

# Social Ties and Jihadist Participation: A Mixed-Methods Approach to the Differential Recruitment of Radicalized Youth in Spain

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## Abstract

The relationship between social ties and jihadist participation has garnered substantial attention from terrorism scholars. However, further research is needed to understand what specific properties of interpersonal bonds influence terrorist involvement and how they operate. Drawing on social network theory, the current study tests the effects of the type, number, and strength of interpersonal ties with jihadist activists in explaining the occurrence and absence of individual engagement in jihadist activities. For that purpose, this paper analyzes the social links of 23 youths involved in terrorism and 21 youths who, despite their attitudinal affinity with jihadism, did not take part in such actions. Combining quantitative and qualitative data and methods of analysis, the study found empirical evidence that participation in jihadism is affected by the number of connections between young people and the global jihadist movement. It also found partial support for the relationship between tie strength and jihadist involvement. However, it rejected the assumption that the type of social tie influences participation.

*Jihadist participation, social ties, differential recruitment, youth, Spain*

## Introduction

Why do some individuals get involved in jihadist activities while others remain inactive despite their shared attitudinal affinity with the goals and tactics of jihadist organizations? Individual variation in jihadist participation has been at the core of research efforts for some time.<sup>1</sup> The phenomenon, which scholars analyzing social movement participation call "differential recruitment," underscores the well-established fact that the adoption of radical beliefs does not inexorably lead to involvement in illegal ideologically driven actions.<sup>2</sup> While the majority of those who justify or advocate political violence actually stay out of criminal acts, a few of the most militant radicals turn to violence or participate in supporting violent actions.

To account for differential recruitment, the relevance of social embeddedness and interpersonal contacts has been raised by scholars studying terrorism.<sup>3</sup> Social ties have been signaled as important determinants of terrorist engagement because they shape worldviews, reinforce identities, satisfy basic social needs, bring together like-minded individuals, motivate collective action and, eventually, facilitate participation.<sup>4</sup> It has also been argued that the fact that terrorist involvement is, in the majority of cases, an interdependent choice rather than a socially detached decision is nothing but a demonstration that interpersonal contacts are the key facilitating factor for participating.<sup>5</sup>

However, empirical research has shown that, of the many individuals connected to militant activists, only some end up engaging in political violence.<sup>6</sup> Then, if jihadist mobilization may not occur despite the presence of interpersonal ties to the jihadist movement, how are bonds and jihadist participation actually related? The particular properties of social networks which predispose individuals to engage, or inhibit them from engaging, in political violence, as well as how these features of ties operate, require further consideration in the field of terrorism studies.

This paper aims to examine the association between differential recruitment into jihadism and interpersonal connections. To do so, it seeks to answer the following

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<sup>1</sup> Anja Dalgaard-Nielsen, "Violent Radicalization in Europe: What we know and what we do not know", *Studies in Conflict and Terrorism* 33, No. 9 (2010): 797–814; Thomas Hegghammer, "The Recruiter's Dilemma," *Journal of Peace Research* 50, No. 1 (2013): 3–16.

<sup>2</sup> Peter Neumann, "The trouble with radicalization", *International Affairs (Royal Institute of International Affairs 1944-)* 89, No. 4 (2013): 873–893.

<sup>3</sup> Thomas Hegghammer, "The Recruiter's Dilemma"; R. Kim Cragin, "Resisting Violent Extremism: A Conceptual Model for Non-Radicalization", *Terrorism and Political Violence* 26, No. 2 (2014): 337–353.

<sup>4</sup> Marc Sageman, *Understanding Terror Networks* (Philadelphia: University of Pennsylvania Press, 2004); Quintan Wiktorowicz, *Radical Islam Rising. Muslim Extremism in the West* (Oxford: Rowman & Littlefield Publishers, 2005), chs. 2 and 4; Peter R. Neumann and Brooke Rogers, *Recruitment and mobilisation for the Islamist militant movement in Europe* (Kings College, University of London, for the European Commission (Directorate General Justice, Freedom and Security), 2007); R. Kim Cragin, "Resisting Violent Extremism: A Conceptual Model for Non-Radicalization", *Terrorism and Political Violence* 26, No. 2 (2014): 337–35; Mohammed Hafez & Creighton Mullins, "The Radicalization Puzzle: A Theoretical Synthesis of Empirical Approaches to Homegrown Extremism", *Studies in Conflict & Terrorism* 38, No. 11 (2015): 958–975; Arie W. Kruglanski, Jocelyn J. Bélanger and Rohan Gunaratna, *The Three Pillars of Radicalization: Needs, Narratives, and Networks* (Oxford: Oxford University Press, 2019).

<sup>5</sup> Donatella Della Porta, *Clandestine Political Violence* (New York: Cambridge University Press, 2013).

<sup>6</sup> Álvaro Vicente, "How radicalizing agents mobilize minors to jihadism: a qualitative study in Spain", *Behavioral Sciences of Terrorism and Political Aggression*, ahead-of-print (2020): 1–27.

core research questions: What structural features of social ties influence participation in jihadist activities? How did these properties shape the effects of links in jihadist involvement? While the first question is addressed quantitatively, by putting to the test several hypotheses through inferential statistics, the second is dealt with qualitatively, by thematically analyzing a corpus of textual data.

To explain participation and non-participation in jihadism, this study examines the effects of the type, number, and strength of social ties. The article draws on social network theory to compare and analyze the relations of 23 underage youths involved in jihadist activities and 21 adolescents who, despite their attitudinal affinity with jihadism, did not take part in such actions. They all underwent their radicalization process in Spain between 2012 and 2019. In this research, the terms “underage youth” (often replaced by “youth” for simplicity), “young people” and “youngsters” refer to individuals who became radicalized before turning 18 years old, the age signifying the end of childhood according to the United Nations definition and the beginning of legal adulthood established in most Western countries. “Participation in jihadism” or “participation in jihadist activities” includes activities of both a violent (engaging in combat in a conflict zone, planning and carrying out attacks) and a non-violent nature (producing online jihadist material, radicalizing and recruiting people) inspired by the ideology of Salafi-jihadism.

The article proceeds as follows. It first outlines the theoretical framework for the social network approach to differential recruitment and a set of hypotheses based on these academic contributions and on insights drawn from terrorism studies. It then describes the research design, sample used and methods. The next section presents separately the quantitative and qualitative results and is followed by a discussion of the theoretical implications of the study’s findings.

## Theoretical framework and hypotheses

Social network theories are built on the empirical reality that individuals do not act in isolation, but their choices, ideas, attitudes, and behaviors are shaped through interchanges with others. By acknowledging the importance of social context in individual actions, this theoretical tradition explores the functions and dynamics of interpersonal bonds that affect mobilization. Social networks researchers have attempted to elucidate the causal role of ties in people’s decisions to participate or not in collective action, as well as to identify which features of connections are influential in behavior.<sup>7</sup> Insofar as involvement in terrorism can be understood as a form of collective action, network theory offers a suitable framework for exploring individual variation in jihadist participation.

Among the properties of ties that act as predictors of political and civic engagement, some of the most mentioned in the literature are the types, number, and strength of the connections between individuals and people already immersed in a social movement.<sup>8</sup> Focusing on these features, network researchers have tried to

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<sup>7</sup> Gerald Marwell, Pamela E. Oliver, and Ralph Prahl, “Social Networks and Collective Action: A Theory of the Critical Mass. III”, *American Journal of Sociology* 94, No. 3 (1988): 502-534; David A. Snow, Louis A. Zurcher, Jr., and Sheldon Eklund-Olson, “Social Networks and Social Movements: A Microstructural Approach to Differential Recruitment”, *American Sociological Review* 45, No. 5 (1980): 787–801; Roger V. Gould, “Collective action and network structure”, *American Sociological Review* 58, No. 2 (1993): 182–196.

<sup>8</sup> Florence Passy, “Social Networks Matter. But How?”, in Mario Diani and Doug McAdam (eds.), *Social Movements and Networks: Relational Approaches to Collective Action* (New

understand to what extent people's participation in collective action depends on a) the origin of the relationship they have with activists already involved; b) the number of those interpersonal links; and c) their intensity and stability. Terrorism scholars have also explored the relationship between these three features of social bonds and involvement in political violence.

