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"What Made Me Change": Transformative Experiences in the Jihadist Radicalization Process

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Abstract

Disentangling the roots of radicalization leading to violence is a worldwide challenge. Unfortunately, empirical data are scarce. Through fieldwork conducting face-to-face interviews to Muslim inmates in Spanish prisons, this research examines transformative experiences that may have influenced radicalization leading to violence. Incarcerated convicts because of jihadist terrorism (n = 30), common criminals who carry out proselytizing work (n = 22), and non-radicals (control group, n = 64) were asked about the turning point in their lives. Their responses were coded into exclusive thematic categories following an inductive-deductive mixed approach. Jihadists and proselytizers identified experiences linking their personal identity to religion -ideological ties- as a transformative point that provided them purpose and sparked the desire for leaving their criminal lifestyle behind. Also, proselytizers referred to family-related experiences -familial ties- as a turning point which also prompted them to criminal desistance, whereas this was not mentioned by jihadists. All groups had in common the experience of incarceration as a major turning point and a moderate level of religiosity. Overall, these findings contribute to the understanding and prevention of jihadist radicalization.

Keywords: jihadism; prison; radicalization; turning point; narrative analysis

"What Made Me Change": Transformative Experiences in the Jihadist Radicalization Process

Jihadist terrorism, a persistent global concern, holds a central position in worldwide and European policies (European Commission, 2020). Yet, the factors driving individuals towards extremist political and religious beliefs, and eventually to violence, remain unclear. Recent studies highlight the importance of delving into the life stories and turning points (transformative experiences that involve a significant change in life) of radical individuals, as these provide valuable insights into the radicalization process (e.g., Pemberton & Aarten, 2018) and can help prevent further jihadist radicalization. However, to the best of our knowledge, few studies analyze these key transformative life events, and none of them compare the autobiographical narratives of jihadists with those of proselytizers and common criminals.

Our goal is to examine the nature of turning points in the lives of radical individuals in Spanish prisons and to explore potential differences in these transformative experiences based on the level of radicalization and the criminal profile of radical individuals. We conducted interviews with (1) inmates convicted of jihadist terrorism crimes; (2) inmates engaged in proselytizing activities within prison; and (3) non-radical Muslim inmates as a control group.

Biographical Perspective of the Process of Radicalization

Radicalization is a deepening commitment to extremist political or religious ideologies involving psychosocial factors that often include the desire to change society and the support of violence as the mean for change (Horgan, 2009). This process is complex, nonlinear, and dynamic, as there are many push and pull factors that interact and influence individuals on their path towards extremism (Horgan, 2008). Current research indicates that isolated and stable macro variables, such as objective economic or political marginalization, are not effective predictors of why people join religious terrorist movements (Rink & Sharma, 2016). Instead, this process should be examined at a psychosocial level, accounting for potential changes in the lives of individuals who align with extremist causes (Sieckelinck et al., 2019).

Criminological research has explored individual pathways to crime and radicalization through the life-course theory (Carlsson et al., 2020; Sampson & Laub, 2005). This theory seeks to understand criminal behavior by examining an individual's development throughout their life, recognizing its dynamic nature influenced by various social, psychological, and environmental factors (Elder, 1998). Essentially, the life-course theory provides a framework to analyze how life events, experiences, and individual development shape beliefs and behavior over time (Laub & Sampson, 1993). It is grounded on the perspective that crime offending and desistance patterns are part of the same continuum, influenced by agency, age, social ties, and the experience of key life events as turning points (Sampson & Laub, 2005). This approach has been used to explore significant biographical and developmental events in the life of Islamist convicts (e.g., Moeller & Scheithauer, 2022).

There is a growing interest in autobiographical narrative analysis within the lifecourse theory framework in criminology (Helfgott et al., 2020; Hockey, 2016). The study of narratives addresses the participants' perspective and how they generate meaning, purpose and continuity from personal events that are part of their identity (McAdams, 2018). McAdams (2008, p. 242) defines narrative identity as "an individual's internalized, evolving, and integrative story of the self". To study changes in the life-course through narrative, McAdams (1985) developed a life story interview in which individuals are prompted to discuss critical scenes in their lives. These narratives, especially when detailing a pivotal turning point, offer greater complexity, meaning-making, and self-related insights than general autobiographical narratives (Grysman & Hudson, 2010). Turning points are accounts of transformative, self-shaping experiences where individuals perceive a significant change in their life course (McAdams, 1985).

Understanding the life stories of radical individuals, and particularly the role of turning points (Laub & Sampson, 1993), could contribute to disentangle the psychosocial mechanisms influencing their trajectories to radicalization (Copeland, 2019; Pemberton & Aarten, 2018). However, while turning points have received significant attention from criminology (e.g., Carlsson, 2012; Melde & Esbensen, 2011) and developmental psychology (e.g., McCabe & Dinh, 2018; McLean & Pratt, 2006), there are few psychosocial studies that explicitly analyze the turning points in radical individuals (e.g., Carlsson et al., 2020).

The 3N Model: Need, Narrative and Network in the Turning Points

The present research is grounded in a combination of the life-course perspective and the 3N model of radicalization, which comprises three elements: Need, Narrative, and Network. This model highlights the importance of the search for personal significance, that is, the desire to earn respect, gain positive recognition, and be someone (Webber & Kruglanski, 2016). According to this model, the search for personal significance is the fundamental *need* that triggers the process of radicalization (Kruglanski et al., 2014). When individuals face this loss, they are motivated to restore their significance, and they do so through a violence-justifying ideology or *narrative* (Webber et al., 2018). Then, the *network* – contact with others who endorse this ideology– validates and provides perceived support for the individual's violent ideology (Bélanger et al., 2019). Given that literature has consistently shown that the quest for significance plays a crucial role in radicalization processes (Kruglanski et al., 2018; Lobato et al., 2023; Webber et al., 2018), jihadists may experience events related to the loss or recovery of meaning as significant turning points. *Need*

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The loss of significance can be experienced due to many factors, such as social alienation, anomie, and perceived discrimination (Bélanger et al., 2019; Lobato et al., 2020; Troian et al., 2019). Several studies have also linked socioeconomic hardships, marginalization, and lower educational levels to the loss of significance and extremist attitudes and behaviors (Emmelkamp et al., 2020; Kanol, 2022; Lobato et al., 2023; Nawaz, 2024; Pedersen et al., 2018; Süß & Aakhunzzada, 2019). In terms of jihadist radicalization, Muslim immigrant populations are especially at risk of suffering socioeconomic difficulties, which might accelerate their loss of significance and willingness to endorse radical ideologies (Lyons-Padilla et al., 2015). Weggemans et al. (2014) found these topics in the life stories of jihadist foreign fighters, who expressed frustration about their social position and a lack of meaning in their lives. For them, engagement in the Syrian conflict appeared to provide a sense of purpose and belonging. Other studies have also connected socioeconomic grievances to jihadist radicalization and the decision to travel to conflict zones (Bakker & Grol, 2015; Coolsaet, 2016). Last, the loss of significance can also be triggered by a personal crisis due to a prolonged delinquent lifestyle (e.g., drug use, incarcerations, etc.; Klausen et al., 2020; Speckhard & Shajkovci, 2018). Some studies have found a connection between a criminal past and joining a terrorist group as a redemption (Basra & Neumann, 2016). These authors observed that many European foreign fighters had experienced a shocking event or crisis that led them to reevaluate their lives and be open to radical views. Basically, jihadist ideology provided redemption from criminality while fulfilling their personal needs.

