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Generalists or specialists? Unpacking crime trajectories of intimate partner violence offenders

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ABSTRACT

This study examines the heterogeneity of Intimate Partner Violence (IPV) perpetrators by distinguishing IPV specialists, whose violence is limited to partners, from IPV generalists, who also target non-partners, and comparing both to non-IPV violent offenders. Using comprehensive administrative records from Catalonia, we analyzed the complete criminal histories (1990–2019) of all individuals convicted of IPV between 2010 and 2015, alongside a 10 % sample of non-IPV violent offenders. A strict definition classified only one-quarter of IPV offenders as generalists, highlighting the impact of definitional choices on prevalence and offender profiles. Trajectory analyses identified five patterns of violent offending. IPV specialists were concentrated in late-onset, low-rate, short-duration trajectories, consistent with situational, relationship-bound violence. IPV generalists were more likely to follow early-onset, high-rate, long-duration trajectories resembling chronic violent offenders, but increasingly focused on partners with age. Differences in trajectories were only modestly explained by prior non-violent offending, suggesting that antisocial predispositions shape the target of violence more than its developmental pattern. Gender did not influence trajectory prevalence but strongly predicted the likelihood of targeting partners versus others, reflecting the interaction of patriarchal norms, situational factors, and individual predispositions in differentiating IPV specialists and generalists from other violent offenders. Overall, IPV perpetrators are heterogeneous in trajectories, offence patterns, persistence, and gender, underscoring the value of integrating typological and developmental perspectives and informing differentiated, context-sensitive interventions.

1. Introduction

Intimate Partner Violence (IPV) is a pervasive form of interpersonal violence involving physical, sexual, psychological, or economic harm within current or former intimate relationships (EIGE, 2023). It is widely recognized as a major public health and human rights concern, generating substantial social and economic costs (White et al., 2024; Duvvury, Callan, Carney, & Raghavendra, 2013; Waters et al., 2005).

The determinants of IPV span multiple levels: micro-level traits and trauma exposure (Kimber, Adham, Gill, McTavish, & MacMillan, 2018; Oram, Trevillion, Khalifeh, Feder, & Howard, 2014; Spencer et al., 2019), meso-level relational and situational stressors such as economic strain and community disadvantage (Schwab-Reese, Peek-Asa, & Parker, 2016; Spencer, Stith, & Cafferky, 2020; VanderEnde, Yount, Dynes, & Sibley, 2012), and macro-level gender norms and institutional arrangements that shape family power dynamics (Mallory et al., 2016; McCarthy, Mehta, & Haberland, 2018; Pratt & Cullen, 2005). These potential influences sustain the ongoing debate about whether IPV has unique etiological processes or responds to multiple factors and manifests in a variety of forms.

The main objective of this paper is to investigate the heterogeneity of IPV offenders and its possible sources. Determining whether IPV offenders are homogeneous or heterogeneous carries direct implications for assessment and intervention (Bouffard & Zedaker, 2016), requiring either focused or multifaceted policy responses.

To conduct this investigation, we rely on two main strands of literature: the IPV typological approach, which offers a more static perspective, and developmental criminology, which takes a more

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dynamic view of violent and non-violent offending over the life course. Each incorporates debates about micro-, meso-, and macro-level sources of offender differentiation in distinct yet complementary ways. Following recent trends (Piquero, Theobald, & Farrington, 2014; Theobald, Farrington, Coid, & Piquero, 2016), our aim is to bring these approaches together to obtain a more complete picture of IPV offender heterogeneity grounded in both individual traits and developmental processes.

Empirically, we examine the sociodemographic characteristics of different groups of IPV offenders and their offending trajectories across the life course. Departing from previous work, we adopt a restrictive definition of IPV offenders who also engage in other offending—limiting this to those who commit additional violent offences—while extending the comparison to all other violent offenders. The first choice allows us to explore IPV heterogeneity without pre-imposing sources of differentiation (e.g., antisocial dispositions), while the second allows us to assess the distinctiveness of IPV offenders relative to other violent offenders.

Our results show that IPV offenders are heterogeneous in criminogenic and socio-demographic characteristics, as well as in their life-course trajectories of offending. This heterogeneity appears linked to both stable personal traits (antisocial and violent predispositions) and stable social structures (such as patriarchy), as well as changing life circumstances and situational stressors that shape more or less complex trajectories of violent behavior.

The paper is organized as follows. The theory section first traces the origins and main postulates of the two traditional strands of literature used to explore the heterogeneity of IPV offenders. It then outlines recent attempts to integrate these approaches, distinguishing them according to their traditional foundations. Section three sets out our substantive and methodological aims and presents our research questions. Section four describes the data and methods. Section five reports the results, and section six discusses our findings.

2. Theory

2.1. Traditional approaches to studying the heterogeneity of IPV offenders

Traditionally, the heterogeneity of IPV offenders has been studied with IPV typologies. The most famous is Holtzworth-Munroe and Stuart's (1994) typology, that distinguished "generally violent" IPV aggressors—with stable violent predispositions driven by psychopathology or borderline personality disorders—from "family-only" aggressors whose behavior is more situational and tied to life and relational stressors such as work strain, unemployment, financial hardship, or physical or mental health problems (Keilholtz, Spencer, & Stith, 2022). Feminist scholars contested the exclusive focus on psychological aspects of these original typologies, and their neglect of socio-cultural factors, to emphasize structural gender inequality, interpreting the generally violent and more severe forms of IPV as coercive control by males rooted in patriarchal norms (Johnson, 1995; Johnson & Ferraro, 2000). This distinction underpins the widely used differentiation between "intimate terrorism" and "situational couple violence," as well as the debate on whether IPV is gender symmetric, i.e., inflicted in similar proportions by males and females (Dutton, 2012; Johnson, 2011; Dixon & Graham-Kevan, 2011). The debate relies heavily on the sources of data used in the analyses—police and criminal justice registries or general population victimization surveys (Straus, 1999). A working consensus has ensued which portrays "family-only" IPV as gender symmetric, based on stressors affecting the couple, whereas "intimate terrorism" would be strongly more asymmetrical, especially in the most physical and detrimental manifestations of IPV.

The second approach aligns with long-standing debates in criminal-career research where the focus is on general offending, not IPV. Developmental criminologists emphasize variation in onset, duration, frequency, and specialization—defined as the tendency to repeat similar offence types over a criminal career (Farrington, 1992; Farrington, Gaffney, & Ttofi, 2017; Piquero, Farrington, & Blumstein, 2003)—and link it to changing life circumstances and transitions which, through state dependent processes of learning, promote alternative and specialized paths of offending (Nagin & Paternoster, 2000; Sampson & Laub, 1993; Sampson & Laub, 2005). It often criticizes generalist perspectives that attribute criminal versatility to stable, individual-level, antisocial traits (Gottfredson & Hirschi, 1986), with violence representing a severe and late manifestation of persistent offenders (Piquero, Jennings, & Barnes, 2012). Typological approaches—which differ from those mentioned above in their not being IPV specific—bridge these views by distinguishing broad antisocial pathways from more situationally driven patterns, including partner-specific violence (Blokland, Nagin, & Nieuwbeerta, 2005; Blokland & Nieuwbeerta, 2005; DeLisi, Bunga, Heirigs, Erickson, & Hochstetler, 2019; Moffitt, 1993; Moffitt, 2018; Nagin & Paternoster, 2000). The role of gender in developmental criminology is understudied, with exceptions (Cauffman, Monahan, & Thomas, 2015; Fergusson & Horwood, 2002) that indicate that female careers are similar to men's but different in prevalence and underlying explanatory factors.

2.2. Generalists and specialists in histories of IPV offending

Recent research has increasingly attempted to integrate developmental criminology with IPV-specific typological perspectives by applying key criminal career dimensions—such as onset, intensity, versatility, and duration—to analyze IPV offenders' degree of specialization and differentiation. Despite these advances, significant methodological differences remain. A central distinction concerns whether IPV offenders are examined in isolation or compared with other offenders. Studies focusing solely on IPV offenders align more closely with the IPV-specific typological tradition, whereas those comparing IPV offenders to broader offending groups reflect the developmental criminology perspective. Other differences—such as how generalists are defined or whether gender is incorporated to explain heterogeneity—cut across both traditions.

As noted, studies that focus solely on IPV offenders are conceptually closer to IPV-specific typologies. Most classify offenders at a single point in time using police, court, or correctional records, but incorporate selected elements of criminal history such as age of onset or offence counts and variety. Definitions of generalism vary. Some restrict it to IPV offenders who also commit non-IPV violent crimes (Cantos, Goldstein, Brenner, O'Leary, & Verborg, 2015; Teva, Marín-Morales, Bueso-Izquierdo, Pérez-García, & Hidalgo-Ruzzante, 2023; Valdivia-Devia, Oyanedel, Andrés Pueyo, Fuentes Araya, & Valdivia-Monzón, 2021) or sexual violence (Chopin et al., 2023), capturing violent predisposition specifically. Others adopt a broader definition, including any non-IPV offence, violent or not (Pérez-Cámara, Teva, Pérez-García, Burneo-Garcés, & Hidalgo-Ruzzante, 2024; Coghlan & Millsteed, 2017; Herrero, Torres, Fernández-Suárez, & Rodríguez-Díaz, 2016; Loinaz, 2014). Some studies further differentiate violent versus nonviolent generalists (Hilton & Eke, 2016; Ouellet et al., 2021), or measure generalism as overall criminal versatility (Bouffard & Zedaker, 2016; Tanskanen & Aaltonen, 2022).

