

**“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 from the 3N model and the life-course perspective lenses. 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 self-reported 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). The factors driving individuals towards extremist political and religious beliefs, and eventually to violence, have been studied from frameworks that regard radicalization as a static process, such as the 3N model. However, recent studies from the life-course perspective highlight the importance of delving into the turning points (transformative experiences that involve a significant change in life) of radical individuals, as these provide valuable insights into the dynamic nature of the radicalization process (e.g., Pemberton & Aarten, 2018) and can help design prevention strategies.

Therefore, our goal is to examine the nature of turning points in the lives of radical individuals in Spanish prisons through the 3N model and to explore potential differences in these transformative experiences based on the level of radicalization and the criminal profile of radical individuals. With these objectives in mind, 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.

### **The 3N Model: Needs, Narratives, and Networks**

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 (Kruglanski et al., 2019; Webber and Kruglanski, 2016). This model highlights the importance of the quest for personal significance, that is, the desire to earn respect, gain positive recognition, and be someone (Kruglanski et al., 2022). According to this model, the loss of personal significance is the fundamental trigger of the process of radicalization (Kruglanski et al., 2014). When individuals face this loss (or an opportunity to gain

significance), they experience the *need* to start a quest to restore their personal significance. Significance is restored by the *network*, or, in other words, by people who are important (Kruglanski et al., 2018). At the same time, the network provides a *narrative* that indicates the means through which to achieve that significance. When this narrative is a violence-justifying ideology, extremist attitudes and behaviors are fueled (Webber et al., 2020). Thus, the network is the key element that validates and provides support for the individual's violent ideology, and at the same time provides meaning when following the precepts of the narrative (Jasko et al., 2020). Given that literature has consistently shown that the quest for significance plays a crucial role in radicalization processes (Da Silva et al., 2023; Bélanger et al., 2019; Lobato et al., 2023; Webber et al., 2018), jihadists may experience events related to the loss or recovery of meaning.

The loss of significance can be experienced due to various factors: political (Jasko et al., 2019) and social alienation (Bélanger et al., 2019; Lobato, Moyano, et al., 2020), perceived discrimination (Troian et al., 2019) and oppression (Lobato et al., 2018; Lobato, Moya, et al., 2020), traumatic experiences and economic and relational failures (Jasko et al., 2017), prison conditions (Kruglanski et al., 2016), intergroup conflict and social exclusion (Lobato, Moyano, et al., 2020), group-based relative deprivation (Obaidi et al., 2019), failure on achieving personal goals (Orehek & Kruglanski, 2018), and experiencing negative emotions (Adam-Troian et al., 2020; Jasko et al., 2020; Webber et al., 2018).

Similarly, the loss of significance can also be triggered by a personal crisis (Kruglanski et al., 2009). This crisis can emerge from an experience or event that leads individuals to reevaluate their lives and become open to radical views as a means of regaining lost significance (Klausen et al., 2020). In particular, some European and North American foreign fighters had a prolonged delinquent lifestyle (e.g., drug use, incarcerations, unemployment, etc.) that sparked their quest for significance and subsequent process of

radicalization (Crettiez & Sèze, 2022; Klausen et al., 2020; Speckhard & Shajkovci, 2018; Versteegt & Ljubic, 2018).

Following the 3N model, radical individuals adhere to a violence-justifying narrative to restore their significance. For instance, Basra and Neumann (2016) analyzed 79 European jihadist cases with criminal pasts and observed that jihadist ideology acted as a redemption narrative from their previous lifestyle. These individuals sought to leave their “sins” behind, which led them to turn to religion and become involved with jihadist groups (Rodermond & Thijs, 2023; Thijs et al., 2023). In these cases, the jihadism ideology offered atonement for crime while providing a means to satisfy the same personal needs that initially led them to criminal behavior: belonging, purpose, power, and violence (Basra & Neumann, 2016).