### *Type of social ties*

In attributing causal significance to the types of bonds connecting people to a social movement, scholars have theorized that certain ties are more influential than others in fostering mobilization. Much of the scientific research has centered on the role played by two main types of links with activists: immediate ties and organizational ties. The former refers to bonds of kinship, friendship, neighborhood, and acquaintance with people active in a social movement; the latter, to bonds forged in social and political organizations in which people participate and which facilitate subsequent forms of engagement with a social movement.<sup>9</sup>

An extensive body of literature points to the relevance of immediate ties in promoting participation in different expressions of hazardous activism, ranging from civil disobedience movements to pro-democracy uprisings or campaigns of inter-communal ethnic violence.<sup>10</sup> Research on terrorism has also observed the significance of such close and intimate ties in engaging in political violence across ideological traditions, including Salafi-jihadism, nationalism, extreme left, and extreme right.<sup>11</sup> Several explanatory mechanisms may be at work in making immediate social connections a strong predictor of mobilization, such as trust, social pressure, reassurance, social leverage, conformity, and diffusion of responsibility.<sup>12</sup>

Nevertheless, social movement researchers have also provided sound evidence that organizational ties are paramount in connecting prospective participants with an

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York: Oxford University Press, 2003): 21–48; Doug McAdam, "Beyond structural analysis: Toward a more dynamic understanding of social movements", in Mario Diani and Doug McAdam (eds.), *Social Movements and Networks: Relational Approaches to Collective Action* (New York: Oxford University Press, 2003): 281–298; Mario Diani, "Social Movements and Collective Action", in John Scott and Peter J. Carrington (eds.), *The SAGE Handbook of Social Network Analysis* (London: SAGE Publications Ltd, 2014): 223–235.

<sup>9</sup> Sharon E. Nepstad and Christian Smith, "Rethinking Recruitment to High-Risk/cost Activism: The Case of Nicaragua Exchange", *Mobilization: An International Quarterly* 4, No. 1 (1999): 25–40

<sup>10</sup> *Ibidem*; Karl-Dieter Opp and Christiane Gern, "Dissident Groups, Personal Networks, and Spontaneous Cooperation: The East German Revolution of 1989", *American Sociological Review* 58, No. 5 (1993): 659–680; Omar McDoom, "It's Who You Know: Social Networks, Interpersonal Connections, and Participation in Collective Violence", *HiCN Working Papers*, No. 140 (2013).

<sup>11</sup> Sean C. Reynolds and Mohammed M. Hafez, "Social Network Analysis of German Foreign Fighters in Syria and Iraq", *Terrorism and Political Violence* 31, no. 4 (2019): 661–686; Marc Sageman, *Understanding Terror Networks*; Edwin Bakker, *Jihadi Terrorists in Europe*, Clingendael Security Paper 2<sup>nd</sup> Edition (The Hague: Netherlands Institute of International Relations, 2006); Lorenzo Bosi, "Explaining Pathways to Armed Activism in the Provisional Irish Republican Army, 1969–1972", *Social Science History* 36, No. 3 (2012): 347–390; Leonard Weinberg and William L. Eubank, "Neo-Fascist and Far Left Terrorists in Italy: Some Biographical Observations", *British Journal of Political Science* 18, No. 4 (1988): 531–549; Donatella Della Porta, *Clandestine Political Violence*.

<sup>12</sup> Florence Passy, "Social Networks Matter. But How?"; Sharon E. Nepstad and Christian Smith, "Rethinking recruitment to high-risk/cost activism: the case of Nicaragua Exchange"; Todd C. Helmus, "Why and How Some People Become Terrorists," in Paul K. Davis and Kim Cragin (eds.), *Social Science for Counterterrorism: Putting the Pieces Together* (RAND Corporation, 2009): 71–109; Donatella Della Porta, *Clandestine Political Violence*.

opportunity to participate, since they ensure firm social support for collective action and are associated with feelings of personal efficacy.<sup>13</sup> However, research on political violence has shown that although organizational connections have a strong effect on promoting involvement, they influence the recruitment process frequently in combination with immediate ties.<sup>14</sup>

It can be assumed, then, that immediate ties with individuals sympathetic to Salafi-jihadism or already committed to this movement are – whether *per se* or in conjunction with organizational ties – a sound predictor of youths' participation in jihadist activities. Therefore, the following two competing hypotheses have been formulated:

*H1a: Youths who have immediate ties with jihadists are more likely to participate in jihadist activities than youths without such social ties.*

*H1b: Youths who have both immediate and organizational ties with jihadists are more likely to participate in jihadist activities than youths who lack a combination of both types of social ties.*

### **Number of social ties**

A second structural property of interpersonal bonds that has been identified as a catalyst of mobilization is the number of ties between prospective participants and activists. There is a broad consensus within the literature that individuals who are well connected to a social movement through a high number of personal relations are more exposed to opportunities to become socially and politically active and are recruited more frequently.<sup>15</sup> Accordingly, being tied to many relevant others within a network is associated with participating in different forms of contentious collective action, such as protest, party organization, intercommunal violence, and terrorism.<sup>16</sup>

Why does having multiple personal connections make a difference in social movement participation? Four causal mechanisms appear to be key in the explanation: information access, social reaffirmation, individual rewards, and critical cooperation.

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<sup>13</sup> Doug McAdam, "Recruitment to High-Risk Activism: The Case of Freedom Summer", *American Journal of Sociology* 92, No. 1 (1986): 64–90; Doug McAdam and Ronnelle Paulsen, "Specifying the Relationship Between Social Ties and Activism", *American Journal of Sociology* 99, No. 3 (1993): 640–667.

<sup>14</sup> Dieter Reinisch, "Teenagers and Young Adults in Dissident Irish Republicanism: A Case Study of Na Fianna Éireann in Dublin", *Critical Studies on Terrorism* 13, No. 4 (2020): 702–23; Donatella Della Porta, *Social Movements, Political Violence, and the State: A Comparative Analysis of Italy and Germany* (Cambridge: Cambridge University Press, 1995); Adrian Cherney, Emma Belton, Siti Amirah Binte Norham, and Jack Milts, "Understanding Youth Radicalisation: An Analysis of Australian Data", *Behavioral Sciences of Terrorism and Political Aggression*, ahead-of-print (2020): 1–23; Fernando Reinares, *Patriotas de la muerte. Por qué han militado en ETA y cuándo abandonan*, 6<sup>th</sup> Edition (Madrid: Taurus, 2011).

<sup>15</sup> Anthony Paik and Layana Navarre-Jackson, "Social Networks, Recruitment, and Volunteering: Are Social Capital Effects Conditional on Recruitment?", *Nonprofit and Voluntary Sector Quarterly* 40, No. 3 (2011): 476–496.

<sup>16</sup> Doug McAdam, "Recruitment to High-Risk Activism: The Case of Freedom Summer"; Helmut Anheier, "Movement Development and Organizational Networks: The Role of Single Members in the German Nazi Party, 1925–30", in Mario Diani and Doug McAdam (eds.), *Social Movements and Networks: Relational Approaches to Collective Action* (New York: Oxford University Press, 2003): 49–74; Omar McDoom, "It's Who You Know: Social Networks, Interpersonal Connections, and Participation in Collective Violence"; Donatella Della Porta, "Recruitment Processes in Clandestine Political Organisations: Italian Left Wing Terrorism", in Bert Klandermans, Hanspeter Kriesi, and Sidney G. Tarrow (eds.), *From Structure to Action: Comparing Social Movement Research Across Cultures* (Oxford: JAI Press, 1989): 155–169.