Despite definitional differences, studies largely converge. Generalists show more entrenched violent tendencies and broader antisociality—higher psychopathology, earlier onset, greater criminal involvement, substance abuse, higher actuarial risk, and poorer treatment outcomes (Pérez-Cámara et al., 2024; Ouellet et al., 2021; Teva et al., 2023; Hilton & Eke, 2016; Cantos et al., 2015; Herrero et al., 2016; Piquero, Brame, Fagan, & Moffitt, 2006). Specialists, by contrast, tend to exhibit more prosocial traits and better socioeconomic functioning (Petersson & Strand, 2020). Few studies examine gender patterns within IPV, but their findings generally align with expectations from typological approaches: men predominate overall and are especially overrepresented among generalists (Bouffard & Zedaker, 2016; Tanskanen & Aaltonen, 2022). Taken together, this evidence supports feminist

accounts of intimate terrorism, which conceptualize severe and coercive IPV as predominantly male and rooted in the interaction between violent predispositions and patriarchal power dynamics (Johnson, 1995).

A key limitation of studies that focus only on IPV perpetrators is selection bias, as they cannot determine whether partner-directed violence reflects a broader violent disposition or factors specific to intimate relationships. This can blur the distinction between generalists and specialists, as both groups are preselected for willingness to use violence in intimate contexts.

Studies grounded more firmly in the developmental criminology tradition examine broader populations of offenders, which helps minimize these selection effects (Dowling, Boxall, & Morgan, 2021; Theobald et al., 2016). Only a few such studies exist, and like the typological ones, they differ in how they define generalism. Three studies use longitudinal designs to inductively identify versatile or generalist patterns of violent and non-violent offending in youth that strongly predict IPV in adulthood (Verbruggen, Blokland, Robinson, & Maxwell, 2020; Piquero et al., 2014; Dowling et al., 2021). Others adopt clearer, deductive classifications to distinguish IPV generalists—those who also engage in violence against non-partners—from IPV family-only specialists and non-IPV violent offenders (Theobald et al., 2016; Weatherburn & Rahman, 2018). These studies find that violent IPV generalists differ from other violent offenders mainly in degree rather than kind, whereas their differences from IPV-only specialists are more substantial and qualitative (Theobald et al., 2016). Only one study (Weatherburn & Rahman, 2018) included women, and even then gender differences were not examined, reflecting the limited attention to gender within developmental criminology.

Despite recent efforts to integrate both traditions, important gaps remain. Varying definitions of IPV generalists lead to different prevalence estimates: broader definitions based on versatility identify larger groups but shift attention from violent tendencies to general antisocial predispositions, blurring distinctions between the two. Although related (Piquero et al., 2012), violence and antisociality are not equivalent and may both stem from unobserved disadvantages.

Studies that do not compare IPV generalists with other violent offenders often overlook factors that interact with antisocial traits to produce IPV—especially gender, which is seldom analyzed. Moreover, family-only IPV specialists remain understudied, even though they appear to be the most common type. Little is known about whether their offending trajectories are uniformly brief and occasional or whether some follow more persistent paths similar to generalists.

Our study seeks to address several of these gaps.

3. Research aims and questions

The present study aims to integrate the strengths of developmental and typological approaches to assess whether IPV offenders resemble generalists or specialists. We do so by: (a) examining all violent offenders rather than only IPV perpetrators; (b) applying a clear deductive typology that distinguishes IPV specialists, IPV violent generalists, and non-IPV violent offenders; (c) using trajectory analysis to capture developmental heterogeneity over a 26-year observation window (extended by an additional 10 years in complementary analyses); and (d) explicitly analyzing gendered patterns central to leading theoretical frameworks.

We address three main research questions:

RQ1: *Do IPV specialists, IPV generalists, and non-IPV violent offenders differ regarding their criminological histories and socio-economic backgrounds?*

RQ2: *Do they also differ in terms of developmental trajectories of offending?*

RQ3: *What roles do criminological histories and socio-economic backgrounds play in explaining trajectory differences across violent groups?*

RQ1 establishes whether the proposed typology of violent offenders (i.e. IPV specialists, IPV generalists, and non-IPV violent offenders) corresponds to empirically meaningful groups rather than arbitrary classifications. It also provides an initial assessment of how IPV offenders compare with other violent offenders—an issue that has been obscured in prior research relying solely on IPV samples.

RQ2 examines whether these groups differ in their life-course offending trajectories, offering a developmental test of whether the typological categories map onto distinct longitudinal patterns of violent behavior.

RQ3 then evaluates the extent to which early onset, cumulative offending (violent and non-violent), and socio-demographic characteristics—with particular attention to gender—explain any observed trajectory differences. This clarifies whether divergent developmental pathways reflect group-specific etiological processes or broader criminogenic factors.

Taken together, these questions integrate typological and developmental criminology, situate IPV within the broader ecology of violent offending, and assess gendered patterns that are central to competing theoretical perspectives.

4. Method

4.1. Data

The dataset used in this study was compiled purposely for a four-year project ("DONTHURTME") on trajectories of offending and victimization in Catalonia, Spain. It comprises anonymized, lifelong penal records (up to March 31, 2019) for all individuals convicted of at least one IPV-related offence in the region, between 2010 and 2015—referred to hereafter as the "selection period." This cohort includes 7232 offenders.

IPV crimes are defined to include homicides, murders, abortions, injuries, abuse, sexual offences, assaults, threats, harassment, illegal detentions, kidnappings, coercion, and offences against moral integrity that the Catalan judicial system classifies as either "gender violence against the partner" or "domestic violence" (the latter only if involving an intimate couple). Breaches of previous IPV sentences and restraining orders were also considered, but only for describing the violent trajectories of IPV offenders, not for defining those trajectories (see below in Section 4.2). The data, drawn from the registries of the Catalan Department of Justice, include detailed information on each conviction—both IPV and non-IPV—such as offence dates and characteristics, sentence execution (including incarceration start and end dates, changes in penitentiary status, participation in rehabilitation programs, disciplinary incidents, and restraining orders with their start and end dates), among other variables.

In addition to the IPV offender group, the dataset includes a control sample of 4523 individuals—10 % of all those convicted of any offence during the same selection period—with equivalent coverage in terms of data and observation period. For the purposes of this study, and in line with previous discussions in Sections 1 and 2, the control group was restricted to individuals who were convicted of at least one non-IPV violent crime between age 14 and their age as of March 31, 2019 ($N = 1104$). Violent crime is defined, following the World Health Organization (Krug, Mercy, Dahlberg, & Zwi, 2002), as "the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation" (p. 5). This includes crimes against persons, sexual offences, robberies, human trafficking, and offences against authority. We excluded individuals convicted solely of non-violent offences such as traffic violations (including DUI), drug trafficking, non-violent organized crime, fraud, smuggling, failure to aid, false reporting, and breaches of confidentiality. Reckless violent offences (e.g., unintentional homicide) were also excluded due to the absence of intent. Similarly, sentence violations (e.g., breaches of restraining orders) and crimes against animals not intended to harm their owners were excluded. While individuals convicted exclusively of such non-violent offences were omitted from the analysis, we document the extent to

which violent offenders (both IPV and non-IPV) also committed non-violent crimes in our descriptive statistics.

To prepare the dataset for analysis, we pooled the IPV and control group data and transformed them into a longitudinal structure, with one entry per individual per year of age, spanning from age 14—the minimum age of criminal responsibility in Spain—to the individual's observed age as of March 31, 2019. For each age-year, we computed cumulative counts of various types of offences (total, IPV vs. non-IPV, violent vs. non-violent), as well as other indicators such as cumulative restraining orders. We also recorded the number of months spent in prison at each age to account for incapacitation effects. Time served in non-incapacitating contexts (e.g., open prisons or second-grade regimes with weekend permits) was proportionally discounted from the analysis predicting cumulative numbers of offence across the life course (e.g., 2/7 of the time under weekend permits was subtracted for second-grade inmates), as these conditions allow for potential offending.

The dataset is right-censored because individuals are only observed up to March 31, 2019. As ages varied at censoring and many individuals have incomplete offending histories, the main analysis excludes all offenders younger than 40 on that date (around 40 % of the sample). For the remaining 60 %, we include only offences committed up to their 41st birthday. This approach allows us to track complete violent-offending trajectories from ages 14 to 40—the exposure period—for 5109 individuals in the IPV and control samples. Of these, 4581 were convicted of at least one IPV offence during their criminal careers, and 528 were convicted of at least one non-IPV violent offence but no IPV offence.

To examine offending patterns further into adulthood, we conducted a complementary analysis of individuals aged 50 or older. This provided a ten-year longer observation window than the main analysis, albeit with a substantially reduced balanced sample of 2037 violent offenders.

4.2. Analytical strategy

To compare the offending patterns of violent individuals, we begin by classifying them based on their lifetime conviction records of IPV and non-IPV violent convictions. This classification yields three mutually exclusive analytical groups: (1) IPV specialists: individuals convicted solely of IPV-related violent crimes; (2) IPV generalists: individuals convicted of both IPV and non-IPV violent crimes; and (3) non-IPV violent offenders: individuals convicted exclusively of non-IPV-related violent crimes. Note that members of all three groups may also have committed non-violent offences, although these do not affect group classification.

We begin by exploring group differences across a range of criminological and socio-demographic variables using simple summary statistics. To tackle RQ1 and identify meaningful associations while accounting for inter-correlations among the independent variables, we then fit a multinomial logistic regression with violent group as the dependent variable.

For the purpose of investigating RQ2 and identify long-term offending patterns, we apply Latent Growth Mixture Modeling (LGMM)—a person-oriented statistical technique that groups individuals probabilistically into latent classes based on shared longitudinal patterns of offending. This approach is well-suited for life-course research, as it captures heterogeneity in offending trajectories, including persistence, escalation, and desistance. By modeling this variation, we can develop a more nuanced understanding of offender behavior than methods based solely on group averages.

The LGMM is specified as a Poisson model, with the cumulative number of violent offences committed by a given age as the dependent variable, while age itself is used as the main predictor. Because many individuals do not offend until later in life (or not at all), the model accounts for an excess of zero values using a zero-inflated specification and includes a correction for overdispersion. Estimation is conducted in Latent Gold 6.1 (Vermunt & Magidson, 2025).