Narrative

According to the 3N model, individuals adhere to a violence-justifying narrative to restore their significance. In the case of religious terrorism, the radical interpretation of religion is the legitimizing ideology (Lobato et al., 2020). In jihadist groups, an "ideologization" of religion often occurs, centered around the vision of an ideal Islamic state

(Milla et al., 2019). These individuals tend to have little understanding of Islam before joining the group and become more religious when they meet other group members (Scull et al., 2020). In the life-course framework, the experience of religion as a turning point and as a means of restoring significance has been reported as well (Fiori et al., 2004). However, religiosity per se does not seem to be particularly relevant to the radicalization process (Kamenowski et al. 2021; Ünal & Ünal, 2018; Wolfowicz et al., 2021). Rather, evidence points at the subjective interpretation of religion and the narrative derived from it as the main driver towards extremism (Dawson, 2018; Larsen, 2020; Larsen & Jensen, 2021). The recovery of the lost significance through the adoption of the jihadist ideology has been reported in the life stories of jihadist combatants (Milla et al., 2019), and it is embedded in their decision of travelling to conflict zones (Speckhard & Shajkovci, 2018).

According to Sheikh et al. (2016), considering religious beliefs sacred and nonnegotiable also leads to more support for violence and even the willingness to die to implement the extremist ideology. Being fused with religion, this is, experiencing a visceral feeling of oneness with religious beliefs, also predicts the willingness to engage in pro-group, extremist behaviors (Gómez et al., 2020, 2021, 2022; Gómez, Vázquez & Atran, 2023; see Gómez et al., in press, for a review).

Network

The network or contact with others who endorse the same radical views is also a main component of the 3N model (Bélanger et al., 2019). The strong relational ties often formed between extremist group members, studied through the lens of identity fusion theory (Gómez et al., 2019, in press; Swann et al., 2012), have been particularly emphasized for their importance in the jihadist radicalization process (Milla et al., 2019). Moreover, individuals who establish family-like bonds with other group members are more willing to endorse extreme sacrifices on behalf of their group (Swann et al., 2014). Milla et al. (2019) found that identity fusion was strongly present in jihadists' life stories, observing that their personal identity had merged with the group identity, and they were willing to sacrifice themselves to defend their oppressed Muslim brothers.

Regarding other types of social ties, family commitment and attachment have been studied as protective factors in the radicalization process (Gómez et al., 2022). In their systematic review, Zych and Nasaescu (2022) observed that high family commitment was related to less radicalization. In turn, individuals who engage in extremist actions often distance themselves from their families (Bakker & Grol, 2015; Pemberton & Aarten, 2018). In the life-course framework, familial ties have been extensively reported as a turning point related to criminal desistance (Laub & Sampson, 1993; Salvatore & Taniguchi, 2012; Sampson & Laub, 2005). In this regard, Cid and Martí (2012) observed in the life stories of offenders sentenced to prison that when they had a partner or family supporting them outside prison, they often had narratives of redemption and compensation, manifesting their desire to change their lives and end their criminal behavior. In criminology research, incarceration and arrest are also transformative experiences linked to criminal desistance (Vignansky et al., 2018) and not necessarily to radicalization.

Limitations in the Literature

Despite these valuable results, life story studies are not exempt from limitations. For instance, Carlsson et al. (2020) acknowledged the small and likely skewed nature of their sample. Some investigations rely on open-source information or interviews with relatives, rather than direct interviews with participants (e.g., Weggemans et al., 2014). Another methodological challenge is the lack of a control group of non-radical participants, hampering the confirmation of specific key life events and turning points as exclusive indicators of radicalization, as opposed to general developmental features experienced by both radical and non-radical individuals. Moreover, current literature on autobiographical

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narratives and radicalization often neglects the analysis of turning points (e.g., Milla et al., 2019).

The Present Research

The objective was to empirically examine the transformative experiences or turning points that might be associated with Islamist radicalization. Specifically, we sought to determine whether these experiences were different among three groups of incarcerated individuals classified by the Spanish Penitentiary Institution as: 1) jihadist terrorists (individuals imprisoned because of jihadist terrorist crimes), 2) proselytizers (Muslim inmates convicted of crimes unrelated to terrorism who carry out proselytizing tasks within prison), and 3) control participants (Muslim inmates who did not exhibit any sign of radicalization). To this end, we conducted semi-structured interviews.

To achieve this goal, we focused on the turning points narrated by participants in their life stories (Laub & Sampson, 1993; Pemberton & Aarten, 2018). We expected that the content of these experiences would differ between groups. Specifically, we hypothesized that radical participants (jihadists and proselytizers) would link their turning point more often to the quest for significance, that is, the loss and subsequent recovery of meaning through their subjective experience and interpretation of the religious ideology, than non-radical participants (Bélanger et al., 2019; Larsen & Jensen, 2021; Lobato et al., 2020; Milla et al., 2019). Moreover, radical participants would be more likely to display a redemption narrative from their past, especially proselytizers, given their extended criminal record (Basra & Neumann, 2016; Klausen et al., 2020). Concerning the network component, we hypothesized that radical participants would refer more frequently to relational ties with other Muslims and less frequently to familial events when compared to control participants (Bélanger et al., 2019; Gómez et al., 2022; Milla et al., 2019; Swann et al., 2012; Zych & Nasaescu, 2022). However, in the sense that familial ties could prompt a desire for redemption from their criminal lifestyle (Cid & Martí, 2012), these could also be present in the turning points of radical participants, especially proselytizers, given that they had an extended criminal record. Finally, since all participants shared the incarceration experience, we expected that the frequency of mentioning it as a turning point would be similar among the groups (Vignansky et al., 2018).

Method

Participants

Two hundred nineteen participants were originally selected according to their penitentiary and sociodemographic characteristics from the database in the Penitentiary Information System (SIP), owned by the Spanish Penitentiary Institution. They belonged to three groups: (1) inmates convicted of jihadist terrorism (n = 68); (2) Muslim inmates involved in indoctrination activities and the dissemination of an extremist vision of Islam among other inmates, performing acts of pressure or coercion and classified by the Spanish Penitentiary Institution as proselytizers (n = 32); and (3) non-radical Muslim inmates, who were randomly selected in the same prisons as the participants from the other two groups for methodological reasons – i.e., minimizing differences in the penitentiary environment – and were not classified in any of the previous groups (control group; n = 119). The last two groups were convicted of crimes unrelated to terrorism (e.g., robbery, drug trafficking, or assault).

The present study is part of a broader project in which the participants were interviewed and subsequently answered a questionnaire (Gómez et al., 2021, 2022; Gómez, Vázquez, & Atran, 2023). From the initial sample, 71 participants (32.42%) were excluded because they answered to the questionnaire but refused to be recorded or to take part in the interview. Jihadist convicts were the most reluctant group to respond to the narrative, as only 48.5% of the initial sample ultimately agreed to participate, whereas among proselytizers and control participants, 84.4% and 72% decided to take part, respectively. Although the difference in participation between proselytizer inmates and control participants was not significant (p = .896), the differences in participation between jihadist and proselytizer inmates ($\chi^2(1) = 11.65$, p < .001, V = .341), and between jihadist inmates and control participants ($\chi^2(1) = 10.28$, p = .001, V = .235), were significant. In addition, 32 participants (21.6% of the remaining sample) were excluded from the analyses because they did not provide a clear answer to the turning point. Despite most participants were excluded from the non-radical group for this reason (25.6% vs. 14.3% of jihadist and 18.5% of proselytizer participants), the differences among groups remained non-significant (p = .357).

Table 1 includes age, serving time in prison (in months), number of entries in prison, and number of disciplinary punishments in the last year for all participants of the three groups, as well as other sociodemographic information and the self-reported religiosity of participants. Sociodemographic information was classified into broader categories to avoid the identification of participants. The self-reported religiosity was measured through a single item (i.e., "To what extent do you consider yourself a religious person?"), on a Likert scale ranging from 0 (*not religious at all*) to 6 (*very religious*).

There were no significant differences between groups in any of the variables related to penitentiary information (ps > .345). Regarding sociodemographic variables, no differences were found between groups (ps > .263), except for the country of origin. Particularly, there were more Spanish participants in the jihadist sample (33.3%) than in the non-radical sample (9.4%), and more African participants in the non-radical sample (79.7%) than in the jihadist sample (56.7%), Fisher's exact test, p = .021. The remaining differences in this variable between groups were non-significant (ps > .284). Regarding the self-reported religiosity, there were no differences across groups, F(2,109) = 0.49, p = .613, $\eta^2_p = .01$. All participants

were moderately religious and none of the means was significantly different from the mean of the scale, ps > .109.

