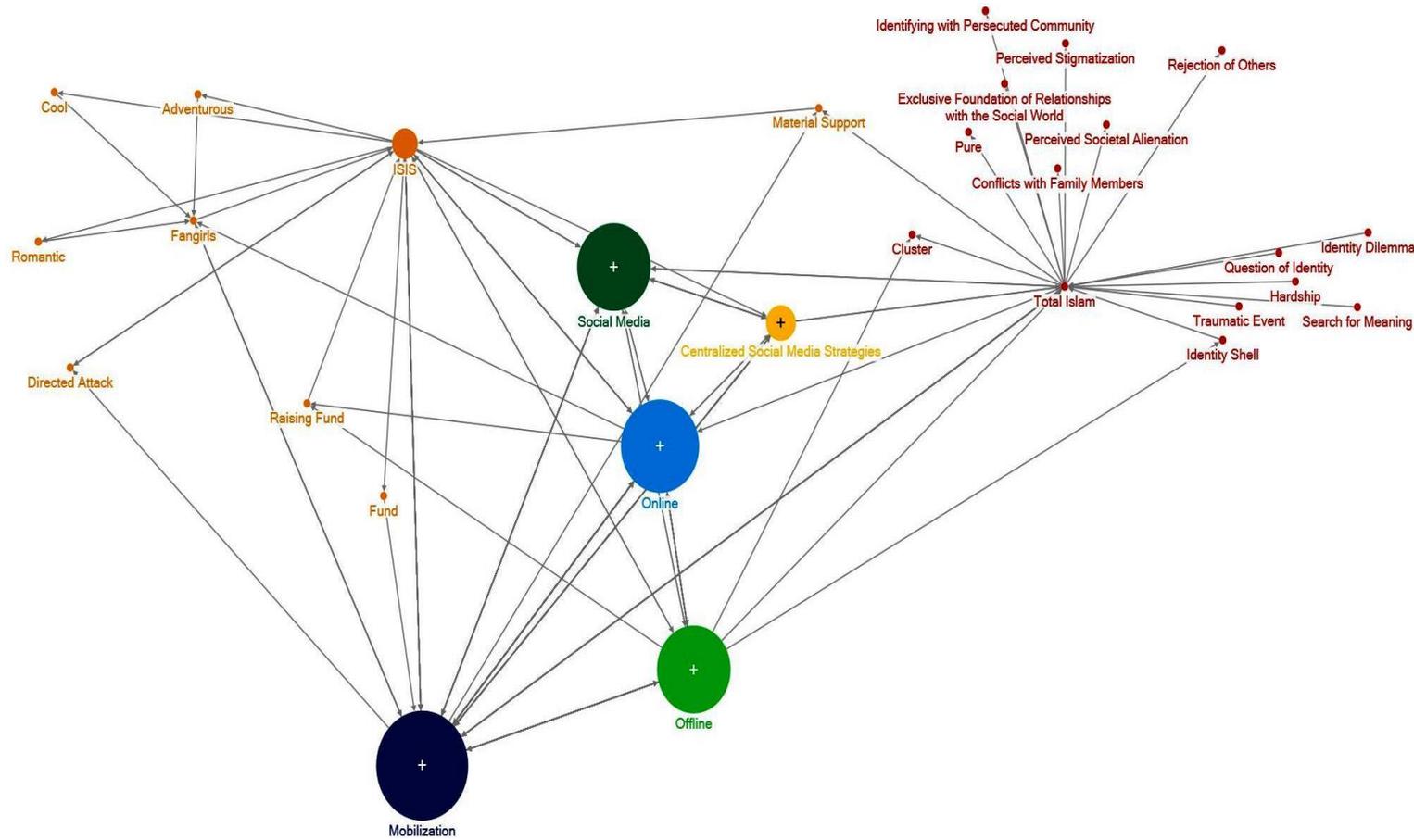
Figure 5: Total Islam and ISIS.

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Figure 6: Total Islam and Mobilization.