Our modeling strategy prioritizes differences between latent classes over within-class variation, while allowing for the inclusion of covariates either as trajectory predictors or as controls. Besides age, in the core model, offender type (IPV specialist, IPV generalist, or non-IPV offender) is used as a predictor. We additionally tested a model that included an interaction between age and offender type to allow the trajectories to vary in shape across offender types. However, this model exhibited poorer fit—based on both BIC and AIC—than the model without the interaction. Moreover, in our model, we control for months spent in prison per year (adjusted as described earlier) and birth cohort, categorized as: born before 1960, between 1960 and 1969, and between 1970 and 1979.

To facilitate comparison between the trajectories identified through LGMM and those commonly examined in developmental criminology (Bushway, Sweeten, & Nieuwbeerta, 2009), we derive offenders' non-cumulative annual counts of violent offences from the estimated cumulative counts by subtracting the cumulative total at the previous age from the total at the current age. We then smooth the resulting absolute trends by applying a four-year moving average, which reduces year-to-year fluctuations and highlights the underlying trajectory patterns.

Once the primary trajectories have been identified, to tackle RQ3 we assess the extent to which the association between violent group membership and trajectory type is shaped by underlying differences in individual characteristics. This is done using multinomial logistic regression models, where the dependent variable is the set of offending trajectories derived from LGMM. Specifically, we model the log-odds of belonging to a more or less complex trajectory relative to a moderately complex one, with IPV generalists as the reference category for group comparisons.

The goal of this analysis is to decompose the observed relationship between offending trajectory and group type into: A) the portion explained by other trajectory-defining factors (e.g., cumulative violent offences, prison time, and cohort); B) the portion explained by additional criminological and demographic variables, including age of onset for violent and non-violent offences, number of non-violent offences, breaches of sentences or restraining orders, and the average severity of convictions (measured as mean prison time per conviction), as well as gender and nationality (Spanish vs. non-Spanish).

We begin with a null model that excludes all covariates, followed by a series of reduced models that add further predictors. This stepwise approach helps assess the extent to which individual characteristics confound the relationship between trajectory and group, and to what degree these differences persist once those characteristics are accounted for.

To formally disentangle these confounding effects, we apply the Karlson–Holm–Breen (KHB) method (Breen, Karlson, & Holm, 2013; Karlson, Holm, & Breen, 2011). The KHB method corrects for the coefficient scaling problem in non-linear models, which arises when comparing regression coefficients across models with different covariates due to differences in residual variance. It allows us to quantify how much of the total association is attributable to observed differences in covariates and how much remains unexplained.

Because stepwise results may vary depending on the order in which regressors are introduced (other than group membership), we estimate two additional models in which gender and non-violent offending history are, respectively, added immediately after group membership. These models allow us to directly assess the specific contribution of these two factors to differences in trajectory prevalence across violent groups.

5. Results

5.1. Descriptives

Table 1 presents descriptive statistics for all variables, overall and by offender type (IPV generalists, IPV specialists, and non-IPV violent offenders). The last row shows that non-IPV violent offenders comprise

Table 1
Descriptive Statistics.

	IPV Generalist		IPV specialist		Non-IPV violent		Total*	
	Mean or %	St. dev. or *f*	Mean or %	St. dev. or *f*	Mean or %	St. dev. or *f*	Mean or %	St. dev. or *f*
Age of criminal onset (any crime)	36.67	8.54	43.06	9.13	37.86	9.46	39.67	9.62
Age of criminal onset (violent)	37.16	8.46	43.45	8.99	38.66	9.54	40.29	9.56
Age of IPV onset	40.28	7.70	43.45	8.99	–	–	42.80	8.83
Age of non-IPV violent onset	38.00	8.75	–	–	38.66	9.54	38.56	9.43
Age of criminal onset (non-violent)	36.97	7.80	39.57	7.60	37.76	8.69	37.96	8.46
# of offences (any type) up until age 40	3.55	4.16	0.82	1.35	3.45	5.79	1.59	3.06
# of violent offences up until 40	2.36	2.56	0.58	0.72	1.84	3.04	1.03	1.77
# of IPV crimes up until 40	0.94	1.09	0.58	0.76	–	–	0.58	0.84
# of non-IPV violent crimes up until 40	1.42	2.05	–	–	1.84	3.04	0.45	1.50
# of non-violent offences up until 40	0.78	1.77	0.17	0.76	1.49	4.01	0.42	1.68
# of sentence breaches up until 40	0.40	1.09	0.07	0.39	0.13	0.50	0.14	0.61
Sentence severity for IPV violent crimes (sum of months up until 40)	0.67	1.54	0.22	0.86	–	–	0.28	1.00
Sentence severity for non-IPV violent crimes (sum of months up until 40)	1.67	3.84	–	–	2.93	7.09	0.61	2.98
Sentence severity for non-violent crimes (sum of months up until 40)	0.39	1.39	0.09	0.64	0.64	1.78	0.20	1.00
Years in prison up until 40	5.63	7.23	0.81	3.09	5.97	7.73	2.22	5.24
Female	3.8 %	19.0 %	4.6 %	21.0 %	9.8 %	29.8 %	5.0 %	21.8 %
Foreigner	18.7 %	39.0 %	26.4 %	44.1 %	29.7 %	45.7 %	25.4 %	43.5 %
Birth cohort								
1970–1979	65.5 %	47.6 %	52.8 %	49.9 %	57.4 %	49.5 %	55.6 %	49.7 %
1960–1969	25.9 %	43.8 %	32.2 %	46.7 %	31.1 %	46.3 %	30.9 %	46.2 %
Before 1960	8.6 %	28.1 %	15.0 %	35.7 %	11.6 %	32.0 %	13.5 %	34.1 %
Total	9.31 %	930	37.60 %	3651	53.08 %	528 (5280*)	100 %	5109 (9861*)

Notes:
Own calculations using data from the registries of Catalonia's Department of Justice.
Life histories, up to 40 years old, of all offenders sentenced for an IPV crime, or of a random sample of 10 % of all offenders sentenced for a non-IPV violent crime, if older than 39 in March 2019.
* Data are not weighted except for the total, in which case statistics are corrected for the underrepresentation of non-IPV violent offenders.
Table 1. This Table provides the descriptive statistics (mean or percentage) for the covariate variables that will be included in the multinomial logistic regression analyses explaining group membership (IPV specialist, IPV generalist, or non-IPV violent offender) further on in Section 5.

about half of the 5-year cohort fully observed from age 14 to 40. This figure should be interpreted with caution, as it is based on weighted data to correct for our sampling of only one in ten non-IPV offenders from the population.

In contrast, the distribution of generalists and specialists among IPV offenders is unweighted, providing a more accurate estimate of how many IPV perpetrators also committed violent crimes against non-partners by age 40. Only about one in four did so, providing essential context for addressing our first research question: most IPV offenders in our data are specialists who engage solely in family-related violence.

Table 1 also reveals that IPV specialists not only avoided violence against non-partners but committed fewer violent offences against partners between ages 14 and 40 (0.58 vs. 2.36 on average among IPV generalists), and fewer non-violent offences (0.17 vs. 0.78). In total, IPV specialists committed approximately one-quarter as many offences as IPV generalists and received lighter sentences—about one-third the prison time per offence—resulting in them serving only about one-seventh the total prison time. This disparity is largely attributable to a later onset of criminal behavior: most IPV specialists were first convicted after age 40 and are overrepresented in older cohorts due to younger cohorts being less likely to be observed beyond that age. Socioeconomic differences are also apparent. While both foreign nationals and women are underrepresented among IPV offenders overall, they are comparatively more prevalent among IPV specialists than among generalists.

Table 1 also highlights important differences between IPV generalists and non-IPV violent offenders. While IPV generalists begin both violent and non-violent offending at younger ages, they accumulate more violent offences but fewer non-violent offences overall. They also commit fewer crimes against non-partners, suggesting that their elevated violence levels are primarily driven by IPV. Possibly reflecting their lower rates of general delinquency, IPV generalists receive lighter sentences for non-IPV violent and non-violent offences than non-IPV offenders. Finally, men and Spanish nationals are most over-represented among IPV generalists and least so among non-IPV violent offenders.

5.2. *Differences in characteristics across offender types*

Fig. 1 presents the multinomial logistic regression results, re-estimating the bivariate associations between violent offender type and all other variables while accounting for intercorrelations among predictors. Table A1 in the appendix reports the same estimates, along with their standard errors, in tabular form. Offender type is the dependent variable, and the coefficients (red for IPV specialists, blue for non-IPV violent offenders in Fig. 1) represent the log-odds of belonging to each group relative to IPV generalists per one-unit increase (for interval variables) or per category shift (for nominal variables), controlling for all other covariates.

Several key differences emerge when comparing IPV specialists to IPV generalists. First, IPV specialists are 1.4 times ($1/e^{-0.31}$) less likely to have committed an additional violent offence and to receive harsher punishments, and 1.2 times less likely to have an additional non-violent conviction. Second, they are 3.2 and 9.5 times *less* likely to belong to the two oldest birth cohorts—contrary to the descriptive results. Supplementary analyses (available on request) show this is explained by their later onset, fewer offences, and shorter prison time—traits more common among older cohorts. Absent these factors, specialists would be more likely to belong to younger cohorts. Third, IPV specialists are 1.4 times more likely to be foreign nationals than generalists.