[Insert Table 1]

The final sample consisted of 116 participants from 36 penitentiary centers: 30 convicted of jihadist terrorism, 22 proselytizers, and 64 non-radical Muslims (control group). All participants were men and Muslim, and none had a diagnosis of mental illness.

Procedure

The duration of data collection was six months. Data were gathered through semistructured interviews that were audio recorded with the participants' previous consent and quantitative questionnaires using an iPad. The interviews took place inside the penitentiary centers in a separate room where privacy was guaranteed. No prison staff were present during the interviews. Participants were thoroughly informed about the goals of the research and invited to collaborate. They acknowledged human subject protections through informed consent and were informed that their participation would not give them any penitentiary benefits (e.g., more probability to take a leave or opt for an open prison regime) neither would be detrimental for them to not participate (e.g., receive disciplinary punishment). The authorities had no access to the responses of individual prisoners (for more details, see Gómez et al. 2021, 2022; and Gómez, Vázquez & Atran, 2023). The research was approved by the Ethics Committee of the Universidad Nacional de Educación a Distancia (UNED), Spain (Approval Number: 2019-0108).

Measures

The data collection was conducted in two stages. First, interviews were conducted by a team of 33 interviewers (14 men and 19 women) previously trained in the task. Participants were asked to describe a normal day in their prison life to facilitate rapport between the interviewer and interviewee. Next, they were asked to relate their life story from childhood to the present, describing their "life chapters" and a "key scene" that represented a transformative experience that changed their life (turning point), based on the life story interview from McAdams (1985). The total duration of the interviews ranged from 30 to 60 minutes. In the second stage, data were collected through a survey using the offline version of the ARTIS Magi-Wise survey platform (see Gómez et al., 2021, 2022; Gómez, Vázquez, & Atran, 2023). From all the measures included in the questionnaire, only self-reported religiosity was considered for this study as a control variable. Additionally, penitentiary and sociodemographic information was gathered from the inmates' penitentiary files.

Data analyses

Content Analysis

The main goal of this analysis was to develop a system of categories that could capture the meaning of the transformative experience -turning point- mentioned by participants. Therefore, the descriptions of the turning point were transcribed and analyzed. Following Knott et al. (2022; see also Gómez et al., 2022), we used a mixed approach that combined inductive and deductive logic as an iterative process in the different phases of the analyses. First, from an exploratory perspective, we conducted an initial content analysis following an inductive approach. Then, we related emerging themes from the narrative to previous theories through a deductive approach and refined them to the final themes. Once the final categorical system was created, the coding process followed several cycles. In the first cycle, two judges read the transcriptions and divided all quotes that contained more than one predominant idea (unit of analysis). Some participants mentioned more than one turning point, assigning in these cases more than one code, one for each unit of analysis. Therefore, while the codes were not exclusive in terms of limiting each participant to a single turning point, they were exclusive in the sense that each unit of analysis from the turning points was categorized under a single code. In the second cycle, two independent judges read all the

quotes and coded each of them in a single category. The initial inter-rater Cohen's kappa coefficient was .92. Disagreements between judges were debated with a third judge, modifying the coding when deemed necessary. The final inter-rater Cohen's kappa coefficient was .95. Non-solved disagreements between judges were coded as "others" for analysis.

The final codebook included six categories. Each category is described below, along with some examples. For each example, we label the groups as J (Jihadist), P (Proselytizer), and C (Control).

Criminal Activity. Participants talked about how they had experienced the entry and/or stay in prison ("When I got into prison, now I'm better than before," C99); events related to substance abuse, whether it was about the abuse itself or starting/quitting the abuse ("When I realized I couldn't keep on living hooked on drugs," J57); or crime-related experiences, such as committing a crime or being arrested ("When I was being arrested and a gun was pointed at me," J48).

Relational Ties. Participants talked about shared experiences with friends, other Muslims, or jihadists ("In high school, during puberty. Because of my friends. A lot of friends fell into drugs... I didn't," J5).

Ideological Ties. Participants referred to experiences related to religion or jihad, especially how it became an important topic in their lives with positive consequences ("Reading books. Books of the Prophet, about the Prophet's life, how he behaved, how he was. And the Quran. The interpretation. Reading those books changed me inside," J13).

Familial Ties. Participants talked about family or partner-related experiences, such as getting married or divorced ("Five years ago, I got married. This woman I have, may God bless her," C92), becoming a father ("When my children were born. The sense of responsibility appeared. They made me happy," C32), or losing a close relative ("The death

of my parents. In that moment was when I felt the change. The way of thinking, of interacting with people. Everything," P20).

Socioeconomic Status Change. Participants referred to immigration experiences, such as the trip from their country of origin to Spain, the contrast between their life in their home countries and their life in Spain, or their struggles adapt to the new culture ("When I came to Spain, because my standard of living improved," C42); changes in their socioeconomic situation, positive or negative ("When I started earning money with my job and I realized I was at last a responsible adult," J60); or educational milestones, like obtaining a diploma or attending to school or university ("When I got into prison and started studying and learning Spanish," C95).

Others. This category was created to include answers that did not fit in any of the previous categories.

ATLAS.ti software (version 23.2.1) was used to support the coding process.

Statistical Analyses

First, we compared the three groups in the relevant penitentiary and sociodemographic variables. One-way ANOVA tests were used for continuous variables and chi-square tests for categorical information. Second, we used a chi-square test of homogeneity to examine the proportion of presence and absence of each category at the turning point between groups (presence = 1, absence = 0). Then, we performed post-hoc pairwise comparisons using chi-square tests. Third, we performed a Cochran's Q test to examine intra-group differences between categories, followed by post-hoc pairwise comparisons through McNemar tests. In all analyses of categorical data, we provide the results of Fisher's exact test when the expected frequencies were less than five or more than 20% of the cases (Kim, 2017). Since we regarded participants as cases, it was possible for a participant to be present in more than one category. All pairwise comparisons were conducted using Bonferroni correction. The statistical package SPSS v. 27 was used for all analyses.

Results

Content Analysis

The content analysis resulted in the six categories previously described. The percentage of appearance of each category is as follows: 60.3% of participants mentioned criminal activity, 1.7% mentioned relational ties, 6.0% mentioned ideological ties, 18.1% mentioned familial ties, 12.9% mentioned socioeconomic status change, and 9.5% mentioned others.

Turning Point

Intergroup Analyses

Considering the coding of the turning points, we conducted chi-square tests of homogeneity to test whether any of the categories were mentioned more often by any group. Significant differences were found in ideological and familial ties (see Table 2). No significant differences were found in relational ties, socioeconomic status change and criminal activity categories. The "others" category was also equally present across the three groups. Given that and considering that the "others" category included a wide array of unrelated factors, we decided to exclude it from the remaining analyses.

[Insert Table 2]

Pairwise comparisons were conducted between groups to further explore the differences (see Figure 1). Jihadist participants mentioned ideological ties as a turning point, while control participants never did, $\chi^2(1) = 5.94$, p = .015, V = .31. Specifically, they considered religion as a source of great change in their lives, regarded it as something that allowed them to gain significance, and highlighted the relevance of experiences of religious reinterpretation or "rediscovery". This "rediscovery" usually came along with positive consequences for their futures, helping them leave behind a harmful lifestyle.

[Insert Figure 1]

For instance, Participant J11 said his turning point was: "When I became a Muslim. I was in Ceuta, awakened by the Imam's call from a mosque. From that moment on, I promised myself I would not drink alcohol anymore."