For one thing, empirical assessments have found that individuals embedded in large social networks are more likely to be informed of an opportunity for collective action, and, as a result, have a higher chance of being asked to participate.<sup>17</sup> Furthermore, being exposed to multiple sources leads to reinforcement and reaffirmation in the adoption of norms, values, and behaviors, which is crucial for the successful transmission of dangerous and controversial ideas and actions.<sup>18</sup> On another note, it has also been observed that big networks are well suited for deterring people from free-riding because they are more effective in generating selective incentives for participation, such as social leverage or solidarity.<sup>19</sup> Finally, theorists of the “threshold” and “critical mass” models of collective action have noted that individuals considering taking part in high-risk and high-cost activism are more likely to be convinced to participate if they are assured that enough other actors are willing to engage themselves.<sup>20</sup>

Accordingly, it is plausible to extend the existing empirical evidence to the youth involvement in terrorism. Therefore, one may hypothesize that:

*H2: Youths with a greater number of social ties with jihadists are more likely to become involved in jihadist activities than youths with a smaller number of such social ties.*

### **Strength of social ties**

Finally, participation in collective action has also been associated with variations in tie strength. In his classic study “The Strength of Weak Ties”, Granovetter conceptualized tie strength as a multidimensional trait, which is a function of “the amount of time spent for its maintenance, the emotional intensity it evokes, and the intimacy and reciprocal services that are attached to it”.<sup>21</sup> Granovetter postulated that weak ties can reach a larger number of people and cross a greater social distance than strong ties, making them a major source of potential new ideas and attitudes and, consequently, a key source for change. Nevertheless, Granovetter’s thesis was disputed by social movement researchers, who objected that strong ties are decisive for participation in collective action, and especially in challenging and risky conduct, because commitment to militant movements is not only a matter of access to ideas and information but, above all, of influence of behavior.<sup>22</sup>

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<sup>17</sup> Jeroen van Laer, “The Mobilization Dropout Race: Interpersonal Networks and Motivations Predicting Differential Recruitment in a National Climate Change Demonstration”, *Mobilization: An International Quarterly* 22, No. 3 (2017): 311–329; Alan Schussman and Sarah A. Soule, “Process and Protest: Accounting for Individual Protest Participation”, *Social Forces* 84, No. 2 (2005): 1083–1108.

<sup>18</sup> Damon Centola and Michael Macy, “Complex Contagions and the Weakness of Long Ties”, *American Journal of Sociology* 113, No. 3 (2007): 702–734.

<sup>19</sup> Rickard Sandell and Charlotta Stern, “Group Size and the Logic of Collective Action”, *Rationality and Society* 10, No. 3 (1998): 327–345; Bruce Fireman and William Gamson, “Utilitarian Logic in the Resource Mobilization Perspective”, in Mayer N. Zald and John D. McCarthy (eds.), *The Dynamics of Social Movements: Resource Mobilization, Social Control, and Tactics* (Cambridge, Mass.: Winthrop Publishers, 1979).

<sup>20</sup> Mark Granovetter, “Threshold Models of Collective Behavior”, *American Journal of Sociology* 83, No. 6 (1978): 1420–1443; Pamela Oliver, Gerald Marwell and Ruy Teixeira, “A Theory of the Critical Mass. I. Interdependence, Group Heterogeneity, and the Production of Collective Action,” *American Journal of Sociology* 91, No. 3 (1985): 522–556.

<sup>21</sup> Mark Granovetter, “The Strength of Weak Ties”, *American Journal of Sociology* 78, no. 6 (1973): 1360–1380.

<sup>22</sup> James Kitts, “Mobilizing in Black Boxes: Social Networks and Participation in Social Movement Organizations”, *Mobilization: An International Quarterly* 5, No. 2 (2000): 241–257; Doug McAdam, “Recruitment to High-Risk Activism: The Case of Freedom Summer”; Florence

The superiority of strong ties for terrorist involvement fits well with the picture of the highly centralized functioning of Al Qaeda before 9/11.<sup>23</sup> In one of the first attempts to test Granovetter's thesis on terrorist activity, it was found that the network behind these 2001 attacks was made up of strong ties, which kept the group interconnected, and that outside contacts were curtailed to prevent leaks.<sup>24</sup> Relying on strong ties for mobilization has other implications since they are associated with higher social pressure to participate, more supportive interactions, and a greater level of social similarity (homophily) among individuals, which in turn is related to durable connections.<sup>25</sup>

However, recent scientific contributions indicate that weak ties play an increasingly relevant role in terrorist recruitment, particularly with the rise of social media platforms. It has been theoretically substantiated that terrorist organizations with a worldwide base leverage weak ties to engage volunteers from distant places and disjointed social networks.<sup>26</sup> Furthermore, by brokering unconnected groups, weak ties mitigate segmentation, a major problem for transnational terrorist networks aimed at mobilizing supporters.<sup>27</sup> Notwithstanding, empirically grounded knowledge supporting these assumptions is scant.<sup>28</sup>

In the absence of consolidated empirical literature providing enough evidence of the effect of variations of tie strength on current jihadist participation, a non-directional hypothesis was laid out:

*H3: The strength of ties between participant youth and jihadist activists is significantly different than the strength of ties between non-participant youth and jihadist activists.*

## Research design, study sample and methods

This research employed a mixed-methods design, which is an approach that integrates quantitative and qualitative traditions within a single study.<sup>29</sup> The use of mixed methods of research does not come without possible shortcomings and challenges, such as operating without conforming to a standardized framework, or reconciling the different epistemological and ontological approaches of the techniques

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Passy, "Social Networks Matter. But How?"; Damon Centola and Michael Macy, "Complex Contagions and the Weakness of Long Ties".

<sup>23</sup> Miles Kahler, "Collective Action and Clandestine Networks: The Case of Al Qaeda", in id. (ed.), *Networked Politics* (Ithaca, NY: Cornell University Press, 2017): 103–124.

<sup>24</sup> Valdis E. Krebs, "Mapping Networks of Terrorist Cells", *Connections* 24, No. 3 (2002): 43–52.

<sup>25</sup> Mark Granovetter, "The Strength of Weak Ties"; Miller McPherson, Lynn Smith-Lovin, and James M. Cook, "Birds of a Feather: Homophily in Social Networks", *Annual Review of Sociology* 27 (2001): 415–444; Barry Wellman and Scot Wortley, "Different Strokes from Different Folks: Community Ties and Social Support", *American Journal of Sociology* 96, No. 3 (1990): 558–588.

<sup>26</sup> Jonathan Kennedy and Gabriel Weimann, "The Strength of Weak Terrorist Ties", *Terrorism and Political Violence* 23, No. 2 (2011): 201–212.

<sup>27</sup> Miles Kahler, "Collective Action and Clandestine Networks: The Case of Al Qaeda".

<sup>28</sup> It is worth mentioning Stefan Malthaner, "Contextualizing Radicalization: The Emergence of the 'Sauerland-Group' from Radical Networks and the Salafist Movement", *Studies in Conflict & Terrorism* 37, No. 8 (2014): 638–653.

<sup>29</sup> John W. Creswell and Vicki L. Plano Clark, *Designing and Conducting Mixed Methods Research*, 2<sup>nd</sup> Edition (Los Angeles: SAGE Publications, 2011).

employed.<sup>30</sup> Despite this, its application has become widespread in social network analysis due to its potential to explain the complexity of network structure and processes.<sup>31</sup>

The rationale for mixing both strategies of analysis in this work was that while quantitative data focuses on the form of the relationships that young people had with actors of the global jihadist movement, qualitative data sheds light on the content, meaning, and effects of those interactions. The combination of methods thus offers the opportunity to gain both an inside and an outside view of social networks.<sup>32</sup> In addition, the advantages of mixing approaches in this study included increasing the construct validity of the results, strengthening the reliability of the analysis, and complementing the findings derived from each method.<sup>33</sup>

### **Study universe and study sample**

The present research assesses the role of social ties in the jihadist mobilization of underage youth that unfolded in Spain between 2012 and 2019, during the mobilization cycle prompted by terrorist organizations active in Syria, with the Islamic State (IS) as the main driver. Over that period, 23 youngsters were either convicted in Spain – by juvenile or ordinary courts – of terrorism offenses, or died while committing terrorist attacks. But criminal investigations and judicial proceedings show that the actual number of underage youths in the country attracted by the global jihadist movement and its organizations – and, to some extent, associated with them – exceeded the number of youths who eventually committed jihadist crimes.<sup>34</sup>

This study draws on a sample that reflects these individual variations in jihadist involvement among young people radicalized by Salafi-jihadism in Spain. To demarcate the boundaries of the sample, this research followed an inclusion and exclusion strategy based on McAdams' concept of "bounded forms of activism," which places emphasis on discrete instances of movement involvement to set the participant/non-participant distinction.<sup>35</sup> Hence, for someone to be included in the sample as a "participant" the youngster must have been convicted of committing terrorist actions in Spain or was unable to be tried because he or she died as a result of engagement in jihadist activities. Participant youths included in the sample committed different terrorist crimes, ranging from producing and disseminating online jihadist material (n=8) to radicalizing other individuals (n=6), as well as attempting to travel to jihadist-held territory in Syria (n=5) or planning and carrying out terrorist attacks in Spain (n=4).