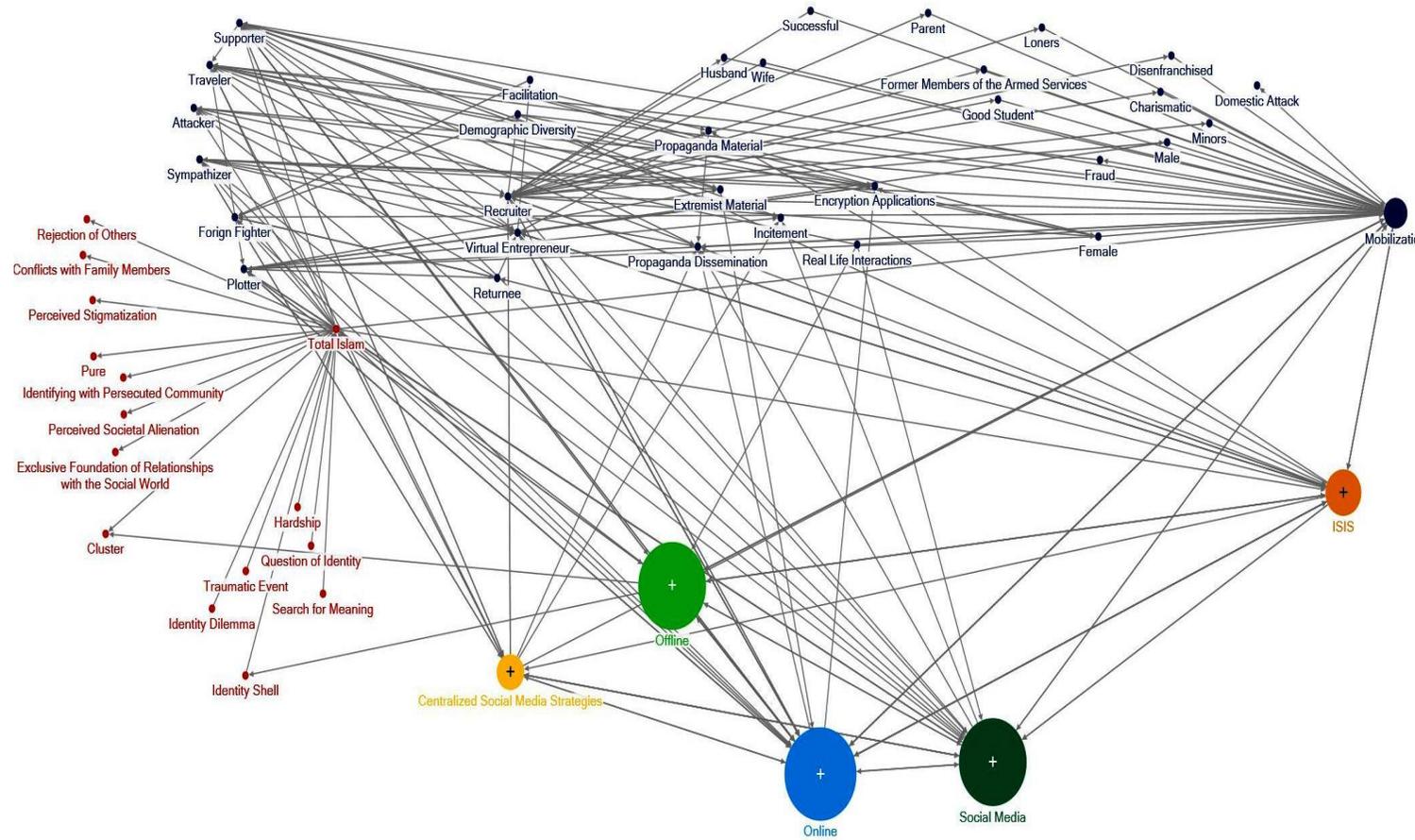Asaad Almohammad: From Total Islam to the Islamic State