Participant J13 also talked about a positive change in his life thanks to Islam, but this time in prison:

This time I have spent in prison, I have changed, I am not the same I used to be. (...) I have been listening to inmates who have spent more time than I have in prison, how they spent their lives in prison. And they are here because of it, jihadism. (...) I have also read the books... (...) Books of the Prophet, of the Prophet's life, how he behaved, how he was. And the books... The Quran. The Quran... the interpretation. Reading those books changed me inside. (J13)

Nevertheless, two jihadist participants also described their process of adhering to an extremist ideology without linking it to delinquency. For instance, one of them expressed how his conversion to Islam led to a significant change in his search for meaning in life:

There was a change for me when forming myself as a person. The spiritual part had an influence. Because I became a Muslim here in Spain. (...) One way or another, an individual always searches for what they are in this life. There is always a search, one way or another. (...) In my family they were orthodox, so this topic was a little bit of a taboo. (...) I was discovering the topic of Islam step by step. (J129)

Both jihadist and proselytizer participants mentioned ideological ties as a turning point with the same frequency (p = .999). Furthermore, proselytizers mentioned ideological ties more often than control participants, $\chi^2(1) = 5.45$, p = .020, V = .32. Proselytizers also viewed religion as a positive change in their lives and as an aid to leave their harmful past behind. Mostly, this inclination toward religion and transformation was based on a desire for redemption, and unlike jihadist participants, they did not separate their ideologization of religion from delinquency. For instance, one participant narrated how he was able to discern right from wrong when he started reading the Quran in prison and fearing potential punishments:

Thanks to God, I have changed... (...) Before, I used to get into fights a lot. Now, I don't have any disciplinary punishments or anything because I know how it is. What made me change was this: reading the Quran a lot. Because... threats with the punishment of fire... that really scares me, the fire. And that made me change a lot. It [the Quran] talks a lot about fire, about very harsh punishments, and that made me change a lot. Not robbing people, not hurting people, not speaking badly to people, not looking at people... If you can help people, then help them. Everything that is good, do it; what is bad, don't do it. That's what made me change. Because before, I couldn't distinguish between both things. Before, I could only go forward. I could only go to the evil. (P21)

Regarding familial ties, proselytizer participants talked about events related to family or intimate partners as significant turning points more often than control participants did, $\chi^2(1) = 5.16$, p = .023, V = .24. However, when compared to proselytizers, jihadist participants barely referred to this kind of ties ($\chi^2(1) = 9.24$, p = .002, V = .47), although there were no significant differences between them and control participants, p = .122. Proselytizer participants regarded the death of a close relative as a moment of change (e.g., "The death of my parents. In that moment was when I felt the change. The way of thinking, of interacting with people. Everything." P20), when they saw the suffering of relatives or intimate partners due to their imprisonment (e.g., "What I went through with my wife is also my turning point in life. My wife [...] came the first time [to prison], she trusted me, she was crying and all." P17), and when their children were born. They tended to regard these events as something that made them realize the responsibility they bear within their families, thus making them want to leave behind harmful habits and avoid more suffering for their families. For instance, one participant narrated how his mother reproached him of his bad behavior, which led him to change:

My mom told me: "What's going on with you now? Are you going to continue committing crimes, robbing, entering prison, and then stay there for who knows how many years? What, aren't you going to start a family, aren't you going to have an honest job, aren't you going to have children? If you keep going on like this, you will end up killing me, always going in and out [prison]." So, I stopped there... Four or five years ago I quit everything: joints, coke, everything. (P1)

Another participant talked about how a call from his family led him to decide that he was going to quit his criminal lifestyle:

There was something, I don't remember what it was. A call, I think. A call from my family. There was something and it made me change. I keep thinking that is when I was the most fucked up, and, at that moment, I changed and said: you are not going to face life this way, you are going to be better than you were before entering [into prison]. (P63)

Last, proselytizer participants did not mention events related to a socioeconomic status change as a turning point, whereas jihadist participants (Fisher's exact test, p = .033, V = .31) and non-radical convicts (Fisher's exact test, p = .104) did. There were no differences between jihadist and non-radical participants in socioeconomic status change (p = .326). Participants from these two groups mainly talked about getting or losing a job (e.g., "When I started working at 15-16 and started helping my mother," J8; "When I started earning money with my job and I realized I was at last a responsible adult," J60), finishing their studies and obtaining their diploma (e.g., "When I turned 16. I graduated from secondary school, and I got out of the juvenile center," C45), or when they came to Spain from their home country (e.g., "When I came to Spain, because my standard of living improved," C42). However, when jihadist participants talked about socioeconomic status, they mainly referred to positive changes, whereas control participants talked about positive and negative changes equally. Regarding immigration topics, jihadist participants expressed their arrival to Spain in more negative terms ("I will go back to my country when this is over. I will go back, I will leave. With great regret, because I came here when I was 17...", J16). In contrast, non-radical participants talked about their arrival as a positive change in their status and lives ("Here in Spain, you can make a future", C108).

Intra-group Analyses

We analyzed the intra-group differences between categories (see Figure 2).

[Insert Figure 2]

Jihadists. The Cochran's Q test revealed that the distribution of the different categories was not homogeneous, $\chi^2(4) = 22.76$, p < .001. Events related to criminal activity were more mentioned as a turning point than familial and relational ties (ps < .020). The remaining categories were equally mentioned, ps > .190.

Proselytizers. The Cochran's Q test revealed that the distribution of the different categories was not homogeneous, $\chi^2(4) = 25.83$, p < .001. Events related to criminal activity were also more mentioned as a turning point than socioeconomic status change and relational ties (ps = .005), but equally mentioned than ideological and familial ties (ps > .350). Familial ties, in turn, were more mentioned than socioeconomic status change and relational ties, ps = .039. The remaining categories were equally mentioned, ps > .999.

Non-radicals. The Cochran's Q test indicated that the different categories were not homogeneously distributed, $\chi^2(4) = 104.77$, p < .001. Events related to criminal activity were more mentioned as a turning point than the rest of categories, ps < .001. Socioeconomic status change and familial ties were equally present (p = .999), and both were more mentioned than ideological and relational ties (ps < .019).

Discussion

This study aimed to explore significant transformative experiences (turning points) in the lives of radical individuals (convicts of jihadist terrorism and proselytizers), as well as non-radical Muslims incarcerated in Spanish prisons. Additionally, we wanted to compare the content of the turning points based on the group of participants to look for differences. To that end, we conducted life story interviews in prison with participants from the three groups and asked them to choose a significant turning point in their lives.

The content analysis revealed five main topics: criminal activity, relational ties, ideological ties, familial ties, and socioeconomic status change.

Turning points related to criminal activity were mainly focused on incarceration or arrest as transformative experiences, consistent with other life story studies with inmates in general (e.g., Vignansky et al., 2018). No significant differences were found between groups, supporting that incarceration or arrest is a transformative experience regardless of the radicalization level.

Regarding events related to relational ties, participants discussed personal connections with other Muslims or radical individuals. This strong bond between group members has been reported in terrorist organizations (Milla et al., 2019) and its consequences in the disposition to endorse extreme behavior have been thoroughly studied as well (Bélanger et al., 2019; Swann et al., 2014). Although no significant differences were found between groups in this category, only jihadist participants mentioned them. Despite the importance of these ties, previous research in Spanish prisons has shown that jihadists tend to express a higher commitment to religion than to their group – the Muslim community - (Gómez et al., 2022). The lack of differences could also be due to the online nature of many of the terrorist

crimes committed in Spain during the last years (Núñez, 2022), and therefore, our participants may have not established a solid, in-person network.

One of the most relevant findings concern ideological ties, where the results revealed a reinterpretation of religion as a turning point in the life of radical individuals, which aligns with previous findings (Milla et al., 2019; Scull et al., 2020; Speckhard & Shajkovci, 2018). Similarly, the search for meaning was often present in turning points related to ideological ties. Literature has consistently shown that the need for significance plays a crucial role in the radicalization process (Kruglanski et al., 2018; Lobato et al., 2023; Webber et al., 2018), and in jihadist extremism, it is deeply embedded in the life stories of individuals who eventually join the group (Milla et al., 2019).