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<sup>30</sup> Rob Timans, Paul Wouters and Johan Heilbron, "Mixed methods research: what it is and what it could be", *Theory and Society*, No. 48 (2019): 193–216.

<sup>31</sup> Dominik E. Froehlich, "Mapping mixed methods approaches to social network analysis in learning and education", in Dominik E. Froehlich, Martin Rehm, and Bart C. Rienties (eds.): *Mixed methods social network analysis: Theories and methodologies in learning and education* (New York: Routledge, 2020): 13-24.

<sup>32</sup> Gemma Edwards, "Mixed-method approaches to social network analysis". *Discussion Paper*. NCRM (2010).

<sup>33</sup> John W. Creswell and Vicki L. Plano Clark, *Designing and Conducting Mixed Methods Research*.

<sup>34</sup> According to data released by State Attorney General's Office, the Juvenile Prosecution Service of the National Court initiated between 2012 and 2019 a total of 61 investigation procedures concerning youth associated with jihadism in Spain, the majority of which were closed for lack of evidence that adolescents had been involved in jihadist activities. These data was discussed with judiciary sources.

<sup>35</sup> Doug McAdam, "Recruitment to High-Risk Activism: The Case of Freedom Summer".



On the other hand, individuals who could fit into the “non-participants” group must have refrained from or been incapable of engaging in terrorism despite their affinity to Salafi-jihadism. Evidence of this attitudinal affinity among the non-participant group comprises statements of support to jihadist organizations published on social media or captured by law enforcement agencies by wiretapping, as well as declarations of willingness to travel to Syria. Other bounded forms of non-participation include regular attendance at meetings in Salafi milieus where violent jihad was openly advocated, or active membership in virtual communities where jihadist groups were praised. A small number of non-participant youths were also involved in bridge-burning activities, such as committing violent robberies or briefly assuming the management of virtual communities.

To identify youngsters who could fit into both sub-groups, this research used documentary sources (police and judiciary files), court sessions, and semi-structured interviews. These sources offered a detailed account of the work conducted by Spain’s National Court – the main judiciary body dealing with terrorism – against cases involving underage youth. Individuals were included in the sample only when information could be obtained for all independent variables. The resulting study sample consists of 44 individuals, 23 of whom fall into the “participants” group and 21 into the “non-participants” group. Table 1 summarizes the main characteristics of both sub-samples. All sample individuals were aged between 14 and 17 at the outset of their radicalization process. The sample includes 19 girls and 25 boys. Regarding their place of residence, 10 of the subjects lived in Barcelona province and 6 in Girona province, both in Catalonia; 9 in Melilla and 5 in Ceuta, two Spanish autonomous cities situated in the north of Africa; and 4 in Madrid and its metropolitan area. The remaining 10 individuals resided in five other provinces.

**Table 1. Sub-samples characteristics**

<b>Characteristics</b>	<b>Participants (n=23)</b>	<b>Non-participants (n=21)</b>
<i>Age at the start of the radicalization process</i>	14-17 years old	14-17 years old
<i>Sex</i>	6 females; 17 males	13 females; 8 males
<i>Residence</i>	Ceuta, Melilla, Barcelona, Madrid, Girona, Tarragona, Valencia, Las Palmas, Córdoba	Ceuta, Melilla, Barcelona, Madrid, Girona, Alicante, Córdoba.
<i>Ideological affinity with jihadist organizations</i>	Publicly and/or privately declared	Publicly and/or privately declared
<i>Behavioral commitment to the jihadist movement</i>	Sentenced for committing different jihadist crimes.	No evidence that they committed jihadist crimes.

### **Quantitative stage**

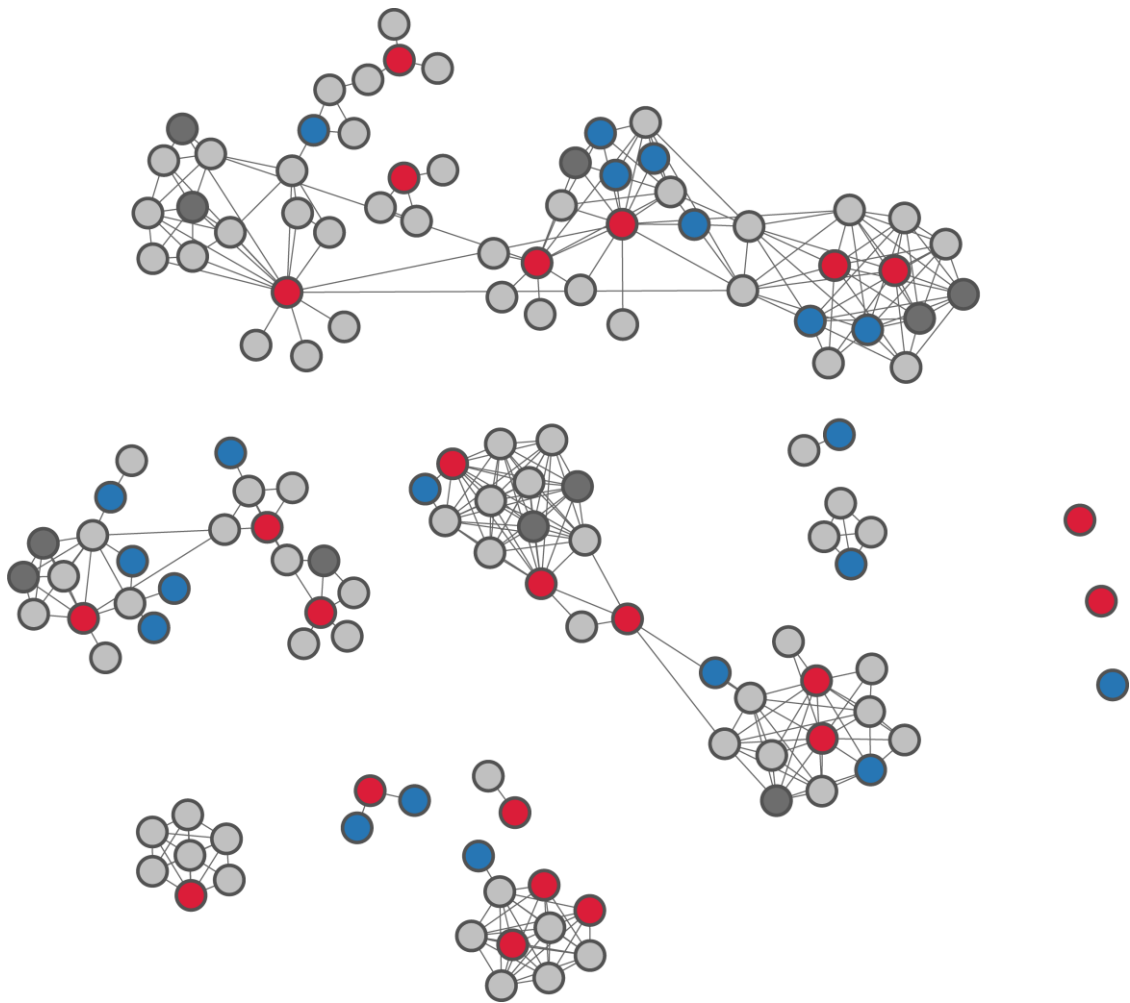
To test the hypotheses, a database was constructed with data about the patterning of connections of the sample individuals. Quantitative data was obtained from police reports, criminal proceedings, and court hearings,<sup>36</sup> and was triangulated with

<sup>36</sup> Police reports and criminal proceedings consulted by the author belong to the court records 4/2015, 9/2016 and 3/2017 of Central Investigating Court (CIC; in Spanish, Juzgado Central de Instrucción, JCI) 1; 1/2014 and 2/2017 of CIC 2; 7/2015, 4/2016, 13/2016 and 10/2017 of CIC 3; 4/2015 of CIC 4; 5/2014, 3/2016, 8/2016 and 9/2018 of CIC 5; 2/2016 and 1/2017 of

information drawn from semi-structured interviews. The social network resulting from the database contains a total of 125 nodes and 202 ties. The term “social network” is used here to denote the set of relationships between the 44 individuals of the research sample and their direct contacts within the jihadist movement.