To that end, it is noteworthy that the previous figures show a wealth of connections that could be read and interpreted differently. Total Islam, as a marker reflecting a spectrum of totalizing identity, was used to describe its presence, antecedents (crises), and consequences (grievances) along with a number of RLV dynamics. The outlined trajectories are subjective scenarios and should be investigated further. Based on the previous conceptual maps of the literature, the following figure presents the inferred model which summarizes the role of Total Islam in RLV dynamics.
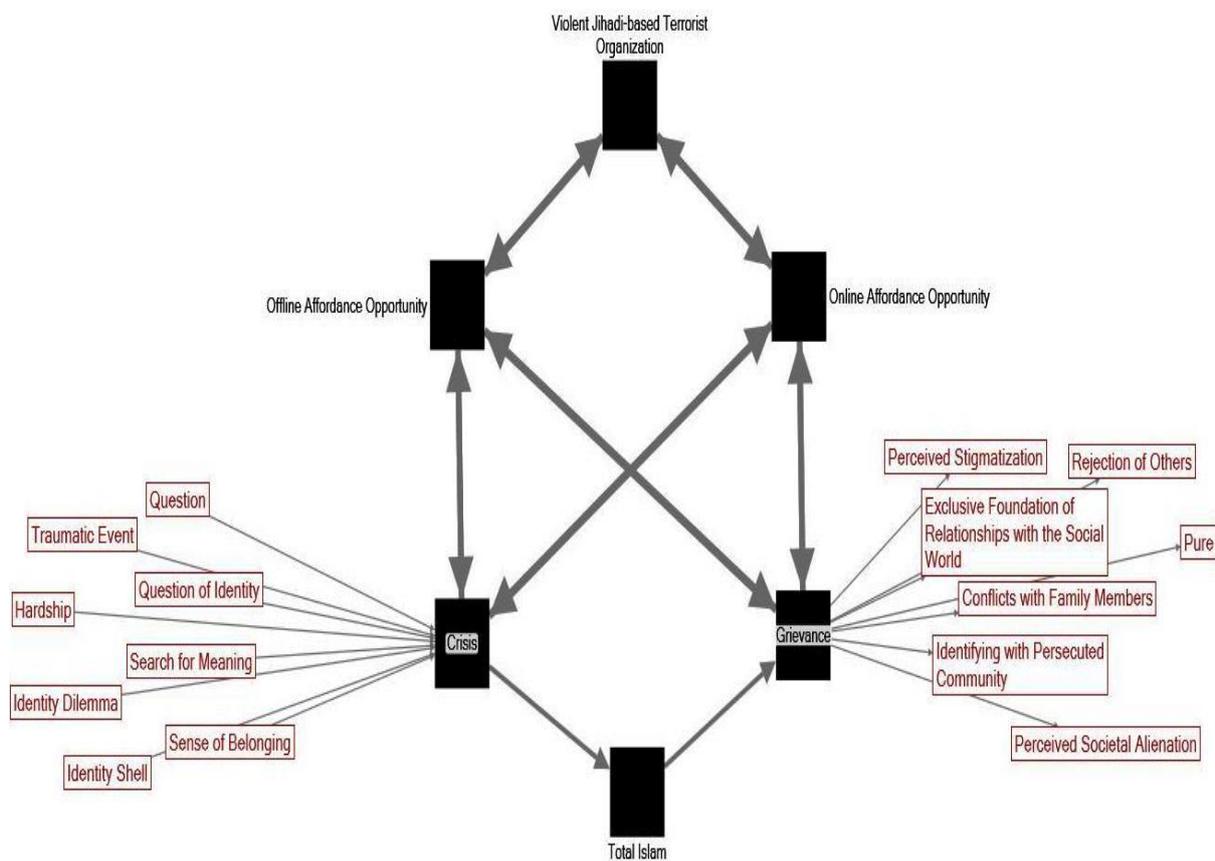

Figure 8: Total Islam: RLV Dynamics as a Subject of Reciprocal Affordance Opportunities

In line with the linkage-based approach (Ingram, 2016; 2017), the model is inclusive of identity-based crisis. Extrapolating on that view and the previous discussion, this form of

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crisis is believed to strengthen the embrace of Total Islam totalizing identity as a solution. The increased dominance of this identity marker manifests in grievances given its zero-sum nature and exclusiveness in governing one's relationship with the social world. Jihadi-based terrorist organizations, ISIS in the case of this study, capitalize on affordance opportunities provided in the offline milieu (e.g., existing clusters, charismatic preachers, recruiters, supporters, etc.) and over the internet (e.g., propaganda videos, social media, online-disseminated literature, supporters, etc.) to amplify both the crises and grievances while propagating the righteousness associated with embracing and nurturing that identity marker.

Individuals ascribing to the identity advocate it (e.g., to peers, to family members, etc.) and seek likeminded others (e.g., join existing clusters and form a new cluster) using affordance opportunities provided in both milieus. Collectively or individually, the driving crises and manifested grievances may result in uncertainties as to a course of action to deal with the social world. Increased anxieties associated with such vagueness could lead those individuals to pursue answers from networks offline and over social media. Giving their conspicuous presence (e.g., questions in a community center or over social media, posts, comments, etc.), supporters/sympathizers/members of the terrorist organization using such affordances become more aware of such individuals and study their questions (e.g., Berger & Morgan, 2015; Berger, 2016; Vidino & Hughes, 2015; Conseil du statut de la femme & Centre for the Prevention of Radicalization Leading to Violence, 2016).