In fact, both jihadist and proselytizer inmates mentioned ideological ties more frequently than control participants, who did not mention this category at all. Radical participants viewed the discovery or reinterpretation of religion as a significant, transformative point in their lives, often linked to redeeming from a criminal past, and allowing them to find a new purpose and meaning in their lives (Basra & Neumann, 2016; Kruglanski et al., 2018). This difference between radical and control participants indicates that the experience of religion as a turning point and as a means of restoring significance, a phenomenon that has been reported in the life-course framework (Fiori et al., 2004), could lead to extremism. However, some jihadist participants talked about their adherence to extremist beliefs without a redemption script, whereas all proselytizers based their ideological narratives on their desire to leave a criminal lifestyle behind. This points at their potentially different pathways to extremism. In addition, the lack of differences among groups in their self-reported level of religiosity confirms that it is the ideological interpretation of religion and not the religiosity per se the key factor in explaining radicalization (Kamenowski et al. 2021; Larsen & Jensen, 2021; Wolfowicz et al., 2021).

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Regarding familial ties, participants mainly referred to events such as becoming a father, getting married, or the death of parents. Proselytizers mentioned family-related events as turning points more often than non-radical participants and jihadists, particularly focusing on how ties to their families influenced them to abandon their previous criminal lifestyle. These events also tend to be present in the life stories of convicts and offenders as a turning point (Cid & Martí, 2012), especially linked to criminal desistance (Laub & Sampson, 1993; Salvatore & Taniguchi, 2012). Given that proselytizers start their pathway to radicalization with a more extensive criminal record (Santos-Hermoso et al., 2021), this rupture point might be a trigger for adhering to an extremist religious ideology that helps them leave their criminal past behind and thus compensate their families and partners for their support and suffering (Cid & Martí, 2012). Concerning jihadist participants, familial ties do not seem a significant turning point to them. This aligns with the findings of extremist individuals distancing from their families as they become more radical (Bakker & Grol, 2015; Zych & Nasaescu, 2022).

Finally, the change in socioeconomic status included events such as achieving educational milestones, immigration, or changes in the economic status, which have been reported to influence the process of radicalization as a source of loss of significance (e.g., Emmelkamp et al., 2020; Süß & Aakhunzzada, 2019). These events were more mentioned by jihadist participants, whereas proselytizers barely mentioned them. Therefore, these events do not seem to be important for individuals who adhere to the jihadist ideology after engaging in criminal activities unrelated to terrorism. For this group, the source of the loss of meaning could be their criminal record rather than the change in their socioeconomic status (Basra & Neumann, 2016). However, non-radical and jihadist participants, while showing no differences in proportion, talked about these events in a different direction. Jihadists regarded their changes in socioeconomic status as positive, whereas non-radicals talked about positive and negative changes equally. And regarding their immigration experiences, jihadist participants were more negative than non-radical participants, despite a third of them having been born in Spain. Apparently, their perception of lower status is rooted in different areas, and jihadists feel more marginalized in Spain than controls (Lyons-Padilla et al., 2015).

Overall, this research enhances our understanding of the jihadist radicalization process and elaborates on the importance of studying the life stories and, particularly, the turning points of extremist individuals. To the best of our knowledge, turning points in the context of violent extremism have received little attention, despite their relevance for understanding criminal pathways according to the life-course theory (Carlsson, 2012; Laub & Sampson, 1993). This study establishes a precedent for an exploratory approach to turning points in the life stories of a sample of incarcerated radical individuals, underscoring the importance of the religious ideology, family, and the quest for significance.

This research also contributes to the debate on the role of religion in the radicalization process, suggesting that the level of religiosity, per se, is not relevant, but rather the subjective reinterpretation and experience of religious beliefs as a pivotal change for the individual. Last, our study has a fair sample of radical participants, some of whom committed actual terrorist crimes and have a prison sentence. This is not usual in research in the extremism field, due to the difficulty of accessing these samples and the resources needed to carry out in-depth face-to-face interviews (Atran et al., 2017; Gómez, Vázquez, Chinchilla, et al., 2023).

In the applied field, these findings can be used to improve risk assessment tools inside prison and help to tailor intervention programs for both jihadist convicts and inmates who carry out proselytizing tasks (Secretaría General de Instituciones Penitenciarias, 2023). In Spain, an instrument to detect the risk of jihadist violent extremism within prisons has been developed, and it underscores the importance of identifying the attempts of recruitment and indoctrination from the inmates (González-Álvarez et al., 2022). According to our results, the experience of ideological ties to religion as a turning point can differentiate radical individuals from Muslim, non-radical inmates; whereas experiencing familial ties as a turning point can be used to identify individuals who might be prone to radicalize inside prison and who could influence and coerce other inmates into extremist practices.

Nonetheless, this study is not exempt from limitations. First, our final sample, although larger than in other studies, is still small, and some of the participants did not describe a turning point and were excluded from the analyses. Second, our control measure of religiosity was vague and might be open to subjective interpretation. Future research should be based on a specific definition of religiosity or assess its different dimensions (Kamenowski et al., 2021; Wolfowicz et al., 2021). Third, we must be wary of potential social desirability among radical participants when talking about their life stories, since they are under constant surveillance in prison and their responses might be biased. However, despite this limitation, differences were found between radical and non-radical participants. Fourth, nationality is not equivalent between groups, which might have introduced some bias in our results, and we did not control for socioeconomic level nor for prior prison sentences. And last, our proselytizer and control participants have a criminal record unrelated to jihadism. Thus, we must be wary of generalizing these findings to the general, non-criminal population. Future studies should explore transformative experiences in radical samples outside prison.

In conclusion, the present study provides empirical evidence of the importance of familial events and ideological ties to religion as turning points in the lives of radical individuals. These ideological ties are intertwined with the quest for significance, that is, the loss of personal meaning and the subsequent recovery of it through the reinterpretation of religion for both jihadist and proselytizer participants, while familial ties are connected to the

desire for redemption from a criminal past only for proselytizer participants. It also supports the idea of the level of religiosity not being a relevant concept to explain the process of jihadist radicalization.

References

- Atran, S., Axelrod, R., Davis, R., & Fischhoff, B. (2017). Challenges in researching terrorism from the field. *Science*, 355(6323), 352-354. https://doi.org/10.1126/science.aaj2037
- Bakker, E., & Grol, P. (2015). Motives and considerations of potential foreign fighters from the Netherlands. International Center for Counter-Terrorism. http://www.jstor.org/stable/resrep17484
- Basra, R., & Neumann, P. R. (2016). Criminal pasts, terrorist futures: European jihadists and the new crime-terror nexus. *Perspectives on Terrorism*, 10(6), 25-40. https://www.jstor.org/stable/26297703
- Bélanger, J. J., Moyano, M., Muhammad, H., Richardson, L., Lafrenière, M. A. K., McCaffery, P.,
 Framand, K., & Nociti, N. (2019). Radicalization leading to violence: A test of the 3N model. *Frontiers in Psychiatry*, 10, 42. https://doi.org/10.3389/fpsyt.2019.00042
- Carlsson, C. (2012). Using «turning points» to understand processes of change in offending: Notes from a Swedish study on life courses and crime. *British Journal of Criminology*, *52*(1), 1-16. https://doi.org/10.1093/bjc/azr062
- Carlsson, C., Rostami, A., Mondani, H., Sturup, J., Sarnecki, J., & Edling, C. (2020). A life-course analysis of engagement in violent extremist groups. *The British Journal of Criminology*, 60(1), 74-92. https://doi.org/10.1093/bjc/azz048
- Cid, J., & Martí, J. (2012). Turning points and returning points: Understanding the role of family ties in the process of desistance. *European Journal of Criminology*, 9(6), 603-620. https://doi.org/10.1177/1477370812453102
- Coolsaet, R. (2016). Facing the fourth foreign fighters wave: What drives Europeans to Syria, and to Islamic state? Insights from the Belgian case. *Egmont-Royal Institute for International Relations*, 81, 48. http://hdl.handle.net/1854/LU-7125403