Non-IPV violent offenders also show distinct patterns relative to IPV generalists: they start violent offending later, commit fewer violent offences (albeit more severely punished), and significantly more non-

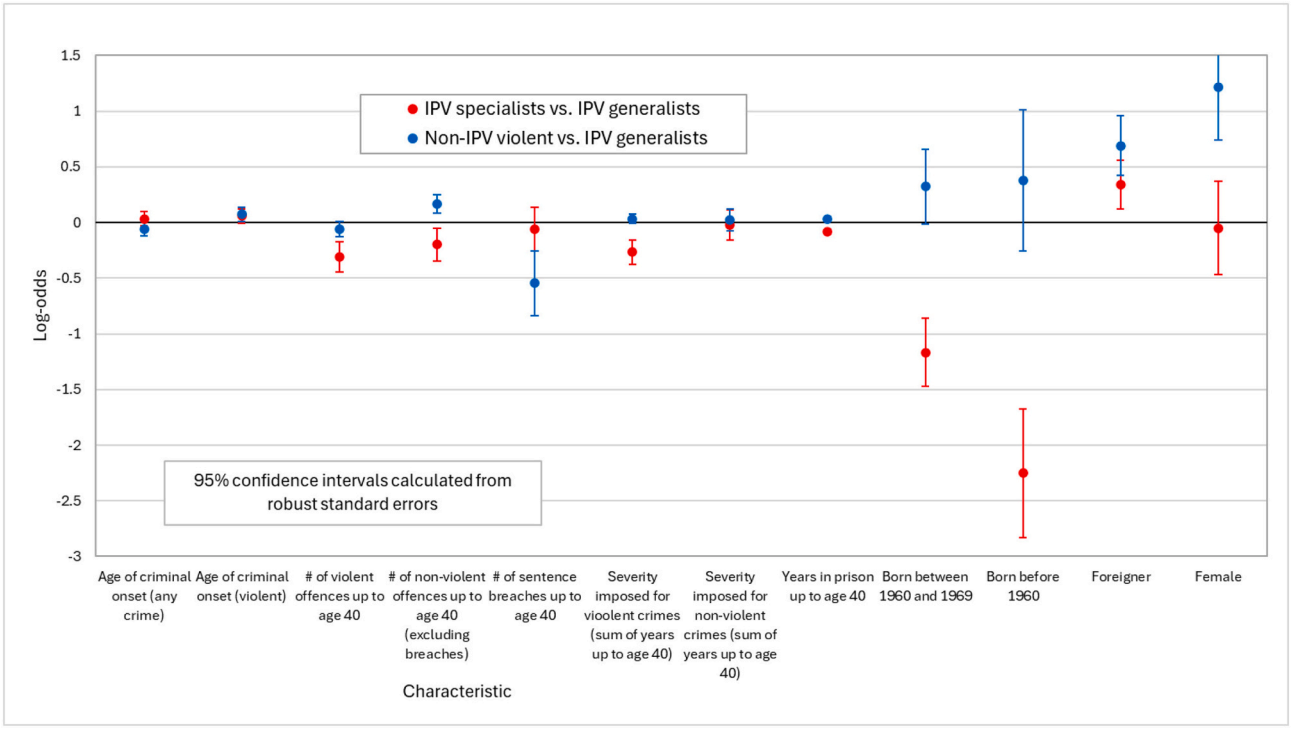

Fig. 1. Characteristics of IPV generalists, IPV specialists, and non-IPV violent offenders. Results from multinomial logistic regression, with 95 % confidence intervals.

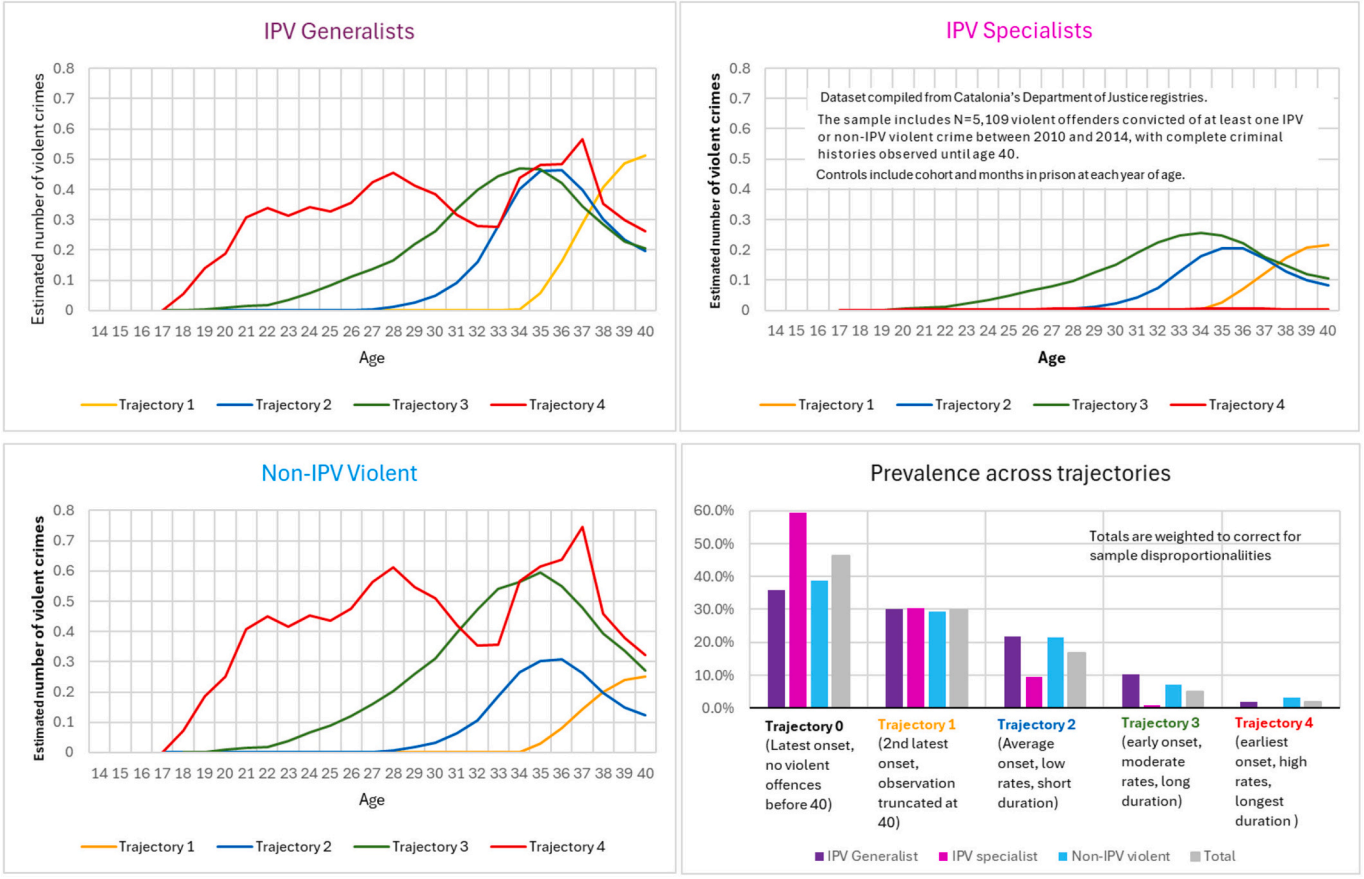

Fig. 2. Trajectories of violent offenders from 14 to 40 years of age, by type of violent group.

violent crimes. They are twice as likely to be foreign nationals and 3.4 times as likely to be female than IPV generalists.

5.3. Differences in trajectories across offender types

Offender groups also exhibit distinct offending trajectories. As explained in the previous section, we employed latent growth mixture modeling (LGMM) to identify the primary trajectories of offending across the three groups, using alternative distributions of cumulative violent offences from ages 14 to 40. We tested models with varying numbers of trajectories, as well as models in which the shape of the growth curves differed by offender type. Based on statistical fit (lowest AIC and BIC), classification quality (Entropy values above 0.80), and theoretical interpretability, the optimal solution was a four-trajectory LGMM without interaction between offender type and the growth curve. These four trajectories were present in each group, though their prevalence differed across groups.

Fig. 2 displays the four trajectories by offender group, after converting cumulative counts into yearly counts and smoothing the trends using four-year moving averages. The trajectories are ordered by overall prevalence (from highest to lowest; the lower-right panel also shows a fifth Trajectory 0 for individuals never convicted before age 41). They differ notably in age of onset, incidence, and duration through age 40. These differences appear across all violent-offender groups because the LGMM constrains trajectory shapes to be identical across them. Accordingly, any visual differences in Fig. 2 reflect group-level variation in prison time and birth cohort—the other two variables used to identify the trajectories—rather than intrinsic differences between groups.

In all groups, earlier onset is associated with higher incidence and longer violent-offending careers, yet these patterns characterize the least prevalent trajectories. The most complex trajectory (Trajectory 4)—with the earliest onset, highest incidence, and longest duration—resembles the "flat" developmental pattern described for versatile offenders with antisocial predispositions. It is absent among IPV specialists and rare in the other two groups.

IPV specialists consistently show lower incidence over the life course across all trajectories. IPV generalists exhibit lower incidence than non-IPV offenders in the two most complex, early-onset/long-duration trajectories, but higher incidence in the least complex, later-onset/shorter-duration ones. Their higher overall violent offending by age 40—seen in earlier analyses—reflects the high prevalence of the least complex trajectories in all groups, where IPV generalists are comparatively more active.

This underscores the importance of accounting for trajectory prevalence across groups. As shown in the bottom-right panel in Fig. 2, Trajectory 0—representing individuals with no violent offences before age 41 and excluded from Fig. 2—is the most common in all groups, especially among IPV specialists (59.4 %) compared to IPV generalists (36.0 %) and non-IPV offenders (38.7 %). The latter two show similar distributions across the five trajectories.

5.4. Explaining group differences in the trajectories

In the next analyses, we show that the observed group differences in trajectory prevalence are not explained by most other variables considered in the descriptive and multinomial analyses, once we control for the variables used to construct the trajectories such as the cumulative number of violent offences. Fig. 3 displays the predicted log-odds of belonging to (a) the least complex Trajectory 0 (no violence before age 41) or (b) the combined most complex Trajectories 3 and 4, relative to the combined moderately complex Trajectories 1 and 2, for IPV specialists (red) and non-IPV violent offenders (blue), compared to IPV generalists. Trajectories 1 and 2, and 3 and 4 are combined due to convergence issues related to small group sizes.