The activists with whom the sample individuals were linked included people convicted of jihadist crimes in Spain, but also subjects who operated in other European countries and in Syria. People involved in the Salafi-Jihadist scene were also considered, even if they were not prosecuted for any crime. A link was coded as present if there was documented evidence of interaction between two nodes (such as in-person meetings, phone calls or chat conversations). Figure 1 visualizes the social network. Participant youths are colored red in the sociogram, and non-participant youths are colored blue. Jihadist activists are colored in light grey. The graph also visualizes in dark grey the mobilization entities (i.e., virtual communities or mosques) in which sample individuals forged organizational ties.

**Figure 1. Sociogram of the social network**



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CIC 6; summary procedure 21/2014 of CIC 1; 7/2015 and 14/2015 of CIC 3, as well as causes for amendment 5/2014, 15/2014, 1/2015, 2/2015, 3/2015, 4/2015, 2/2016 and 16/2016, of the Juvenile Court of the National Court. Court hearings attended by the author correspond to 4/2015, 7/2015, 1/2016, 4/2016, 5/2016, 8/2016, 3/2017, 9/2018, 15/2018 and the preliminary proceedings 68/2014.

The sociogram shows that the jihadist mobilization of minors developed in a non-cohesive and non-integrated manner. Most of the youngsters were closely connected to only a small number of nodes in the entire network. The lack of extensive interconnection between individuals resulted in the fragmentation of the social network into 12 components: three solitary nodes, as well as nine separate entities whose members were only directly linked to a few nodes, and either indirectly connected or completely disconnected from the rest.

As is so often the case in research on dark networks – which, like terrorist networks, are engaged in crime – this study was conducted in an imperfect data situation, with missing and faulty data potentially affecting data gathering.<sup>37</sup> Overlooking nodes and ties (false negatives) or inaccurately capturing relationships (false positives) is common in social network analysis of actors operating covertly and illicitly, and in ways to avoid detection and infiltration.<sup>38</sup> Individuals associated with global jihadism often rely on informal and loose connections, which complicates the retrospective reconstruction of all their bonds. Furthermore, their networks are usually heterogeneous, forcing the dissociation between links related and unrelated to the jihadist movement. As an added methodological challenge, the accessible information on individuals involved in jihadist activities tends to be greater than that available on individuals not involved in but sympathetic to the jihadist cause. To mitigate the impact of these constraints on the analysis, this research drew on a variety of information sources, which ensured access to a broad body of evidence on the social ties of the sample individuals and allowed for data triangulation.

#### *Dependent variables*

The dependent variable for this study was the youngsters' participation in jihadist activities. It was measured as a dichotomous, categorical variable. Youngsters who engaged in jihadist activities were coded 1, "participants". On the contrary, youngsters who showed an affinity with jihadism but did not take part in illegal actions were coded as 0, "non-participants". Overall, 52.3% of the sample were participants and 47.7% were non-participants.

#### *Independent variables*

As a test of the "types of ties" hypotheses (*H1a* and *H1b*), four dummy variables were created, namely: "immediate ties," "organizational ties," "immediate and organizational ties," and "no ties". For all four variables, an individual was coded as 1 when the category was present, and 0 otherwise. "Immediate ties" was present when sample individuals had links of kinship, friendship, neighborhood and/or acquaintanceship with jihadist activists. "Organizational ties" was present when sample individuals forged ties with jihadist activists engaged in virtual platforms and/or mosques, with whom they had no personal relationship prior to the onset of their radicalization. "Immediate and organizational ties" was present when they had the two types of personal connections.

To examine the "number of ties" hypothesis (*H2*), a continuous variable was used for counting the number of jihadist activists with whom a youngster was directly connected.

To test the "strength of ties" hypothesis (*H3*), an average indicator was obtained for each sample individual by calculating the mean strength of all their interrelationships. To do so, a 4-point ordinal scale was used first to value the strength of each tie. This

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<sup>37</sup> James F. Morris and Richard F. Deckro, "SNA Data Difficulties with Dark Networks", *Behavioral Sciences of Terrorism and Political Aggression*, Vol. 5, No. 2 (2013): 70–93.

<sup>38</sup> Luke M. Gerdes, *Illuminating Dark Networks* (Cambridge: Cambridge University Press, 2015).

variable took a value of 0 when no ties were documented; 1 for weak ties; 2 for medium-strength ties; and 3 for strong ties. These values were assigned based on Malthaner and Lindekilde's model, which differentiates three degrees of strength of ties based on connection duration, level of personal closeness, and intensity of interactions.<sup>39</sup> Subsequently, a mean value of the strength of all bonds was calculated for every sample individual. To assess the consistency of this indicator, intra-rater reliability was determined by comparing the mean values estimated at two different moments of the research process. For that purpose, the Intraclass Correlation Coefficient (ICC) was calculated using SPSS version 27.0, based on a mean rating, absolute agreement, two-way mixed-effects model. ICC=0.91 with 95% confidence intervals (0.84-0.95) indicated excellent intra-rater reliability.

Finally, gender (female was the reference category) and age (in years) were explored as control variables. Table 2 shows a descriptive analysis of the study variables.

**Table 2. Operationalization of variables**

<b>Categorical variables</b>	<b>%</b>	<b>n</b>	<b>Operationalization</b>	
<i>Dependent variable</i>				
Participation	52.3	23	Participation in jihadist activities.	
Non-participation	47.7	21	0 = No; 1 = Yes.	
<i>Independent and control variables</i>				
Gender			0 = Women; 1 = Men.	
Male	56.8	25		
Female	43.2	19		
No ties			0 = No; 1 = Yes.	
Yes	6.8	3		
No	93.2	41		
Immediate ties			0 = No; 1 = Yes.	
Yes	68.2	30		
No	31.8	14		
Organizational ties			0 = No; 1 = Yes.	
Yes	63.6	28		
No	36.4	16		
Immediate and organizational ties			0 = No; 1 = Yes.	
Yes	40.9	18		
No	59.1	26		
<b>Continuous variables</b>	<b>Mean (SD)</b>	<b>Min.</b>	<b>Max.</b>	<b>Operationalization</b>
Age	16.3 (0.85)	14	17	Age at the start of the radicalization process.
Number of ties	4.73 (4.17)	0	21	Number of ties with activists.
Strength of ties	1.64 (0.76)	0	3	Mean value of the strength of all social ties with activists.

In collecting data on the theoretical variables, it was considered that mobilization is a gradual process in which individuals forge new social ties and intensify existing ones as they deepen their commitment, and possibly move from violent ideas to violent behavior. Since the fundamental interest of this study is to understand the impact of bonds in people's progress (or lack of) from thinking to acting, data collected captures the state of the interrelationships between each sample individual and the jihadist movement before some of them became involved in jihadist activities. This way,

<sup>39</sup> Stefan Malthaner and Lasse Lindekilde, "Analyzing Pathways of Lone-Actor Radicalization: A Relational Approach", in Michael Stohl, Richard Burchill and Scott Englund (eds.), *Constructions of Terrorism: An Interdisciplinary Approach to Research and Policy* (Oakland California: University of California Press, 2017).

reversal causality – the possibility that data does not reflect what leads to participation (the causes) but what occurs after participation (the effects) – was controlled.

### **Qualitative stage**

The qualitative data corpus was collected from three sources: semi-structured interviews, documentary evidence and court sessions. While information gathered from interviews referred mainly to the participants sub-group, the data obtained from the other sources comprised all sample individuals.

A total of 18 interviews were conducted between May 2019 and June 2021 with actors selected using convenience and snowball sampling techniques. Six of the interviewees were subjects included in the sample (four participants and two non-participants). The other 12 were chosen because of having first-hand knowledge of several sample individuals. These key informants included, among others, first-line practitioners (psychologists, social workers, and social educators) working in juvenile facilities or at the local level, who provided information about eight participants and three non-participants; law enforcement agents involved in the investigation of cases concerning three participants and two non-participants; and relatives of two participants. Table 3 provides a breakdown of all interviewees. The choice of a convenience sample composed of different actors gave access to comprehensive information about the impact of social interactions in participants' and non-participants' paths. This would not have been possible by only interviewing sample individuals due to the difficulty of accessing most of them. Overall, interviews provided material on 23 of the 44 sample individuals (52.3% of the total: 16 participants and 7 non-participants).