As mentioned earlier, Jihadi-based terrorist organizations amplify the crises and acknowledge grievances. In doing so, Total Islam-associated anxieties may further increase. Online and offline affordance opportunities allow Jihadi-based terrorist organizations to isolate those experiencing such identity anxieties, disambiguating vagueness and providing them with a sense of belonging.

As Total Islam becomes more defining of one's identity, it is believed to increase perceived stigmatization and alienation beyond the offline and online Jihadi-based support system (e.g., peers, clusters, echo chambers) (e.g., Conseil du statut de la femme & Centre for the Prevention of Radicalization Leading to Violence, 2016). That support system may

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crystalize in a stronger identity shell and enhance one's sense of purity and legitimacy. The unsatisfied need for legitimacy in the social world could exacerbate that identity-based crisis and adds more grievances (e.g., Ingram, 2016; Ingram, 2017). The affordance opportunities available for those defined by such an identity marker and jihadi-based terrorist organizations nurture rejection of others and promote hostility as a justified course of actions to gain such legitimacy.

To that effect, when violent acts of jihadi-based terrorist organizations become more tied to resolving Total Islam identity-based crises and to addressing its associated grievances, it may facilitate the mobilization down the paths of RLV. RLV mobilization takes many forms, including the creation and dissemination of propaganda material and mere acts of declaring allegiances to ISIS through social media or an encrypted application (e.g., Vidino & Hughes, 2015). More radical forms of such mobilization include: providing material support, immigration, and plotting. The mobilization trajectories could be inspired or directed depending on the utilized affordance opportunities. For instance, earlier discussions suggest that individuals may use the internet or networks in the real world to gain operational knowledge. Moreover, studies on foreign fighters/travelers uncovered that while most were facilitated, both virtually and in the real world, some were not (e.g., Smith, et al., 2015). Jihadi-based terrorist organizations use online and offline affordance opportunities to inspire, motivate, facilitate, and direct the mobilization down the many RLV paths. As mentioned earlier, mobilized individuals use of the affordance opportunities varies. For instance, plotters intending to use IEDs or target governmental facilities are more likely to use the internet to gain knowledge required to carry out such attacks (e.g., Gill, et al., 2017). Moreover, multi-actor attacks are thought to be connected to offline networks and relationships.

To that end, it is noteworthy that the inferred model is a subjective reading of the included studies and it is only a starting point. It is also believed to be limited to mobilization in the west rather than other parts of the world. The current model is not inclusive of various elements of the complex, emergent, and non-linear and dynamic of the RLV phenomenon.

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Moreover, this is not a silver bullet model in that individuals would possibly disengage and prove resilient to mobilization efforts at different points of their trajectories.

Conclusion

The current study endeavored to explore the insight of research on radicalization and the role of the online milieu in the mobilization trajectories. To that effect, Vox-Pol's library was selected to obtain studies on the phenomenon. Extrapolating on the thorough examination of the included studies, the selection of RLV was justified. Moreover, the understanding of the role of the offline milieu was deemed instrumental to clarifying ambiguities related to the impact of online activities. As such, the two milieus were clarified in terms of their associated affordance opportunities.

On the bases of empirical rigor, observations and findings from 11 studies were recorded and examined. Beyond the virtual and physical avenues wherein different manifestations of RLV mobilization dynamics take place, the concept of Total Islam stood out. This form of identity marker was employed to interpret the resulting networks and connectivity between the recorded findings and observations. Scenarios around the Total Islam networks and their varying links and intensity were discussed. Taken altogether, a model of RLV dynamics in terms of their reciprocal interactions with affordance opportunities provided through both the online and offline milieus was inferred.

Future research might examine and extend elements of this model using more libraries, research in different languages, and on various violent extremist groups. Also, research beyond western-based RLV is thought to expand the knowledge on the underpinning issue and allow for comparative analysis. By compiling more evidence and exploring connectivity, research may improve our understanding of other possible scenarios of RLV dynamics. That said, the current model is believed to allow inclusion of varying forms of countering violent extremism approaches and methods (e.g., intelligence, and hard and soft approaches) based on the affordance opportunities they provide to varying stakeholders (e.g.,

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security services, community-based initiatives, educational and psychological intervention programs, etc.). To that effect, in reconciliation with Gill, et al.'s (2017) assessment, an affordance-based countering violent extremism could be viewed as a crime prevention instrument, where different stakeholders (e.g., security services, communities, and schools) could use online and offline affordance opportunities to disrupt reciprocal interactions between those on RLV paths and violent extremist groups.

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