The figure shows estimates of group differences before and after adding an increasingly larger set of covariates in a stepwise multinomial logistic regression with trajectory as the dependent variable and group membership as the key predictor, using the Karlson–Holm–Breen (KHB) decomposition method (Karlson et al., 2011). We also estimate two additional models (Models 12 and 13) in which group differences are assessed after adding, to the baseline model containing only group membership, the offender's non-violent criminal background (the cumulative number of non-violent offences up to age 40 and the cumulative severity of their sentences) and their gender. These variables are treated as concomitant, with the required adjustments for omitted controls applied according to the KHB method. This approach allows us to determine how much of the variation in trajectory distributions across violent-offender groups is explained by these factors.

All estimates for group differences and for the remaining regressors in each model are reported in Table A2 in the appendix.

In both panels of Fig. 3, group differences in trajectory membership are heavily driven by age of violent onset and cumulative violent offences by age 40. Once these factors are controlled for, IPV specialists' initially higher log-odds (relative to IPV generalists) of following the least complex trajectory become lower, and the already lower odds for non-IPV violent offenders decrease further. For the most complex trajectories, these controls reverse the direction of group differences, producing higher log-odds for both IPV specialists and non-IPV violent offenders relative to IPV generalists.

Thus, much of the variation in trajectory prevalence across violent groups reflects differences in onset timing and offending volume. Nonetheless, notable group differences—between IPV generalists and both IPV specialists and non-IPV violent offenders, and between the latter two groups in the lower panel—persist even after adjusting for these factors, underscoring the importance of life-course offending patterns. These remaining differences are only minimally affected by additional covariates, indicating that trajectory patterns contribute independently to distinguishing violent-offender groups.

Part of the limited explanatory power of the remaining covariates reflects the order in which they were entered into the models, following the inclusion of the variables used to construct the trajectories. To assess whether offenders' non-violent criminal history—used as a proxy for antisocial disposition—and gender indirectly account for group differences in offending patterns, we introduced these variables in Models 12 and 13 without the other controls, using the KHB method.

Adding either set of variables did not significantly alter the estimated differences in trajectory prevalence between IPV generalists and IPV specialists. However, introducing non-violent offending history (number and severity) significantly increased the magnitude of non-IPV violent offenders' already lower odds of appearing in the most complex trajectories. In other words, if differences in non-violent offending were held constant, non-IPV violent offenders would be even less likely to experience the most severe trajectories (and more likely—though not significantly—to appear in the least complex ones).

5.5. Sensitivity analysis for trajectories up to 50 years

Could right-censoring at age 40 be influencing the trajectory results? To investigate this possibility, Fig. 4 shows Latent Growth Mixture Modeling applied to a smaller subsample fully observed through age 50. The trajectories and group differences before age 40 largely mirror those in Fig. 1, with some notable distinctions.

First, unlike Fig. 1, Fig. 4 identifies an additional low-frequency violent offending trajectory starting between ages 40 and 50. This trajectory mainly includes individuals with no recorded violent offences before age 40, most of whom appear to have their first violent offence in their forties. As shown at the bottom-right panel, this trajectory is more common among IPV specialists. Second, the onset age for all other trajectories is slightly later than in Fig. 1, likely because this sub-sample consists of older individuals. This may reflect later offending onset in older cohorts due to less punitive social values and criminal justice practices during their youth. Alternatively, it could be a selection effect:

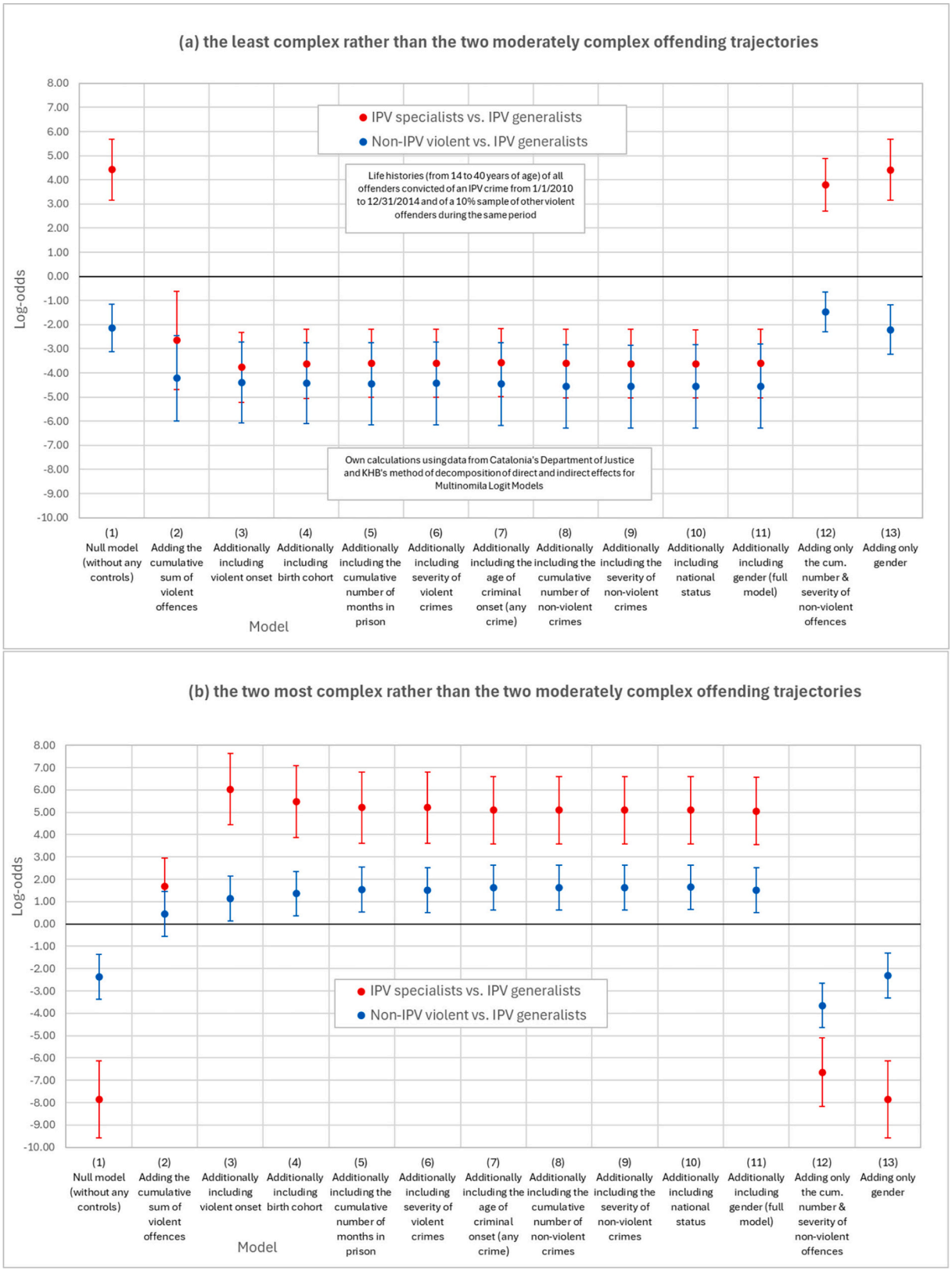

Fig. 3. Predicted log-odds of experiencing (a) the least and (b) the most complex offending trajectories rather than the two moderately complex trajectories in alternative