**Table 3. Interview sample**

<b>Category</b>	<b>Number of interviews</b>
First-line practitioner	5
Participant youngster	4
Law enforcement agent	3
Non-participant youngster	2
Family member of a participant youngster	1
Friend of a participant youngster	1
Lawyer	1
Prison intelligence official	1
<b>Total</b>	<b>18</b>

The interviews sought to capture interviewees' experiences, perceptions, or knowledge regarding the effects and dynamics of social ties. Interviewees were asked to provide detailed answers regarding the three potential explanatory variables examined in this paper. Open-ended questions were raised about how connections shaped youngsters' decisions to become or not become involved in jihadist activities. The process of social network formation and dissolution was also scrutinized.

Out of the 18 interviews, 9 were conducted in person, 4 in writing, 3 by phone, and 2 via social platforms. Face-to-face conversations were conducted in Madrid, Ceuta, Barcelona, Melilla, Salamanca, and Girona. They took place in different settings, including three prisons, a juvenile facility, offices, and cafeterias. With the consent of the interviewees, oral interviews were audio-recorded and transcribed verbatim. When this was not possible, verbatim notes were taken by hand.

When it comes to the documentary review, evidence was obtained from police reports and criminal proceedings. Examples of the textual data analyzed in this study include interrogation reports, telephone-tapping transcripts and captures of chat

conversations. Also, oral evidence was gathered during court hearings. These information sources were used to collect instances about how interactions developed within the boundaries of the social network presented in Figure 1.

Qualitative data was interpreted using hybrid, deductive-inductive thematic analysis. Following this procedure, the analysis identified theory-driven and research-driven codes based on concepts from the literature review, as well as data-driven codes gained from the raw information. The analytic process involved recognizing thematic patterns through an iterative reading of the qualitative data corpus.<sup>40</sup> Guided by selective coding, the significant coded data was grouped into themes, and less prevalent codes were omitted.

## **Ethics**

The ethics committee of Universidad Rey Juan Carlos approved this study (internal register number: 1605201909719). For reasons of data protection, sample individuals were given a simple code derived from their participation outcome and the chronological order in which they were included in the sample. Interviewees gave informed consent, but they are identified only by their category to maintain their confidentiality.

## **Results**

### **Quantitative evidence**

The quantitative strand of this study aimed to gain insight into the structural properties that differentiate the social connections of participant and non-participant youths. To this purpose, bivariate analyses were conducted first to identify statistically significant associations between the dependent and each independent variable. These analyses entailed performing Fisher's exact tests for the categorical variables, and the Mann-Whitney U test for the continuous variables. Statistical analyses were performed using SPSS version 27.0. Table 4 reports the results.

Out of the four variables used to operationalize the "types of ties" hypotheses (*H1a* and *H1b*), the combination of immediate and organizational ties showed a significant relationship ( $p=0.007$ ) with participation at the bivariate level. While 60.9% of youngsters who participated in jihadist activities had both types of ties with elements of the jihadist movement, only 19.0% of non-participants had such a combination of social links. On the contrary, no statistically significant relationship was found between participation and the other three possible categories, namely immediate ties, organizational ties, and no ties.

There was also a significant association ( $p=0.001$ ) between participation in jihadism and the only variable related to the "number of ties" hypothesis (*H2*). While participant youngsters had on average 6.61 connections to other actors of the jihadist movement, non-participants had a mean of 2.67 bonds. By contrast, there was no relationship between youth participation in jihadism and the strength of their ties with jihadists (*H3*). Finally, among the control variables, gender was significant ( $p=0.017$ ) at the bivariate level: 73.9% of participants were male, while 38.1% of non-participants were male. On the contrary, no statistically significant difference existed between the ages of both sub-groups.

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<sup>40</sup> Jennifer Fereday and Eimear Muir-Cochrane, "Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development", *International Journal of Qualitative Methods* 5, No. 1 (2006): 80–92.

**Table 4. Bivariate relationships between dependent and independent variables**

	Participants (n=23)	Non-participants (n=21)	Total (n=44)
<i>Categorical variables</i>			%
Male*	73.9	38.1	56.8
No ties	8.7	4.8	6.8
Immediate ties	73.9	61.9	68.2
Organizational ties	73.9	52.4	63.6
Immediate and organizational ties**	60.9	19.0	40.9
<i>Continuous variables</i>			Mean (SD)
Age	16.2 (0.99)	16.4 (0.67)	16.3 (0.85)
Number of ties**	6.61 (4.63)	2.67 (2.33)	4.73 (4.18)
Strength of ties	1.81 (0.76)	1.45 (0.73)	1.64 (0.76)

Note: \*p < 0.05, \*\*p < 0.01.

The second step in the quantitative analysis entailed conducting a binary logistic regression to assess the multivariate relationship between youth participation in jihadism and the variables that showed a preliminary significant association at the bivariate level. Given the small sample size, Firth's logistic regression (also known as penalized maximum likelihood) was performed first. Because of its good properties in mitigating the bias caused by a low number of cases in a data set, Firth's logistic regression is an appropriate approach for the regression analysis of binary outcomes with small-n.<sup>41</sup> However, the probabilities predicted by both binary logistic regression – which is the standard procedure for analyzing the effects of independent variables on a binary dependent variable – and Firth's logistic regression showed negligible variations. Therefore, binary logistic regression was chosen as the main analysis tool for this study due to its wide use.

The complete model with the dependent variable and the identified potential predictor variables is presented in Table 5. To perform the analysis, the enter method (model 1) was used to first introduce all variables, and then the forward stepwise method was used to generate the final model with the significant predictors (model 2).

The final model indicates that two of the independent variables are significant, which results in only one hypothesis being confirmed in the multivariate model. Specifically, results showed support for the “number of ties” hypothesis (*H2*). The model found that participant youngsters are distinguished from non-participants based on their number of social connections with jihadist activists ( $p=0.006$ ). In this sense, for each additional tie, the odds of a youngster becoming mobilized increased by 1.46 times. Nonetheless, the model did not support the “type of ties” hypothesis (*H1a* and *H1b*). The relationship between youth participation in jihadism and the combination of immediate and organizational ties was statistically non-significant when controlling for the rest of potential predictors. Finally, gender was confirmed to be significant ( $p=0.020$ ). The odds of participating were 6.27 times higher among men than women.

**Table 5. Binary logistic regression of youths' jihadist participation**

<i>Variable</i>	<b>Model 1</b>				<b>Model 2</b>			
	<i>B</i>	<i>S.E.</i>	<i>ExpB</i>	<i>p</i>	<i>B</i>	<i>S.E.</i>	<i>ExpB</i>	<i>p</i>
Male	1.881	0.812	6.560	0.020*	1.837	0.791	6.276	0.020*
Immediate and organizational ties	0.876	0.949	2.401	0.356				
Number of ties	0.307	0.154	1.359	0.046*	0.378	0.137	1.460	0.006**
Constant	-2.647	0.846	0.075	0.002**	-2.516	0.816	0.081	0.002**

Note: \*p < 0.05, \*\*p < 0.01.

<sup>41</sup> David Firth, “Bias Reduction of Maximum Likelihood Estimates”, *Biometrika* 80, no. 1 (1993): 27-38; Carlisle Rainey and Kelly McCaskey, “Estimating Logit Models with Small Samples”, *Political Science Research and Methods* 9, no. 3 (2021): 549-564.

The final model obtained with binary logistic regression was statistically significant. The inferential goodness-of-fit test used was the Hosmer-Lemeshow test, which indicated that the model was well fitted to the data ( $\chi^2$ : 12.475;  $p=0.131$ ). The final model explained 46.7% of the variance in jihadist participation (Nagelkerke R<sup>2</sup>) and correctly classified 81.8% of cases. Sensitivity was 90.5% and specificity was 73.9%.

### Qualitative evidence

The qualitative strand of this research aimed at developing an understanding of the role played by social ties in pulling youngsters into the jihadist movement, and the mechanisms through which interpersonal connections enable or constrain participation. The analysis was structured around the three core properties of social bonds assessed in this paper. Differences and similarities were sought between participants and non-participants applying Boyatzis's approach.<sup>42</sup> Table 6 outlines the main findings. Organization and coding of the textual data was conducted using QSR NVivo computer software (March 2020 release).