In jihadist groups, an “ideologization” of religion occurs, centered around the vision of an ideal Islamic State (Milla et al., 2019), legitimizing violent means to achieve this goal (Lobato, Moya et al., 2020). Thus, the recovery of the lost significance through 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). Likewise, some authors emphasize the importance of the subjective experience of religion in the radicalization process (Larsen & Jensen, 2021), especially as a mean of achieving meaningfulness after experiencing certain events related to the personal, family, or social background (Larsen, 2020). In the interviews of 20 jihadi fighters about their trajectories to extremism, Dawson and Amarasingam (2017) observed the prominence of religious and self-fulfillment motives in their discourse.

Other studies have explored the consequences of feeling deeply connected to religion. For instance, considering religious beliefs sacred and non-negotiable leads to further support for violence and even the willingness to die to implement the extremist ideology (Sheikh et al., 2016). 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; Gómez et al., in press).

However, jihadist individuals often have little understanding of Islam before joining the group and become gradually more religious through interactions with group members (Scull et al., 2020). When compared to non-terrorist Muslim convicts, jihadist inmates tend to have a shallow knowledge about Islam (Versteeg & Ljujic, 2018). Similarly, a meta-analysis showed that religious practice (e.g., frequency of attendance at places of worship) had a minimal effect on radical outcomes, whereas religious group identity and fundamentalism had a greater impact (Wolfowicz et al., 2021). Yet, given the multiple dimensions of religiosity and the different ways to measure it, the findings regarding its role in the radicalization process remain somewhat contradictory (Kamenowski et al. 2021; Ünal & Ünal, 2018). Despite these limitations, the general evidence points to the importance of the subjective experience of religion or its impact on identity rather than its practice or having a deep religious knowledge.

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; Lobato et al., 2023). 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).

Despite its empirical support, studies from the 3N model have considered the three factors as static elements whose presence gives rise to a certain degree of violent extremism. However, they have not considered the dynamism of the needs, networks and narratives. These factors are influenced by turning points, which can be a source of change in attitudes and behaviors of individuals. Thus, these studies fail to address the dynamic nature and the developmental aspects of the radicalization process (Khalil & Dawson, 2023; Taylor & Horgan, 2006). To overcome this limitation, we propose to combine the 3N model with the life-course approach. To the best of our knowledge, no prior integration of these two frameworks has been made in the literature.

### **Life-Course Perspective of the Process of Radicalization**

The life-course theory provides a framework for analyzing how life events, experiences, and individual development shape beliefs and behavior over time (Laub & Sampson, 1993). It posits that crime offending and desistance patterns are part of the same continuum, influenced by the experience of key life events as turning points (Sampson & Laub, 2005). These turning points are transformative, self-shaping experiences where individuals perceive significant changes in their lives (McAdams, 1985).

This approach has been used to explore significant biographical and developmental events in the lives of radical individuals (Sieckelinck et al., 2019), and particularly Islamist convicts (e.g., Canter et al., 2014). For instance, Moeller and Scheithauer (2022) examined 45 court files of homegrown German Islamist terrorists and observed a wide array of experiences related to family background, social networks, education, personal challenges,

physical and mental health, religion and activism, and situations of repression. Similarly, studies in the Netherlands have analyzed court files to identify significant events preceding terrorism (e.g., Thijs et al., 2023; Thijs, Rodermond, & Kleemans, 2024), highlighting behaviors related to extreme ideological beliefs, feelings of injustice, radical social networks, mental health and substance abuse issues, criminal history, religious identification, and experiencing profound triggers events, such as negative familial experiences, confrontation with death or illness, negative encounters with law enforcement, and being a victim of violence.

Within this 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 that when inmates 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.

Likewise, some studies have compared the life events of jihadist suspects with those of common offenders (Versteegt & Ljujic, 2018), the general population (Rodermond & Thijs, 2023), or the siblings of terrorist suspects who did not become extremists (Thijs, Rodermond, Kleemans, et al., 2024), finding more similar social experiences and pathways between terrorist and common offenders than with the other reference groups. In addition, in Europe and specifically in Spain, between one-third and more than a half of jihadist convicts have a previous criminal record as common delinquents (Basra & Neumann, 2017; García-Calvo & Reinares, 2016; Thijs et al., 2023). All this evidence points at the potential crime-

religious terrorism nexus, which should be included into the analysis of the pathways to extremism.