- Copeland, S. (2019). Telling stories of terrorism: A framework for applying narrative approaches to the study of militant's self-accounts. *Behavioral Sciences of Terrorism and Political Aggression*, *11*(3), 232-253. https://doi.org/10.1080/19434472.2018.1525417
- Dawson, L. (2018). Debating the role of religion in the motivation of religious terrorism. Nordic Journal of Religion and Society, 31(2), 98-117. https://doi.org/10.18261/issn.1890-7008-2018-02-02
- Elder, G. H. (1998). The life course as developmental theory. *Child Development*, 69(1), 1-12. https://doi.org/10.1111/j.1467-8624.1998.tb06128.x
- Emmelkamp, J., Asscher, J. J., Wissink, I. B., & Stams, G. J. J. (2020). Risk factors for (violent) radicalization in juveniles: A multilevel meta-analysis. *Aggression and Violent Behavior*, 55, 101489. https://doi.org/10.1016/j.avb.2020.101489
- European Commission. (2020). A Counter-Terrorism Agenda for the EU: Anticipate, Prevent, Protect, Respond. https://home-affairs.ec.europa.eu/system/files/2020-12/09122020_communication_commission_european_parliament_the_council_eu_agenda_c ounter_terrorism_po-2020-9031_com-2020_795_en.pdf
- Fiori, K. L., Hays, J. C., & Meador, K. G. (2004). Spiritual turning points and perceived control over the life course. *The International Journal of Aging and Human Development*, 59(4), 391-420. https://doi.org/10.2190/KBXL-18W0-FPJ4-F1GY
- Gómez, A., Atran, S., Chinchilla, J., Vázquez, A., López-Rodríguez, L., Paredes, B., Martínez, M.,
 Blanco, L., Alba, B., Bautista, H., Fernández, S., Pozuelo-Rubio, F., González-Álvarez, J. L.,
 Chiclana, S., Valladares-Narganes, H., Alonso, M., Ruíz-Alvarado, A., López-Novo, J. L., &
 Davis, R. (2022). Willingness to sacrifice among convicted Islamist terrorists versus violent
 gang members and other criminals. *Scientific Reports*, *12*(1), 2596.
 https://doi.org/10.1038/s41598-022-06590-0

Gómez, Á., Bélanger, J. J., Chinchilla, J., Vázquez, A., Schumpe, B. M., Nisa, C. F., & Chiclana, S.

(2021). Admiration for Islamist groups encourages self-sacrifice through identity fusion. *Humanities and Social Sciences Communications*, 8(1), 54. https://doi.org/10.1057/s41599-021-00734-9

- Gómez, A., Chinchilla, J., Vázquez, A., López-Rodríguez, L., Paredes, B., & Martínez, M. (2020).
 Recent advances, misconceptions, untested assumptions, and future research agenda for identity fusion theory. *Social and Personality Psychology Compass*, *14*(6), e12531.
 https://doi.org/10.1111/spc3.12531
- Gómez, A., López-Rodríguez, L., Sheikh, H., Ginges, J., Wilson, L., Waziri, H., Vázquez, A., Davis, R., & Atran, S. (2017). The devoted actor's will to fight and the spiritual dimension of human conflict. *Nature Human Behavior*, *1*, 673-679. https://doi.org/10.1038/s41562-017-0193-3
- Gómez, Á., Vázquez, A., Alba, B., Blanco, L., Chinchilla, J., Chiclana, S., & Swann, W.B. (in press). Feeling understood fosters identity fusion. *Journal of Personality and Social Psychology: Interpersonal Relations and Group Processes*.
- Gómez, Á., Vázquez, A., & Atran, S. (2023). Transcultural pathways to the will to fight. Proceedings of the National Academy of Sciences, 120(24), e2303614120. https://doi.org/10.1073/pnas.2303614120
- Gómez, Á., Vázquez, A., Blanco, L., & Chinchilla, J. (in press). The role of identity fusion in violent extremism. In Obaidi, M. & Kunst, J. (Eds.), *The Cambridge handbook of the psychology of violent extremism*. Cambridge University Press.
- Gómez, Á., Vázquez, A., Chinchilla, J., Blanco, L., Alba, B., Chiclana, S., & González-Álvarez, J.
 L. (2023). Why is it so difficult to investigate violent radicalization? *The Spanish Journal of Psychology*, 26, e7. https://doi.org/10.1017/SJP.2023.2
- Gómez, Á., Vázquez, A., López-Rodríguez, L., Talaifar, S., Martínez, M., Buhrmester, M. D., &
 Swann, W. B. (2019). Why people abandon groups: Degrading relational vs collective ties
 uniquely impacts identity fusion and identification. *Journal of Experimental Social*

Psychology, 85, 103853. https://doi.org/10.1016/j.jesp.2019.103853

- González-Álvarez, J. L., Santos-Hermoso, J., Gómez, Á., López-Novo, J. L., Buquerín-Pascual, S., Pozuelo-Rubio, F., Fernández-Gómez, C., & Chiclana, S. (2022). A theoretical, empirical, and methodologically based instrument to assess the risk of violent jihadist radicalization in prisons: The DRAVY-3. *Terrorism and Political Violence*. https://doi.org/10.1080/09546553.2022.2145194
- Grysman, A., & Hudson, J. A. (2010). Abstracting and extracting: Causal coherence and the development of the life story. *Memory*, 18(6), 565-580. https://doi.org/10.1080/09658211.2010.493890
- Helfgott, J. B., Gunnison, E., Sumner, J., Collins, P. A., & Rice, S. K. (2020). "If someone would have showed me": Identifying pivotal points in pathways to crime and incarceration through prisoner self-narratives. *International Journal of Offender Therapy and Comparative Criminology*, 64(6-7), 609-634. https://doi.org/10.1177/0306624X19867562
- Hockey, D. (2016). Narrative theory applied to the autobiographies of three life-course offenders. *SAGE Open*, *6*(3), 1-14. https://doi.org/10.1177/2158244016658934
- Horgan, J. (2008). From profiles to pathways and roots to routes: Perspectives from psychology on radicalization into terrorism. *The Annals of the American Academy of Political and Social Science*, 618, 80-94. https://www.jstor.org/stable/40375777
- Horgan, J. G. (2009). Walking away from terrorism. Accounts of disengagement from radical and extremist movements. Routledge. https://doi.org/10.4324/9780203874738
- Kamenowski, M., Manzoni, P., Haymoz, S., Isenhardt, A., Jacot, C., & Baier, D. (2021). Religion as an influencing factor of right-wing, left-wing and Islamist extremism. Findings of a Swiss youth study. *PLOS ONE*, *16*(6), e0252851. https://doi.org/10.1371/journal.pone.0252851
- Kanol, E. (2022). The role of socioeconomic marginalization in the radicalization of jihadi foreign fighters from Europe. *Studies in Conflict & Terrorism*, 1-24.