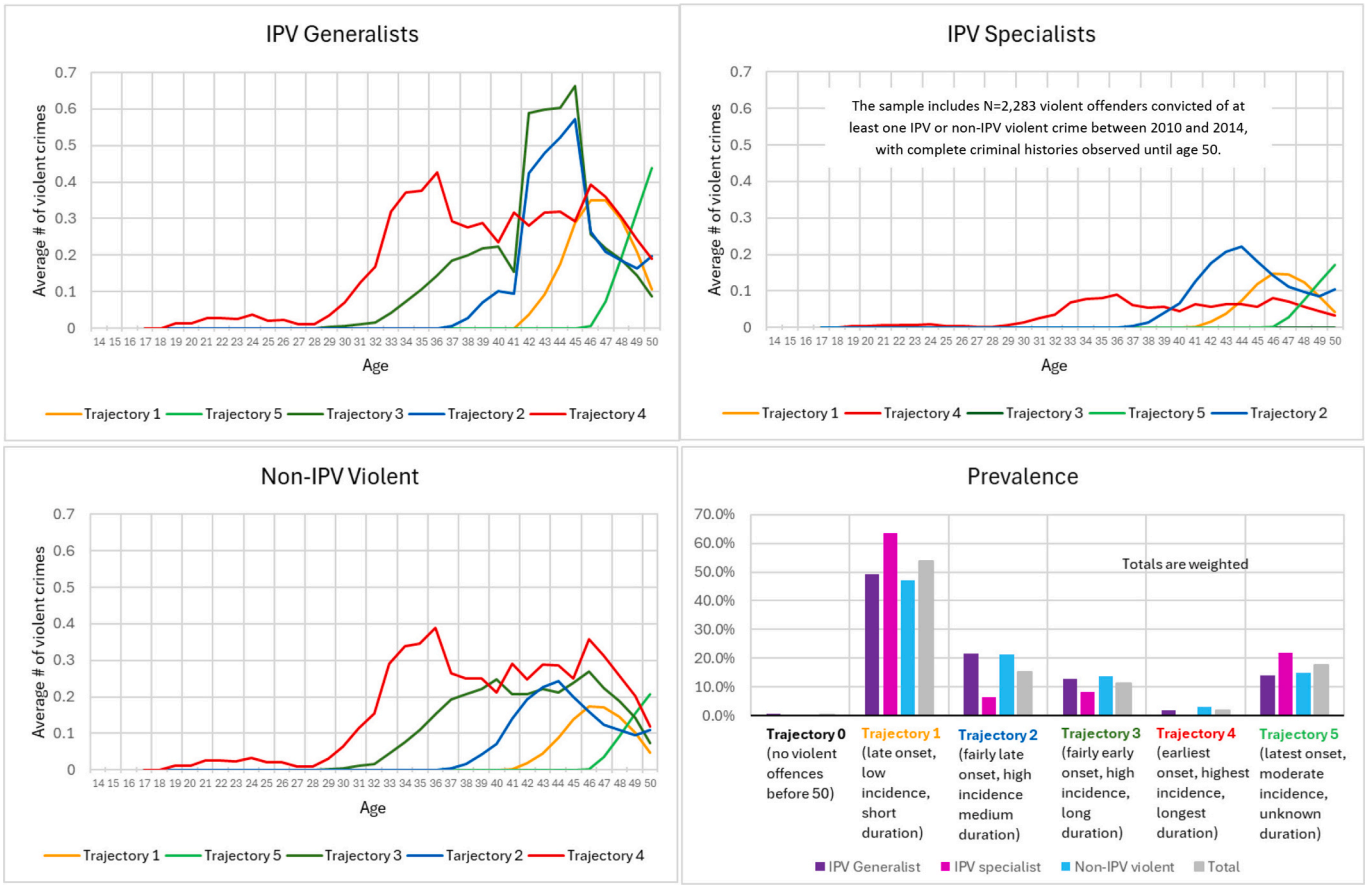

Fig. 4. Trajectories of violent offenders from 14 to 50 years of age.

since the sub-sample includes only those aged 41 to 46+ during sampling, early-onset desisters (who cease offending by their early forties) are excluded, shifting the observed onset age later.

Overall, these findings support the earlier results while adding new insight into late-onset, low-frequency violent offending trajectories.

6. Discussion

This study sought to integrate typological and developmental perspectives on Intimate Partner Violence (IPV) by examining whether IPV offenders resemble violent generalists or specialists and how these patterns unfold over the life course. To address persistent gaps in prior research—such as inconsistent definitions of generalism, the infrequent comparison of groups encompassing the full spectrum of violent offenders, and limited long-term developmental evidence—we analyzed nearly three decades of offending data for a cohort of violent offenders in Catalonia. Using a typology distinguishing IPV specialists, IPV generalists, and non-IPV violent offenders, combined with long-term trajectory analysis, we assessed how IPV fits within broader violent careers and the extent to which antisocial predispositions and gender help explain group differences.

In RQ1, we examined whether a strict definition of IPV generalism—based solely on engagement in violent offences against non-partners—alters estimates of group prevalence and offender profiles when compared with non-IPV violent offenders. This stricter definition classifies only about one-quarter of IPV offenders as violent generalists, representing 9 % of all violent offenders, in line with other work using similar definitions (Theobald et al., 2016). Broader definitions used in prior work (e.g., counting any additional offence) yield substantially higher estimates (Pérez-Cámara et al., 2024; Coghlan & Millsteed, 2017; Herrero et al., 2016; Loinaz, 2014). This highlights the strong impact of definitional choices: broader definitions imply that IPV is embedded in general criminality, while strict criteria reveal that most IPV perpetrators are specialists who begin offending later, commit fewer offences, receive milder sanctions, and are less often male than generalists. Descriptive analyses also showed that IPV generalists differ from non-IPV violent offenders: they begin earlier, commit more violent but fewer non-violent offences, and exhibit stronger overrepresentation among men and non-nationals. Together, these findings indicate that IPV specialists, IPV generalists, and non-IPV violent offenders constitute meaningfully distinct offender types.

In RQ2, we integrated developmental criminology to examine whether the three groups differ in their violent-offending trajectories (up to age 40 in main analyses; up to age 50 in complementary analyses) using latent group–based trajectory modeling. We identified five trajectories distinguished by onset age, frequency, and persistence. Severe trajectories were characterized by early onset in the teens or twenties, high offence rates, and long duration, whereas less severe ones showed later onset (typically in the thirties or forties), low counts, and little persistence. Severe trajectories were lowly prevalent in all groups, while the least severe were the most common.

At the same time, notable differences in trajectory prevalence and violence intensity emerged across groups, with IPV specialists heavily concentrated in low-rate, late-onset, and short-duration trajectories. This pattern is consistent with the notion of specialized careers (Nieuwbeerta, Blokland, Piquero, & Sweeten, 2010) and aligns with developmental criminology's emphasis on the role of key life events in shaping offending (Mazerolle, Piquero, & Brame, 2010; Piquero et al.,

2003; Sampson & Laub, 2005)—in this case, events such as couple formation and dissolution (Walker, Bowen, & Brown, 2013). It also corresponds to situational violence linked to relational stressors in adulthood, characteristic of "family-only" IPV in psychological typologies (Holtzworth-Munroe & Stuart, 1994; Johnson, 1995).

In contrast, IPV generalists and non-IPV offenders tended to appear disproportionately in early-onset, high-rate, long-duration trajectories, aligning with existing evidence (Theobald et al., 2016; Piquero et al., 2014; Dowling et al., 2021). One trajectory resembled the "flat," persistently antisocial pattern associated with criminal versatility (Gottfredson & Hirschi, 1986; Piquero et al., 2014), though it occurred infrequently—consistent with other evidence stating the rarity of persistent offenders (Blokland & Nieuwbeerta, 2005). While both groups shared these broad features, they also diverged in important ways. IPV generalists displayed higher violent intensity in the two most common late-onset trajectories, whereas non-IPV offenders showed greater intensity in the earliest and longest careers. Taken together with IPV generalists' lower levels of violence against non-partners and their later onset in IPV relative to non-IPV violence, these patterns suggest that their offending becomes increasingly partner-focused over time.

In RQ3, we examined whether differences in trajectory distribution and intensity across the three violent groups were explained by disparities in prior non-violent criminal involvement and socio-demographics. None of the variables that significantly predicted group membership in the RQ1 multinomial models accounted for differences in trajectory prevalence, regardless of whether we controlled for between-group variation in age of onset and offence counts. This indicates that the likelihood of following a particular violent trajectory—and its timing and intensity—is largely independent of the criminal and socio-demographic factors used to predict group membership. Instead, trajectories may be more strongly shaped by situational factors and life transitions emphasized by developmental criminology (Sampson & Laub, 1993; Sampson & Laub, 2005)—adulthood, employment, marriage, parenthood—than by stable individual characteristics.

This conclusion also reframes the role of antisocial predispositions—typically proxied by histories of non-violent offending—in shaping violent trajectories. Our findings show that such histories differentiate IPV generalists from non-IPV violent offenders only modestly in their likelihood of following more severe trajectories, consistent with evidence that differences between the groups are of degree rather than kind (Theobald et al., 2016). This challenges interpretations that cast antisocial tendencies as strong predictors of violence through heightened criminal chronicity and versatility (Moffitt, 1993; Moffitt, 2018). Instead, antisocial predispositions appear to shape mainly who aggressors are more likely to target—non-partners rather than partners.

As with antisociality, gender in our results shapes the context of violence more than the choice of offending pathways. Women were far less likely than men to be convicted of any violent offence, yet those who did offend were as likely as men to follow complex developmental trajectories. Unlike antisociality, however, gender structures where violence occurs—intimate versus public spheres—as reflected in men's stronger overrepresentation among IPV offenders, particularly generalists, compared to non-IPV offenders.

Symmetry theorists (Dixon & Graham-Kevan, 2011; Dutton, 2012) attribute men's overrepresentation in IPV to male underreporting (Drijber, Reijnders, & Ceelen, 2013; Walker et al., 2020) and to leniency toward female perpetrators within the justice system (the "chivalry" hypothesis) (Romain & Freiburger, 2016; Spohn & Beichner, 2000). Spain fits this profile following major shifts in public discourse and legal reforms (Organic Laws 1/2004 and 1/2015) (Gracia, Lila, & Santirso, 2020; Roggeband, 2012). However, our analyses indicate that men's three-to-one overrepresentation in non-IPV versus IPV convictions remains constant across cohorts, challenging an explanation based solely on institutional bias.

Feminist theories offer a complementary explanation. Patriarchal norms normalize male control and coercive behavior in intimate relationships, whereas women's IPV tends to be situational or defensive (Coker et al., 2002; Johnson, 1995; Stark, 2006), a pattern supported by multiple studies (Spencer, Cafferky, & Stith, 2016; Henning et al., 2005). Although women often engage in situational violence linked to stress or poor conflict-resolution skills (Johnson, 2011), in private contexts patriarchal norms may frame it as legitimate when directed toward men who fail to fulfill expected caring obligations, and less likely to be reported (Straus, 1999). In contrast, female violence outside private relationships is more visible and less tolerated (Eitle, 2002; Lauritsen, Heimer, & Lynch, 2009).

Feminist perspectives also help explain the more severe, longer-lasting patterns of IPV among generalists. Our findings indicate that IPV generalists shift from targeting non-partners in youth to targeting female partners in adulthood, increasing both intensity and coercive control. This suggests that antisociality and psychopathology—shared with non-IPV violent offenders—interact with patriarchal norms to produce the "intimate terrorist" profile (Johnson, 1995) that appears to characterize IPV generalists. Typological models further distinguish two aggressor types within the most problematic IPV offenders (Gottman et al., 1995; Holtzworth-Munroe & Stuart, 1994). The "cobra" profile involves antisocial and psychopathic traits associated with calculated victim selection and exploitation; in patriarchal contexts, female partners may be an easy target for this type of offender due to women's structural disadvantages and vulnerability. The "pit-bull" profile is associated with borderline traits (Gottman et al., 1995) and reactive violence due to insecurities. This could be favored by perceive threats to masculine identity, consistent with status inconsistency theories (Gelles, 1974; Rodríguez-Menés & Safranoff, 2012). In both cases, patriarchal contexts shape the scope and persistence of violence by enabling calculated coercion or intensifying status-threat responses.