Still, while these studies provide valuable insights, they are not without limitations. On one hand, many analyze open-source information or court files (Moeller & Scheithauer, 2022; Thijs et al., 2023; Thijs, Rodermond, & Kleemans, 2024), whereas others rely primarily on interviews with relatives or professionals (e.g., Versteegt & Ljubic, 2018), instead of direct interviews with participants. This methodology hinders understanding participants' subjective experience of turning point events. And, on the other hand, studies involving interviews with radical participants often have small and skewed samples (e.g., Canter et al., 2014; Carlsson et al., 2020), which can lead to potential biases in the results.

In this line, Rodermond and Thijs (2023) emphasize the need of a mixed-method approach in this field. While turning points have received significant attention in 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 first-person narratives of the turning points in criminals (e.g., Helfgott et al., 2020; Hockey, 2016), and even fewer in radical individuals (e.g., Canter et al., 2014; Carlsson et al., 2020). The study of narratives addresses the participants' perspective and how they generate meaning, purpose and continuity from personal events integral to their identity (McAdams, 2018). This approach is essential to disentangle the psychosocial mechanisms influencing their trajectories to radicalization (Copeland, 2019; Pemberton & Aarten, 2018).

Integrating both perspectives, we argue that turning points constitute subjective experiences that can be integrated within the three factors of the 3N model. That is, these experiences can be considered as factors that generate a loss of personal significance (and the subsequent significance quest), that establish a rapprochement to an extremist narrative or ideology, or that propitiate a change in the social network with a greater proximity and

identification with extremist groups. Thus, turning points not only serve as transformative experiences, but also as triggers of these factors. This perspective, in our view, offers a more dynamic perspective on how the psychosocial experiences of individuals can induce a radicalization process based on the three factors assumed by the 3N model, and provides a deeper insight into the individual pathways to extremism.

### **The Present Research**

The objective was to empirically examine the transformative experiences or turning points that might be associated with Islamist radicalization through the integration of the 3N model and the life-course perspective of 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 achieve this goal, we conducted semi-structured interviews and 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 of the religious ideology, than non-radical participants (Bélanger et al., 2019; Larsen, 2020; Lobato, Moya 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; Rodermond & Thijs, 2023; Thijs et al., 2023; Versteegt & Ljujic, 2018). Concerning the network component, we

hypothesized that radical participants would refer more frequently to relational ties with other Muslims and less frequently to familial ties 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 semi-structured 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 descriptive 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 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 Points**

#### *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 mentioned more frequently as turning points than socioeconomic status change and relational ties ( $ps = .005$ ), but as frequently as 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 through the 3N model of radicalization. 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 studies of common inmates (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 relational ties, linked to the *network* component of the 3N model, 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 results concern ideological ties (related to the *narrative* component), where the results revealed the experience of religion as a turning point in the life of radical individuals, which aligns with previous findings (Larsen, 2020; Milla et al., 2019; 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 rediscovery of religion as a significant, transformative point in their lives. This was often linked to the desire of redeeming from a criminal past that sparked their *need* for significance, followed by the religious ideology as an aid to find a new purpose and meaning in their lives (Basra & Neumann, 2016; Kruglanski et al., 2018; Rodermond & Thijs, 2023). This difference between radical and control participants indicates that the experience of religion as a turning point and as a means of restoring significance after its loss due to a criminal lifestyle could lead to extremism.