**Table 6. Main results of the qualitative analysis**

Theme	Intra-thematic differences	Sub-group differences
<i>Type of social ties</i>	Immediate and organizational ties affected the mobilization process in similar ways: both were key in transmitting radical ideas and attitudes, but neither systematically promoted participation in jihadist activities. However, unlike organizational ties, immediate ties sometimes even constrained participation.	No differences were found between participants and non-participants.
<i>Number of social ties</i>	A large number of ties favors a strong awareness of the jihadist movement's goals, generates incentives for participation, and provides a greater access to mobilization opportunities. No evidence was obtained on the effects of a small number of ties.	It has not been possible to compare the two sub-groups due to the lack of data on the effects of this property in non-participants' paths.
<i>Strength of social ties</i>	Strong ties facilitate prolonged interaction and group pressure toward participation, while preventing disengagement. Weak ties are short-lived, which can impede them from effectively promoting participation.	Clear differences were found: non-participants' ties with the jihadist movement tended to be weak, while those of participants were strong.

#### 1. Type of social ties

In examining the role played by immediate and organizational ties in mobilizing the sample individuals, it is observed that both types of bonds affected jihadist participation to relatively similar degrees. Likewise, no clear differentiated patterns were found between participants' and non-participants' experiences regarding this property of their links to the jihadist movement.

For one thing, the textual data suggests that immediate and organizational ties were crucial in initiating and sustaining the violent radicalization of the sample individuals.

<sup>42</sup> Richard E. Boyatzis. *Transforming qualitative information: thematic analysis and code development*. (Thousand Oaks: Sage Publications, 1998).



Being connected to the jihadist movement through one of the two kinds of social connections, or through a combination of both, allowed youths to be socialized into jihadist norms and values and to develop a positive association with the jihadist movement. However, neither type of bond systematically or unconditionally promoted involvement in jihadist activities.

Non-participant 12 recounted in her police statement that organizational ties often provided her with ideological guidance, but did not always facilitate assistance for translating ideas into action:

“She declares that when she opened this Facebook account, she also opened a second one. That with those Facebook accounts she chatted with several people, almost always on religious topics, but only a few of them proposed several times that she go to Syria to join the jihad.”<sup>43</sup>

Participant 14 also referred to immediate ties failing to promote participation, despite having played a key role in her radicalization:

“The first thing I asked him [her brother] was, ‘Why didn’t you take me with you [to Syria]?’ He was always very realistic when talking to me. He said: ‘Look, this is very hard. This is not a vacation. This is a war. (...) He told me: ‘What you see in the videos is only a little, even though there are videos that show many things. This is very complicated; if it is complicated for us, imagine for you.’ (Participant)

On occasions, if activists did not encourage engagement in jihadist activities, it was because they endorsed legal forms of mobilization in line with the ideological premises of Salafi-jihadism. Non-participant 15’s statement to the police reflects this:

“She reports: Yes, she was ready to go with him [a neighbor with whom she had started a romantic relationship] to IS [-held territories]. Nordin [all names used are pseudonyms] told her first that she would go with him, but later he told her that she wouldn’t go. He told her that he wanted to go alone and that he wanted her to take care of their children, which she also accepted, even though she now rejects the idea.”<sup>44</sup>

The main difference between types of links detailed in the textual corpus is that, in contrast to organizational ties, radicalizing agents belonging to a youth’s closest social circle sometimes even actively constrained jihadist involvement, inhibiting the desire of and possibilities for these youths to take action. Participant 13’s father, a regular at a radical mosque, isolated his son from the influence of a group of local activists dedicated to the creation of jihadist material for online dissemination, as the young man recounted in his police statement:

“Asked to say what was the reason for their move to Belgium, he says that after the arrest of those investigated in Operation Javer, they [his family and him] went there as a way of distancing him from the defendants in the aforementioned operation.”<sup>45</sup>

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<sup>43</sup> Guardia Civil, Jefatura de Información UCE-2, “Informe sobre exploración de la menor [real name] y resultados preliminares de investigación”, en Audiencia Nacional, Fiscalía de Menores, *Expediente de reforma 11/2015*.

<sup>44</sup> Guardia Civil, Jefatura de Información, UCE 2-SIZ Cataluña-GIC Melilla, “Diligencia Toma de manifestación Testigo Protegido TP 1/2015”, in *Diligencias Previas 21/2014, Atestado Policial 2015-103386-04* (2015).

<sup>45</sup> Cuerpo Nacional de Policía, Dirección General de la Policía, Comisaría General de Información, “Atestado Policial Núm. 15.431/16”, in Audiencia Nacional, JCI 6, *Diligencias Previas 124/16*.

In the case of Participant 1, her sisters played a relevant part, first in promoting the adolescent's support for the Islamic State and later in aborting her trip to the Syrian conflict zone:

“She was a girl that... her sisters seemed worried about her. Indeed, when she left [to go to Syria], she changed her WhatsApp profile and the oldest sister rapidly noticed it because the girl had been living with her. So, the sisters went to the police and reported it. They didn't want her to leave. We are pretty sure about that. But, well, the values, the ideology, were transmitted by the women members of the family.” (First-line practitioner)

## *2. Number of social ties*

The qualitative data about the number of social links connecting individuals in the sample to the jihadist movement only make it possible to explore the effects of large social networks on the subgroup of young participants. Since it does not provide information on how the number of social ties affected the courses of action of non-participants, a comparison between subgroups regarding this feature of bonds was not possible.

Collected evidence indicates that being surrounded by many people ideologically close to Salafi-jihadism ensured that youngsters were able to hear about jihad and the organizations that support it, creating a strong awareness of the movement's issues. It also generated mechanisms that promoted participation and favored access to mobilization opportunities.

In the case of the abovementioned Participant 1, such incentives for engagement included expectations of fulfilling a sense of belonging and obtaining collective acceptance:

“She said that, at that moment, a trend emerged in the neighborhood: people talked a lot about jihad. (...) She talked about it as if it were the normal thing in [Participant 1's hometown]. She knew people and everything they said was compelling: they told her that women were treated like jewels [in Syria] and she wanted to feel that way. She started with the idea that, by wearing certain clothes, she would attract peoples' attention, so as she was digging deeper into social media she received support, and reinforcement – one of the things she wanted the most. That gained her more and more attention and led to her becoming more mobilized in social media, because she got what she wanted: becoming the center of attention, and not being just one more in her household and her neighborhood.” (First-line practitioner)

Living in a socio-spatial setting where the jihadist movement had thrived also led Participant 17 to see militancy as a socially approved and legitimized practice; even a profitable one:

“It wasn't just my brother. Many friends from my neighborhood went [to Syria]. Many people from my city. Because in Morocco... look, the majority, 90% of Moroccan people who are there are from [Participant 17's hometown]. Because I tell you, they are the ones who pay the most. For doing that, they pay a lot. I mean, they give you amounts of money, also for your family...” (Participant)

In examining the process of forming large social networks, two patterns can be clearly identified. On the one hand, creating a multitude of connections with like-minded people satisfied different cognitive needs that reinforce the process leading to adopting jihadist ideas, as was the case of Participant 9:

“As a result of going to the mosque, he said that he met a lot of good people, good Muslims, and that he wanted to meet more people of that kind, so he reduced all his social relationships to people studying the Koran (...) Furthermore, when we asked him to write about what led him to commit his crime, he wrote: “I keep informed about the injustices that Muslims suffer, and me myself, as a Muslim brother – I have to do something”. So, he said that he also started getting into forums and social media to get informed about these injustices.” (First-line practitioner)

On the other hand, young people also sought to increase their number of interpersonal links with the jihadist movement to find opportunities for terrorist involvement. As an example, the abovementioned Participant 14 relied on online activists for assistance in her attempt to follow in her brother’s footsteps in Syria:

“When my brother left, I stopped leaving home... I built an entirely different life, a virtual life. My social environment was limited to what I had on my phone. (...) And when my brother died, for instance, his phone number was given to another person and I also knew that guy... it is like, through one person you know another, but only virtually; I never met them in person.” (Participant).

### 3. *Strength of social ties*

Clearly distinct patterns were observed between participants and non-participants regarding the strength of their social bonds with the jihadist movement. Because networks are not static relational structures but evolve as their members make new connections and regulate exchanges, the strength of people’s links to a social movement waxes and wanes over time as mobilization intensifies or is disrupted.