https://doi.org/10.1080/1057610X.2022.2153504

- Kim, H. Y. (2017). Statistical notes for clinical researchers: Chi-squared test and Fisher's exact test. *Restorative Dentistry & Endodontics*, 42(2), 152–155. 10.5395/rde.2017.42.2.152
- Klausen, J., Libretti, R., Hung, B. W., & Jayasumana, A. P. (2020). Radicalization trajectories: An evidence-based computational approach to dynamic risk assessment of "homegrown" jihadists. *Studies in Conflict & Terrorism*, 43(7), 588-615. https://doi.org/10.1080/1057610X.2018.1492819
- Knott, E., Rao, A. H., Summers, K., & Teeger, C. (2022). Interviews in the social sciences. *Nature Reviews Methods Primers*, *2*(1), 73. https://doi.org/10.1038/s43586-022-00150-6
- Kruglanski, A., Jasko, K., Webber, D., Chernikova, M., & Molinario, E. (2018). The making of violent extremists. *Review of General Psychology*, 22(1), 107-120. https://doi.org/10.1037/gpr0000144
- Kruglanski, A. W., Gelfand, M. J., Bélanger, J. J., Sheveland, A., Hetiarachchi, M., & Gunaratna, R. (2014). The psychology of radicalization and deradicalization: How significance quest impacts violent extremism. *Political Psychology*, *35*(S1), 69-93. https://doi.org/10.1111/pops.12163
- Larsen, J. F. (2020). The role of religion in Islamist radicalization processes. *Critical Studies on Terrorism*, *13*(3), 396-417. https://doi.org/10.1080/17539153.2020.1761119
- Larsen, J. F., & Jensen, S. Q. (2021). Everyday religion and radical Islamism a contribution to theorizing the role of religion in radicalization studies. *Studies in Conflict & Terrorism*, 46(12), 2521-2537. https://doi.org/10.1080/1057610X.2021.1929056
- Laub, J. H., & Sampson, R. J. (1993). Turning points in the life course: Why change matters to the study of crime. *Criminology*, 31(3), 301-325. https://doi.org/10.1111/j.1745-9125.1993.tb01132.x
- Lobato, R. M., Moyano, M., Bélanger, J. J., & Trujillo, H. M. (2020). The role of vulnerable

environments in support for homegrown terrorism: Fieldwork using the 3N model. *Aggressive Behavior*, 47(1), 50-57. https://doi.org/10.1002/ab.21933

Lobato, R. M., García-Coll, J., Martín-Criado, J. M., & Moyano, M. (2023). Impact of psychological and structural factors on radicalization processes: A multilevel analysis from the 3N model. *Psychology of Violence*, *13*(6), 479–487. https://doi.org/10.1037/vio0000484

Lyons-Padilla, S., Gelfand, M. J., Mirahmadi, H., Farooq, M., & Van Egmond, M. (2015). Belonging nowhere: Marginalization & radicalization risk among Muslim immigrants. *Behavioral Science & Policy*, 1(2), 1-12. https://doi.org/10.1177/237946151500100202

- McAdams, D. P. (1985). *Power, Intimacy, and the Life Story: Personological Inquiries Into Identity.* Guilford Press.
- McAdams, D. P. (2008). Personal narratives and the life story. In John, O. P., Robins, R. W. & Pervin, L. A. (Eds.), *Handbook of personality: Theory and research* (3rd ed., pp. 242–262). The Guilford Press.
- McAdams, D. P. (2018). Narrative identity: What is it? What does it do? How do you measure it? *Imagination, Cognition and Personality*, *37*(3), 359-372. https://doi.org/10.1177/0276236618756704
- McCabe, A., & Dinh, K. (2018). High points, low points, turning points: Life stories of Cambodian American youth. *Journal of Southeast Asian American Education and Advancement*, 13(1). https://doi.org/10.7771/2153-8999.1162
- McLean, K. C., & Pratt, M. W. (2006). Life's little (and big) lessons: Identity statuses and meaningmaking in the turning point narratives of emerging adults. *Developmental Psychology*, 42(4), 714-722. https://doi.org/10.1037/0012-1649.42.4.714
- Melde, C., & Esbensen, F. (2011). Gang membership as a turning point in the life course. *Criminology*, 49(2), 513-552. https://doi.org/10.1111/j.1745-9125.2011.00227.x

- Milla, M. N., Putra, I. E., & Umam, A. N. (2019). Stories from jihadists: Significance, identity, and radicalization through the call for jihad. *Peace and Conflict: Journal of Peace Psychology*, 25(2), 111-121. https://doi.org/10.1037/pac0000371
- Moeller, M. J., & Scheithauer, H. (2022). Developmental and biographical issues in radicalization pathways: A comparative case analysis of homegrown German convicts of Islamist terrorismrelated offenses. *Terrorism and Political Violence, 34*, 1-20. https://doi.org/10.1080/09546553.2022.2139689
- Nawaz, F. (2024). Socioeconomic hardships, religiosity, and radicalization: A non-linear exploration. *Cogent Social Sciences*, 10(1), 2286042. https://doi.org/10.1080/23311886.2023.2286042
- Núñez, F. (2022). Veinte años de terrorismo yihadista a través de la jurisprudencia de la Audiencia
 Nacional y del Tribunal Supremo (desde el 1 de enero de 2001 hasta el 31 de diciembre de 2020). *Revista de Derecho Penal y Criminología*, 28(28).
 https://doi.org/10.5944/rdpc.28.2022.34071
- Pedersen, W., Vestel, V., & Bakken, A. (2018). At risk for radicalization and jihadism? A population-based study of Norwegian adolescents. *Cooperation and Conflict*, 53(1), 61-83. https://doi.org/10.1177/0010836717716721
- Pemberton, A., & Aarten, P. G. M. (2018). Narrative in the study of victimological processes in terrorism and political violence: An initial exploration. *Studies in Conflict & Terrorism*, 41(7), 541-556. https://doi.org/10.1080/1057610X.2017.1311110
- Rink, A., & Sharma, K. (2016). The determinants of religious radicalization: Evidence from Kenya. Journal of Conflict Resolution, 62(6), 1229-1261. https://doi.org/10.1177/0022002716678986
- Salvatore, C., & Taniguchi, T. A. (2012). Do social bonds matter for emerging adults? *Deviant Behavior*, 33(9), 738-756. https://doi.org/10.1080/01639625.2012.679888

Sampson, R. J., & Laub, J. H. (2005). A life-course view of the development of crime. The ANNALS

of the American Academy of Political and Social Science, 602(1), 12-45. https://doi.org/10.1177/0002716205280075

- Santos-Hermoso, J., González-Álvarez, J. L., Macía Vázquez, A., Pozuelo Rubio, F., & Chiclana, S. (2023). Jihadist extremism in Spanish prisons: characterisation of the inmates linked to jihadist radicalisation and analysis of their behaviour in prison. *Terrorism and Political Violence*, 35(4), 733-753.
- Scull, N. C., Alkhadher, O., & Alawadi, S. (2020). Why people join terrorist groups in Kuwait: A qualitative examination. *Political Psychology*, 41(2), 231-247. https://doi.org/10.1111/pops.12622
- Secretaría General de Instituciones Penitenciarias (2023). Programa de intervención en procesos de radicalización violenta de carácter yihadista. Programa DALIL (Documento penitenciario 32). Ministerio del Interior, Secretaría General Técnica.

https://www.interior.gob.es/opencms/pdf/archivos-y-documentacion/documentacion-ypublicaciones/publicaciones-descargables/institucionespenitenciarias/Programa DALIL 126230799 web.pdf

- Sheikh, H., Gómez, Á., & Atran, S. (2016). Empirical evidence for the devoted actor model. *Current Anthropology*, *57*(S13), S204-S209. https://doi.org/10.1086/686221
- Sieckelinck, S., Sikkens, E., Van San, M., Kotnis, S., & De Winter, M. (2019). Transitional journeys into and out of extremism. A biographical approach. *Studies in Conflict & Terrorism*, 42(7), 662-682. https://doi.org/10.1080/1057610X.2017.1407075
- Speckhard, A., & Shajkovci, A. (2018). 10 reasons western women seek jihad and join terror groups. Homeland Security Today.
- Süß, C. A., & Noor Baheige Aakhunzzada, A. (2019). The socioeconomic dimension of Islamist radicalization in Egypt and Tunisia. (Working Paper No. 45). PRIF Working Papers. https://nbn-resolving.org/urn:nbn:de:0168-ssoar-61467-3