However, some jihadist participants talked about their adherence to extremist beliefs without a redemption script, whereas all proselytizers based their religious narratives on their

desire to leave a criminal lifestyle behind. These two different pathways to extremism are well-documented in the literature (Crettiez & Sèze, 2022; Rodermond & Thijs, 2023), and other studies report that criminal history and substance abuse seem to trigger feelings of guilt and regret which might lead to the adherence of extremist beliefs (Versteegt & Ljubic, 2018). Thus, these findings reinforce the notion of a crime-terror nexus (Basra & Neumann, 2016; Thijs et al., 2023). And last, all groups displayed a moderate level of self-reported religiosity, consistent with their Muslim background. Yet, only jihadist and proselytizer participants explicitly referred to religious experiences as turning points, which could have played an essential role in their trajectory towards extremism. This evinces the importance of studying how individuals experience certain religious events and make meaning of them (Dawson & Amarasingam, 2017; Larsen, 2020; Larsen & Jensen, 2021).

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. The literature consistently shows that the lack of family commitment serves as a risk factor for radicalization (Bakker & Grol, 2015; Gómez et al., 2017; Zych & Nasaescu, 2022), which could be consistent with our findings.

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., Jasko et al., 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. 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 could be rooted in different areas, with jihadist participants feeling more marginalized in Spain than non-radicals (Moyano et al., 2024; Troian et al., 2019).

Overall, this research enhances our understanding of how the subjective experience of turning points influences the three factors involved in jihadist radicalization (need, narrative and network), and elaborates on the importance of studying them in extremist individuals. To the best of our knowledge, the narratives of the 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 from the 3N model in a sample of incarcerated radical individuals, underscoring the importance of the religious ideology, family, and the quest for significance, and contributing to the crime-terrorism nexus debate (Basra & Neumann, 2016). Additionally, 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). Last, in the applied field, these findings can be used to tailor intervention programs for both jihadist convicts and inmates who carry out proselytizing tasks (Secretaría General de Instituciones Penitenciarias, 2023).

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 measure of self-reported 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. Fifth, our approach provides insights into how radical individuals experience and interpret past events, and therefore does not allow us to draw conclusions about objective events. 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 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.

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**Table 1**

*Penitentiary and Sociodemographic Information of Participants of the Three Groups (N = 116)*

Variable	Jihadists	Proselytizers	Non-radicals
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
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 in the last year	0.69 (1.00)	2.40 (3.39)	3.07 (9.42)
Self-reported religiosity <sup>1</sup>	3.56 (1.74)	3.24 (1.79)	3.11 (2.06)
Variable	Jihadists	Proselytizers	Non-radicals
	<i>n (%)</i>	<i>n (%)</i>	<i>n (%)</i>
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)

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

<sup>1</sup> 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)*

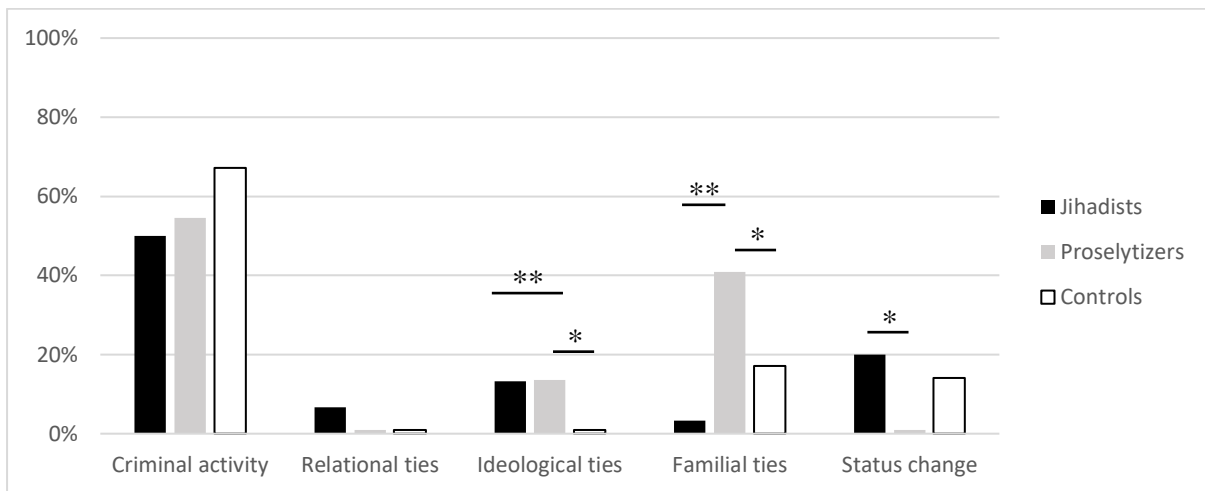
Category	Jihadists <i>n</i> (%)	Proselytizers <i>n</i> (%)	Controls <i>n</i> (%)	$\chi^2$ (2 df)	<i>F</i>	<i>p</i>
Criminal activity	15 (50.0)	12 (54.5)	43 (67.2)	2.90	-	.245
Relational ties	2 (6.7)	0 (0.0)	0 (0.0)	-	4.04	.100
Ideological ties	4 (13.3)	3 (13.6)	0 (0.0)	-	10.18	.004
Familial ties	1 (3.3)	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.