At one end of the strength continuum, weak ties represent the least stable and intense pattern of social connections. The textual data provides evidence of the relevance of such ties among the interpersonal connections built by the non-participants in the sample. Weak bonds served as an initial contact with the Salafi-jihadist scene, but proved to be fragile in most cases. Both internal and external pressures explain their dissolution. Sometimes it was the young people who decided to interrupt contacts with activists when they felt uncomfortable and insecure. In other instances, the exposure to extra-movement actors served as an effective counter-attitudinal influence. This was the case of the aforementioned Non-participant 15, as she admitted in her police statement:

“She reports that, being in a relationship with Nordin, she met Ammar through Facebook in the summer. He opened her eyes and gave her good pieces of advice about Islam. She states that she felt a victim and felt that she had been radicalized, and it was thanks to Ammar that she was not recruited in the end.”<sup>46</sup>

Breaking bonds was also a discretionary decision on the part of recruiters, who might be concerned about the risks involved in the radicalization and recruitment of young people. In the case of Non-participant 9, this meant losing her anchor to the jihadist movement since she was not capable of creating new ties that enabled engagement, according to her account in a police report:

“[The recruiter] told her that he had contacts with the Daesh. On two occasions, he brought her to Morocco, to Martil, where he bought her Islamic clothes and

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<sup>46</sup> Guardia Civil, Jefatura de Información, UCE 2-SIZ Cataluña-GIC Melilla, “Diligencia Toma de manifestación Testigo Protegido TP 1/2015”, in *Diligencias Previas 21/2014, Atestado Policial 2015-103386-04* (2015).

introduced her to his friends, whom he presented as “the people from Daesh”. Soon, for reasons she does not know, [the recruiter] started distancing himself from her. (...) After he distanced himself from her, she despaired and thought that he had gone to Syria without her. She contacted the Daesh-sympathizers in Martil so that they could help her to go to Syria. She went to Martil with a friend who also wanted to go to Syria. When she found them, she told them that she wanted to meet [the recruiter], but their faces changed, and they gave her the runaround.”<sup>47</sup>

The qualitative data also provided evidence to the contrary: young people who were able to restore a weak, precarious relationship with an activist, to the point of leading to terrorist involvement. This course of events is reflected in the efforts of Participant 3 to keep alive the affective relationship she had initiated with a neighbor:

“He started changing, becoming more deeply radicalized. He told her that he could not go forward with the relationship because they followed different doctrines. She didn’t share his ideas. She was affected by that, and by the guy’s decision to break up with her. As a result, she started going to the same mosque that he frequented, and when he saw that [her efforts] he began approaching her again.” (First-line practitioner)

The most revealing case of the effects of strong ties on jihadist participation is that of Participants 19, 20, and 21, who were part of the terrorist cell that carried out a series of attacks in Barcelona and Cambrils in August 2017, killing 16 people. The small, tightly knit group was formed in the context of multiple overlapping social bonds. Close, intensive interactions driven by affective and emotional attachment promoted internal cohesion and conformity, reinforced commitment, and prevented defection, as a friend of Participant 20 expresses:

“He left a note for his mother, his relatives, asking for forgiveness for what he was going to do. He didn’t want to be a part of that [the attack], but he couldn’t do anything. The imam [the leader of the cell] knew that by recruiting people who knew each other no one would leave the group. They would pressure each other.” (Friend)

## Discussion

The main purpose of this paper was to understand the relationship between social ties and differential recruitment into jihadism. This study found that the number of interpersonal connections within the jihadist movement affects a youth’s chances of participating in jihadist activities. On the one side, the quantitative analysis indicated that participant youths had links with more jihadist activists than non-participants. On the other, the qualitative analysis showed that embeddedness in large networks committed to Salafi-jihadism enabled sample youngsters to see violent jihad as a socially accepted and relevant cause, to identify incentives for engagement, as well as to build a disposition for participation and transform it into concrete action. This is in consonance with previous literature that pointed to information access, social reaffirmation, and individual rewards as the causal mechanisms through which a high number of social ties within a social movement influence participation. However, the qualitative study could not provide insights into how the number of bonds affected the courses of action of non-participants, which prevented comparisons between sample sub-groups at that level of analysis. The results of the regression analysis should also

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<sup>47</sup> Guardia Civil, Jefatura de Información, UCE-2-GIC Ceuta. “Atestado policial: 2015-103386-0000025”, in Audiencia Nacional, JCI 6, *Diligencias Previas 25/2015*.

be taken with caution, as the availability of more information on young participants than on non-participants may have biased the results related to this variable.

Moreover, this research came to relevant findings regarding the other two properties of social ties explored. First, qualitative accounts suggested that the influence of a tie's strength on participation is a function of the intensity and stability of social interactions. Clear differentiated patterns for participants and non-participants were found in this regard in the qualitative corpus: while non-participants' personal links with the jihadist movement tended to be of short duration, participants' connections were solid, which allowed for sustained radicalization and group pressure for involvement, and ultimately prevented disengagement. These qualitative findings support the widely held claim in social movement research that the stronger the connection an individual has to a social movement, the more likely they are to be drawn into engagement in high-risk activism. Nonetheless, tie strength did not vary statistically in a significant manner in the quantitative analysis between both subgroups of the sample.

Finally, the mixed-methods analysis rejected the assumption that the types of ties linking individuals to the jihadist movement impact their likelihood of participation. Inferential statistics revealed that neither immediate nor organizational ties, nor the combination of the two, were significant in conditioning youth involvement in jihadist activities. This finding was supported by qualitative evidence, which showed that no kind of social bonds systematically or unconditionally promoted terrorist engagement, even after having played a key role in the adoption of radical ideas and attitudes. This result recognizes the fact that ties that serve as a conduit for radical ideas and attitudes do not necessarily drive violent behavior. In many of the cases analyzed in this study, the social influence processes involved in jihadist radicalization had an exclusive, genuine cognitive focus not tied to any behavioral aspiration.

Altogether, this research showed that it is erroneous to assume that bonds acting as sources of radicalization intentionally lead to violent conduct (as may be the case for the two types of ties). Results also indicated that links actively promoting mobilization may be ineffective in driving participation (as may be the case for weak ties). Consequently, it appears that the positive association between the number of social connections and participation in jihadism may be a function of large networks' abilities to compensate for those ties that do not motivate engagement and those others that fail to enable it. Inasmuch as only certain interpersonal bonds successfully drive a young person to participate, the greater the number of social ties youngsters have with jihadists, the greater their chances of connecting with activists who actually propel involvement.

A note of caution should be considered when interpreting these results, on account of some analytical and methodological limitations. As already noted, missing and flawed data potentially affected the collection of information, which makes it necessary to consider the results as preliminary and to carry out further research to confirm this study's findings. Some of the data limitations have to do with the sources of information – specifically, the differential access to data on participants and non-participants – while others relate to the weaknesses of some research techniques. For instance, retrospective accounts gathered in the semi-structured interviews could have been altered by selective memory, ex-post rationalization, or omissions. In anticipation that some limitations might affect the study, it was decided to choose a mixed-methods design, since the combination of quantitative and qualitative data and research methods allows for compensation for the deficiencies of any single approach and facilitates the triangulation of information.

The composition of the study sample may also represent a limitation. While the participants sub-group is composed of all young people convicted in Spain between 2012 and 2019 for jihadist crimes, the non-participants sub-group only gathers a portion of those associated with the jihadist movement over that period. Becoming supportive of global jihadism does not involve asking for official acceptance in an organization. Instead, jihadist activists and sympathizers operate covertly, drawing primarily on informal and loose connections. This makes it hard to gain an accurate picture of all people related with the jihadist movement, which ultimately complicates obtaining a random study sample that is representative of the population. The sample's non-random selection may entail that results are unique to the specific context and universe of this research, and, therefore, that findings may hardly be generalized.

## **Conclusions**

Scholars in the field of terrorism studies have largely supported the claim that interpersonal ties are decisive in promoting individual participation in political violence. However, a pending issue in this field of research is to specify what structural properties of social bonds influence jihadist involvement, as well as to examine the way networks intervene in this process.

This study found substantial empirical support for the hypothesis that the number of personal links within the jihadist movement affects an individual's chances of participating in jihadist activities. It also found partial support for the relationship between tie strength and jihadist engagement. However, it rejected the assumption that the type of social bond influences participation.

More generally, findings evidenced that ties serving as conduits of radical ideas and attitudes do not necessarily drive violent conduct. They also showed that bonds that promote mobilization may fail to translate ideas into action. This might explain why youngsters with many connections to the jihadist movement are more likely to become engaged in jihadism: since only certain links enable involvement, the greater the number of social ties youngsters have with jihadists, the higher their possibilities of connecting with activists who successfully drive them to participate.

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