6.1. *Limitations and policy implications*

Despite this study's strengths in long-term follow-up and use of comprehensive administrative data, several limitations must be acknowledged. First, our registry data capture only officially recorded offences, lack relational and motivational context, and may undercount less severe or unreported IPV, including female-perpetrated cases. Second, the absence of direct psychological and socioeconomic measures limits the interpretive depth of our findings. Although variables such as substance-related convictions may proxy psychological processes, they cannot confirm clinical addiction or underlying psychopathology. As a result, our models cannot explain the precise 'why' of offending and instead highlight key factors—such as violent predispositions and gender—that shape life-course offending pathways and offenders' degree of IPV specialization. Future research should integrate administrative, police, health, and socio-economic records to allow more detailed analyses of how relationships, personalities, and social contexts interact in the development of IPV.

From a policy perspective, our findings underscore the need for differentiated interventions. IPV specialists—whose violence appears situational and relationship-bound—may benefit from conflict-resolution programs and interventions targeting relational stress. IPV generalists—exhibiting persistent violence and coercive control—require intensive psychological treatment, continuous judicial monitoring, and targeted recidivism-prevention efforts. More broadly, the cultural underpinnings of IPV highlight the importance of prevention strategies aimed at addressing patriarchal norms in community-specific ways.

6.2. Main contributions

By integrating typological and developmental perspectives and analyzing the full population of violent offenders, this study demonstrates that IPV perpetrators are far from homogeneous. IPV specialists, IPV generalists, and non-IPV violent offenders differ systematically in developmental trajectories, offence patterns, persistence, and gender composition. IPV generalists resemble chronic violent offenders developmentally but remain more relationally focused, whereas IPV specialists remain highly relationship-specific. Antisocial predispositions modestly influence who is targeted, while the timing, intensity, and duration of violence are shaped primarily by situational, relational, and structural factors, including patriarchal norms. These findings clarify inconsistencies in prior research, demonstrate the consequences of definitional choices, strengthen the bridge between typological and criminal-career perspectives, and underscore the need for differentiated, context-sensitive prevention and intervention strategies that reflect the diverse pathways through which IPV emerges.

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CRediT authorship contribution statement

Jorge Rodríguez-Menés: Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization, Writing – review & editing, Writing – original draft. **Dimitris Pavlopoulos:** Validation, Methodology, Formal analysis, Writing – review & editing. **Martí Rovira:** Project administration, Methodology, Formal analysis, Data curation, Writing – review & editing. **Maike van Damme:** Methodology, Formal analysis, Conceptualization, Writing – review & editing.

Author agreement

All authors have seen and approved the final version of the manuscript being submitted. The article is the authors' original work, hasn't received prior publication and isn't under consideration for publication elsewhere.

Ethical considerations

This research complies with the highest ethical standards. It was approved by the Ethical Board of the Universitat Pompeu Fabra, CIREP, on May 25th, 2017 (authorization # 0042) and authorized by the depositary of the original data, the Department of Justice of the Regional Government of Catalonia (authorization # 0310/280/2018), on January 18th, 2018.

The authorizations included a waiver for the requirement to obtain consent from the individuals involved, whose identities were anonymized by the technical personnel of the Department of Justice using specialized encryption software, as well as permission to publish the research results. (Copies of the authorizations are attached).

Declaration of competing interest

No conflict of interest is declared in relation to financial or non-financial interests.

Appendix A. Appendix

Table A1
Characteristics of IPV generalists, IPV specialists, and non-IPV offenders. Results from multinomial logistic regression

	IPV specialists vs. IPV generalists		Non-IPV violent vs. IPV generalists	
	Coeff.	Std. Err.	Coeff.	Std. Err.
Age of criminal onset (any crime)	0.03	0.02	−0.06^{+}	0.03
Age of criminal onset (violent)	0.06^{+}	0.01	0.07*	0.03
# of violent offences up to age 40	−0.30***	0.00	−0.06^{+}	0.03
# of non-violent offences up to age 40 (excluding breaches)	−0.20**	0.07	0.17***	0.04
# of sentence breaches up to age 40	−0.06	0.10	−0.55***	0.15
Severity imposed for vioolent crimes (sum of years up to age 40)	−0.27***	0.06	0.03	0.02
Severity imposed for non-violent crimes (sum of years up to age 40)	−0.02	0.07	0.02	0.05
Years in prison up to age 40	−0.08+++	0.01	0.03**	0.01
Born between 1960 and 1969	−1.17***	0.16	0.32^{+}	0.17
Born before 1960	−2.25***	0.29	0.38	0.33
Foreigner	0.34**	0.11	0.69***	0.14
Female	−0.05	0.21	1.22***	0.24
Constant	−1.08*	0.53	0.54	0.55

[1] Baseline categories in categorical variables: Born between 1960 and 1969; Spaniard; Male.
*** Significant at the 0.001 level; ** Sign. at the 0.01 level; * Sign. at the 0.05 level.
$N = 5109$ (all offenders convicted of at least one IPV crime in Catalonia between 2010 and 2014, as well as a randomly selected 10 % sample of offenders convicted of at least one non-IPV violent crime in the same region and time period, provided they were at least 40 years old by the end of the observation period in March 2019). Data are weighted (non-IPV violent offenders are given 10 times their observed weight) and standard errors are consequently corrrected (Sandwich estimator). Own elaboration based on registry data from Catalonia's Department of Justice.

Table A2
Log-odds of experiencing the least or most complex trajectories versus the mid-complex trajectory across models with varying numbers of predictors. Estimates obtained using the Karlson–Holm–Breen method.

	Model 1 (reduced)	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11 (full)	Model 12	Model 13
Trajectory 0 (latest onset)* vs. *1 & 2 (mid onset)													
IPV generalist (ref. cat.)	0	0	0	0	0	0	0	0	0	0	0	0	0
IPV specialist	4.42***	−2.64*	−3.76***	−3.61***	−3.59***	−3.59***	−3.57***	−3.61***	−3.61***	−3.61***	−3.61***	3.78***	4.41***
Other violence only	−2.13***	−4.22***	−4.4***	−4.43***	−4.44***	−4.43***	−4.46***	−4.55***	−4.56***	−4.55***	−4.54***	−1.46***	−2.2***
# of violent offences up to age 40	−3.1**	−3.95***	−3.08**	−3.08**	−3.09**	−3.08**	−3.08**	−3.1**	−3.1**	−3.1**	−3.1**	−3.1**	−3.1**
Age of criminal onset (violent)	0.41**	0.41**	0.42***	0.37**	0.37**	0.37**	0.47***	0.43**	0.41**	0.41**	0.41**	0.41**	0.41**
Born between 1970 and 1979 (ref. cat.)	0	0	0	0	0	0	0	0	0	0	0	0	0
Born between 1960 and 1969	1.46***	1.46***	1.46***	1.33***	1.3***	1.31***	1.39***	1.47***	1.47***	1.47***	1.46***	1.46***	1.46***
Born before 1960	1.47**	1.47**	1.47**	1.36**	1.3**	1.33**	1.48**	1.5**	1.49**	1.48**	1.47**	1.47**	1.47**
Years in prison up to age 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Severity imposed for violent crimes (sum of years up to age 40)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Age of criminal onset (any crime)	−0.04	−0.04	−0.04	−0.04	−0.04	−0.04	−0.1**	−0.05	−0.04	−0.04	−0.04	−0.04	−0.04
# of non-violent offences up to age 40 (excluding breaches)	0.11***	0.11***	0.11***	0.11***	0.11***	0.11***	0.11***	0.12***	0.1***	0.1***	0.11***	−0.71***	0.11***
Severity imposed for non-violent crimes (sum of years up to age 40)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spanish (ref. cat.)	0	0	0	0	0	0	0	0	0	0	0	0	0
Foreigner	−0.09	−0.09	−0.09	−0.09	−0.09	−0.09	−0.09	−0.09	−0.09	−0.09	−0.09	−0.09	−0.09
Male (ref. cat.)	0	0	0	0	0	0	0	0	0	0	0	0	0
Female	−0.15	−0.15	−0.15	−0.15	−0.15	−0.15	−0.15	−0.15	−0.15	−0.14	−0.15	−0.15	1.17**
Constant	−2.61**	6.74***	−11.07	−9.68	−9.86	−9.81	−9.57	−9.71	−9.78	−9.78	−9.73	−1.8**	−2.65**
Trajectories 3 & 4 (earlier onsets)* vs. *1 & 2 (mid onset)													
IPV generalist (ref. cat.)	0	0	0	0	0	0	0	0	0	0	0	0	0
IPV specialist	−7.84***	1.67***	6.02***	5.47***	5.2***	5.2***	5.09***	5.09***	5.09***	5.09***	5.04***	−6.63***	−7.84***
Other violence only	−2.36***	0.44	1.14**	1.35**	1.54**	1.51**	1.62**	1.63**	1.63**	1.64**	1.5**	−3.64***	−2.3***
# of violent offences up to age 40	1.84***	5.33***	1.92***	1.7***	1.87***	1.84***	1.83***	1.83***	1.83***	1.83***	1.84***	1.84***	1.84***
Age of criminal onset (violent)	−1.97***	−1.97***	−1.65***	−1.51***	−1.57***	−1.57***	−1.99***	−1.99***	−1.98***	−1.98***	−1.97***	−1.97***	−1.97***
Born between 1970 and 1979 (ref. cat.)	0	0	0	0	0	0	0	0	0	0	0	0	0
Born between 1960 and 1969	−8.94***	−8.94***	−8.94***	−9.03***	−8.65***	−8.68***	−9.02***	−9.03***	−9.03***	−9.03***	−8.94***	−8.94***	−8.94***
Born before 1960	−2.3	−2.29	−2.28	−2.57	−1.7	−1.76	−2.41	−2.41	−2.41	−2.43	−2.3	−2.31	−2.3
Years in prison up to age 40	−0.01**	−0.01**	−0.01**	−0.01**	−0.01**	−0.01**	−0.01**	−0.01**	−0.01**	−0.01**	−0.01**	−0.01**	−0.01**
Severity imposed for violent crimes (sum of years up to age 40)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Age of criminal onset (any crime)	0.44	0.44	0.44	0.44	0.44	0.44	0.45	0.45	0.45	0.45	0.44	0.44	0.44
# of non-violent offences up to age 40 (excluding breaches)	−0.01	−0.01	−0.01	−0.01	−0.01	−0.01	−0.01	0.00	0.00	0.00	−0.01	1.33***	−0.01
Severity imposed for non-violent crimes (sum of years up to age 40)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spanish (ref. cat.)	0	0	0	0	0	0	0	0	0	0	0	0	0
Foreigner	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Male (ref. cat.)	0	0	0	0	0	0	0	0	0	0	0	0	0
Female	−0.06	−0.06	−0.06	−0.06	−0.06	−0.06	−0.06	−0.06	−0.06	−0.22	−0.06	−0.06	−1
Constant	−18.31***	−30.91***	38.82***	36.57***	39.17***	39.04***	38.03***	38.03***	38.04***	38.04***	37.45***	−19.86***	−18.27***