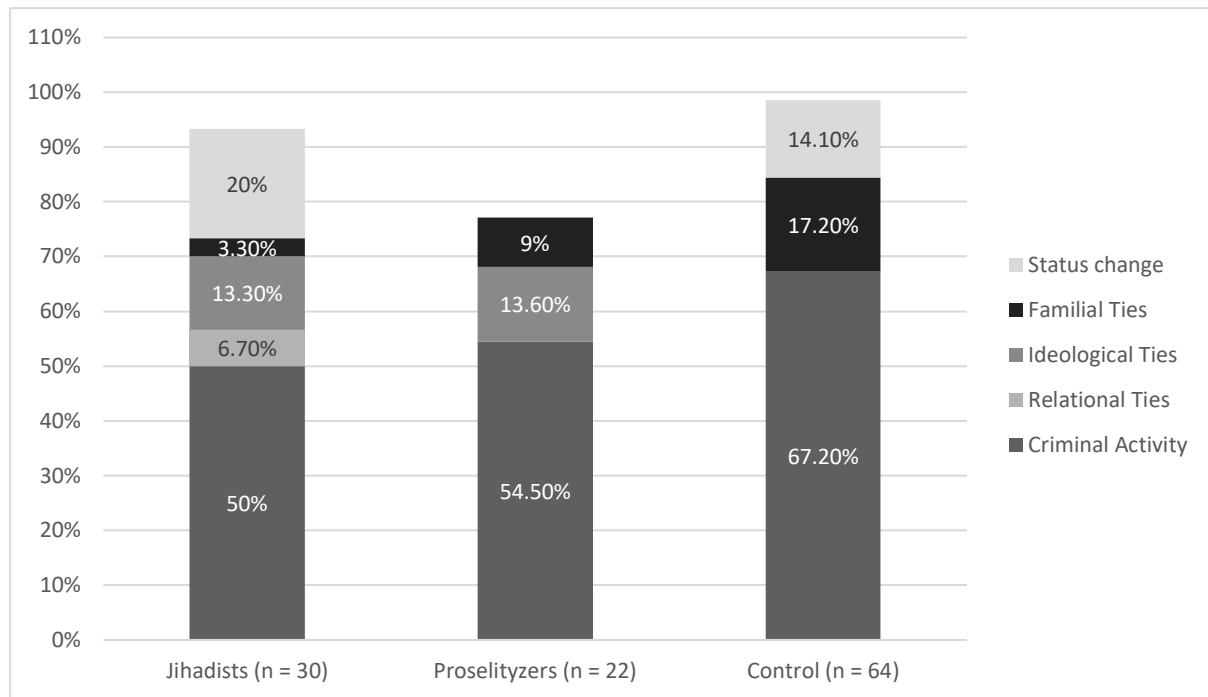
*Note.* Fisher’s exact test was used when the expected frequencies were less than five in or more than 20% of the cases.

\* $p < .05$ ; \*\* $p < .01$

**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.