- Swann, W. B., Buhrmester, M. D., Gómez, A., Jetten, J., Bastian, B., Vázquez, A., Ariyanto, A.,
 Besta, T., Christ, O., Cui, L., Finchilescu, G., González, R., Goto, N., Hornsey, M., Sharma,
 S., Susianto, H., & Zhang, A. (2014). What makes a group worth dying for? Identity fusion
 fosters perception of familial ties, promoting self-sacrifice. *Journal of Personality and Social Psychology*, *106*(6), 912-926. https://doi.org/10.1037/a0036089
- Swann, W. B., Jetten, J., Gómez, Á., Whitehouse, H., & Bastian, B. (2012). When group membership gets personal: A theory of identity fusion. *Psychological Review*, 119(3), 441-456. https://doi.org/10.1037/a0028589
- Troian, J., Baidada, O., Arciszewski, T., Apostolidis, T., Celebi, E., & Yurtbakan, T. (2019).
 Evidence for indirect loss of significance effects on violent extremism: The potential mediating role of anomia. *Aggressive Behavior*, 45(6), 691-703.
 https://doi.org/10.1002/ab.21863
- Ünal, M. C., & Ünal, T. (2018). Recruitment or enlistment? Individual integration into the Turkish Hezbollah. *Turkish Studies*, *19*(3), 327-362. https://doi.org/10.1080/14683849.2017.1379353
- Vignansky, E., Addad, M., & Himi, H. (2018). Despair will hold you prisoner, hope will set you free: Hope and meaning among released prisoners. *The Prison Journal*, 98(3), 334-358. https://doi.org/10.1177/0032885518764920
- Webber, D., & Kruglanski, A. W. (2016). Psychological factors in radicalization: A "3 N" approach.
 In G. Lafree & J.D. Freilich (Eds.), *The Handbook of the Criminology of Terrorism*, (pp. 33-46). Wiley. https://doi.org/10.1002/9781118923986.ch2
- Webber, D., Babush, M., Schori-Eyal, N., Vazeou-Nieuwenhuis, A., Hettiarachchi, M., Bélanger, J. J., Moyano, M., Trujillo, H. M., Gunaratna, R., Kruglanski, A. W., & Gelfand, M. J. (2018). The road to extremism: Field and experimental evidence that significance loss-induced need for closure fosters radicalization. *Journal of Personality and Social Psychology*, *114*(2), 270-285. https://doi.org/10.1037/pspi0000111

- Weggemans, D., Bakker, E., & Grol, P. (2014). Who are they and why do they go? The radicalisation and preparatory processes of Dutch jihadist foreign fighters. *Perspectives on Terrorism*, 8(4), 12, 100-110. https://www.jstor.org/stable/26297200
- Wolfowicz, M., Litmanovitz, Y., Weisburd, D., & Hasisi, B. (2021). Cognitive and behavioral radicalization: A systematic review of the putative risk and protective factors. *Campbell Systematic Reviews*, 17(3). https://doi.org/10.1002/cl2.1174
- Zych, I., & Nasaescu, E. (2022). Is radicalization a family issue? A systematic review of familyrelated risk and protective factors, consequences, and interventions against radicalization. *Campbell Systematic Reviews*, 18(3), e1266. https://doi.org/10.1002/cl2.1266

Table 1

Penitentiary and Sociodemographic Information of Participants of the Three Groups (N =

116)

Variable	Jihadists	Proselytizers	Non-radicals	
	M(SD)	M(SD)	M (SD)	
Age	36 (10.36)	38.05 (9.04)	36.03 (8.99)	
Serving time in prison (in months)	51.13 (50.16)	63.76 (53.89)	52.36 (46.79)	
Number of entries in prison	1.73 (1.31)	2.30 (2.47)	1.97 (1.38)	
Number of disciplinary punishments	0.69 (1.00)	2.40 (3.39)	3.07 (9.42)	
in the last year				
Self-reported religiosity ¹	3.56 (1.74)	3.24 (1.79)	3.11 (2.06)	
Variable	Jihadists	Proselytizers	Non-radicals	
	n (%)	n (%)	n (%)	
Country of origin				
Spain	10 (33.3)	3 (14.3)	6 (9.4)	
Rest of Europe and Asia	3 (10.0)	3 (14.3)	6 (9.4)	
Africa	17 (56.7)	15 (71.4)	51 (79.7)	
Others	0 (0.0)	0 (0.0)	1 (1.6)	
Marital status				
Single	15 (53.6)	8 (42.1)	31 (53.4)	
Married	11 (39.3)	8 (42.1)	21 (36.2)	
Divorced	2 (7.1)	3 (15.8)	6 (10.3)	
Education level				
Illiterate	0 (0.0)	1 (5.9)	3 (5.6)	
Non-finished primary studies	6 (27.3)	3 (17.6)	15 (27.8)	

Primary studies	6 (27.3)	10 (58.8)	19 (35.2)
Secondary studies or more	10 (45.5)	3 (17.6)	17 (31.5)

Note. Missing values were not included in the table; percentages were calculated without missing data.

¹ Scores range from 0 (*not religious at all*) to 6 (*very religious*).

Table 2

Percentage of Participants of Each Group that Mentioned Each Category in the Turning

Point (N = 116)

Category	Jihadists	Proselytizers	Controls	χ^2 (2 df)	F	р
	n (%)	n (%)	n (%)			
Criminal activity	15 (50.0)	12 (54.5)	43 (67.2)	2.90	-	.245
Relational ties	2 (6.7)	0 (0.0)	0 (0.0)	-	4.04	.100
Ideological ties	4 (13.3)	3 (13.6)	0 (0.0)	-	10.18	.004
Familial ties	1 (3.3)	9 (40.9)	11 (17.2)	12.17	-	.002
Status change	6 (20.0)	0 (0.0)	9 (14.1)	-	5.05	.070
Others	3 (10.0)	1 (4.5)	7 (10.9)	-	0.64	.831

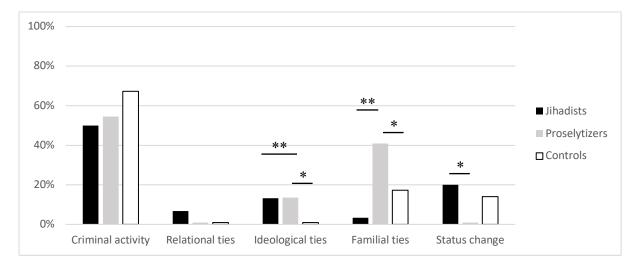
Note. Fisher's exact test was used when the expected frequencies were less than five in or

more than 20% of the cases.

Figure 1

Pairwise Comparisons of the Proportion of Participants of Each Group that Named Each Category in the Turning Point (N = 116)

Figure 1 Alt Text: Bar chart of the proportion of participants of each group that named each category as a turning point, where significant differences between groups are marked in ideological ties, familial ties, and status change.



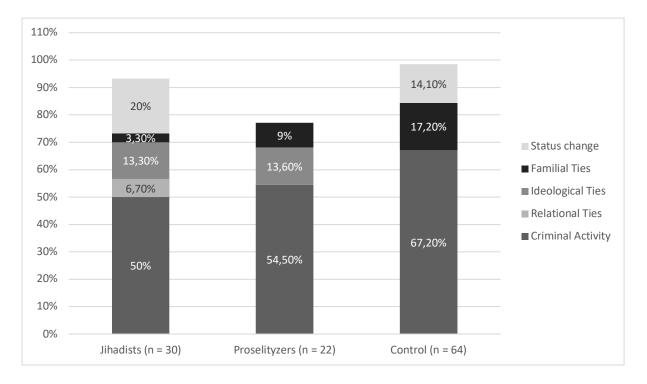
Note. Fisher's exact test was used when the expected frequencies were less than five in or more than 20% of the cases.

p* < .05; *p* < .01

Figure 2

Distribution of the Percentage of Jihadist, Proselytizer, and Control Participants that Named each Category in the Turning Point (N = 116).

Figure 2 Alt Text: Stacked bar chart of the proportion of mention of each category within each group, where criminal activity is the most mentioned category in all groups.



Note. The category "Others" was excluded from the figure.