In grey, estimates for concomitant variables used to allow meaningful comparisons across models with different numberf of controls.
*** = Significant at the 0.001 level; ** = Significant at the 0.01 level; * = Significant at the 0.05 level.

Data availability

The data that support the findings of this study are available from the authors, but restrictions apply to their availability, which were used under a special authorization issued by the Department of Justice of Catalonia's regional government.

References

Blokland, A. A. J., Nagin, D., & Nieuwbeerta, P. (2005). Life span offending trajectories of a Dutch conviction cohort. *Criminology, 43*, 919–954. https://doi.org/10.1111/j.1745-9125.2005.00029.x

Blokland, A. A. J., & Nieuwbeerta, P. (2005). The effects of life circumstances on longitudinal trajectories of offending. *Criminology: An Interdisciplinary Journal, 43*(4), 1203–1240. https://doi.org/10.1111/j.1745-9125.2005.00037.x

Bouffard, L. A., & Zedaker, S. B. (2016). Are domestic violence offenders specialists? Answers from multiple analytic approaches. *Journal of Research in Crime and Delinquency, 53*(6), 788–813. https://doi.org/10.1177/0022427816656897

Breen, R., Karlson, K. B., & Holm, A. (2013). Total, direct, and indirect effects in logit models. *Sociological Methods & Research, 42*(2), 164–191.

Bushway, S. D., Sweeten, G., & Nieuwbeerta, P. (2009). Measuring long term individual trajectories of offending using multiple methods. *Journal of Quantitative Criminology, 25*(3), 259–286.

Cantos, A. L., Goldstein, D. A., Brenner, L., O'Leary, K. D., & Verborg, R. (2015). Correlates and program completion of family only and generally violent perpetrators of intimate partner violence. *Behavioral Psychology, 23*(3).

Cauffman, E., Monahan, K. C., & Thomas, A. G. (2015). Pathways to persistence: Female offending from 14 to 25. *Journal of Developmental and Life-Course Criminology, 1*, 236–268. https://doi.org/10.1007/s40865-015-0016-z

Chopin, J., Fortin, F., Paquette, S., Guay, J.-P., Péloquin, O., & Chartrand, E. (2023). Violent partners or a specific class of offenders? A criminal career approach to understanding men involved in intimate partner sexual violence. *Sexual Abuse, 37* (2), 153–180. https://doi.org/10.1177/10790632231224356

Coghlan, S., & Millsteed, M. (2017). Identifying the differences between generalist and specialist family violence perpetrators: Risk factors and perpetrator characteristics. In *In brief. Crime statistics agency*. ISSN: 2205-6378.

Coker, A. L., Davis, K. E., Arias, I., Desai, S., Sanderson, M., Brandt, H. M., & Smith, P. H. (2002). Physical and mental health effects of intimate partner violence for men and women. *American Journal of Preventive Medicine, 23*(4), 260–268. https://doi.org/10.1016/s0749-3797(02)00514-7 (PMID: 12406480).

DeLisi, M., Bunga, R., Heirigs, M. H., Erickson, J. H., & Hochstetler, A. (2019). The past is prologue: Criminal specialization continuity in the delinquent career. *Youth Violence and Juvenile Justice, 17*(4), 335–353. https://doi.org/10.1177/1541204018809839

Dixon, L., & Graham-Kevan, N. (2011). Understanding the nature and etiology of intimate partner violence and implications for practice and policy. *Clinical Psychology Review, 31*(7), 1145–1155.

Dowling, C., Boxall, H., & Morgan, A. (2021). The criminal career trajectories of domestic violence offenders. In *Trends and issues in crime and criminal justice* (pp. 1–17). Australian Institute of Criminology. no. 624.

Drijber, B. C., Reijnders, U. J., & Ceelen, M. (2013). Male victims of domestic violence. *Journal of Family Violence, 28*(2), 173–178.

Dutton, D. G. (2012). The case against the role of gender in intimate partner violence. *Aggression and Violent Behavior, 17*(1), 99–104.

Duvvury, N., Callan, A., Carney, P., & Raghavendra, S. (2013). *Intimate partner violence: Economic costs and implications for growth and development*. Washington, DC: World Bank.

EIGE. (2023). *Understanding intimate partner violence in the European Union. The essential need for administrative data collection*. Luxemburg: Publications Office of the European Union, Luxembourg.

Eitle, D. J. (2002). Exploring a source of deviance-producing strain for females: Perceived discrimination and general strain theory. *Journal of Criminal Justice, 30*(5), 429–442. https://doi.org/10.1016/S0047-2352(02)00146-0

Farrington, D. P. (1992). Criminal career research in the United Kingdom. *British Journal of Criminology, 32*(4), 521–536. https://doi.org/10.1093/oxfordjournals.bjc.a048255

Farrington, D. P., Gaffney, H., & Ttofi, M. M. (2017). Systematic reviews of explanatory risk factors for violence, offending, and delinquency. *Aggression and Violent Behavior, 33*, 24–36. https://doi.org/10.1016/j.avb.2016.11.004

Fergusson, D. M., & Horwood, L. J. (2002). Male and female offending trajectories. *Development and Psychopathology, 14*(1), 159–177. https://doi.org/10.1017/S0954579402001098

Gelles, R. J. (1974). *The violent home*. Beverly Hills, CA: Sage.

Gottfredson, M., & Hirschi, T. (1986). The true value of lambda would appear to be zero: An essay on career criminals, criminal careers, selective incapacitation, cohort studies, and related topics. *Criminology, 24*(2), 213–234. https://doi.org/10.1111/j.1745-9125.1986.tb01494.x

Gottman, J. M., Jacobson, N. S., Rushe, R. H., Shortt, J. W., Babcock, J., La Taillade, J. J., & Waltz, J. (1995). The relationship between heart rate reactivity, emotionally aggressive behavior, and general violence in batterers. *Journal of Family Psychology, 9*, 227–248.

Gracia, E., Lila, M., & Santirso, F. A. (2020). Attitudes toward intimate partner violence against women in the European Union: A systematic review. *European Psychologist, 25*(2), 104–121. https://doi.org/10.1027/1016-9040/a000392

Henning, K., Jones, A. R., & Holdford, R. (2005). I didn't do it, but if I did I had a good reason": Minimization, Denial, and Attributions of Blame Among Male and Female Domestic Violence Offenders. *Journal of Family Violence, 20*, 131–139. https://doi.org/10.1007/s10896-005-3647-8

Herrero, J., Torres, A., Fernández-Suárez, A., & Rodríguez-Díaz, F. J. (2016). Generalists versus specialists: Toward a typology of batterers in prison. *The European Journal of Psychology Applied to Legal Context, 8*(1), 19–26.

Hilton, N. Z., & Eke, A. W. (2016). Non-specialization of criminal careers among intimate partner violence offenders. *Criminal Justice and Behavior, 43*(10), 1347–1363.

Holtzworth-Munroe, A., & Stuart, G. L. (1994). Typologies of male batterers: Three subtypes and the differences among them. *Psychological Bulletin, 116*(3), 476.

Johnson, M. P. (1995). Patriarchal terrorism and common couple violence: Two forms of violence against women. *Journal of Marriage and the Family, 57*(2), 283–294.

Johnson, M. P. (2011). Gender and types of intimate partner violence: A response to an anti-feminist literature review. *Aggression and Violent Behavior, 16*(4), 289–296. https://doi.org/10.1016/j.avb.2011.04.006

Johnson, M. P., & Ferraro, K. J. (2000). Research on domestic violence in the 1990s: Making distinctions. *Journal of Marriage and Family, 62*, 948–963. https://doi.org/10.1111/j.1741-3737.2000.00948.x

Karlson, K. B., Holm, A., & Breen, R. (2011). Comparing regression coefficients between same-sample nested models using logit and probit. A new method. *Sociological Methodology, 42*, 286–313.

Keilholtz, B. M., Spencer, C. M., & Stith, S. M. (2022). Common life stressors as risk markers for intimate partner violence: A meta-analysis. *Contemporary Family Therapy, 45*(3), 1–11. https://doi.org/10.1007/s10591-022-09633-w

Kimber, M., Adham, S., Gill, S., McTavish, J., & MacMillan, H. L. (2018). The association between child exposure to intimate partner violence (IPV) and perpetration of IPV in adulthood—A systematic review. *Child Abuse & Neglect, 76*, 273–286. https://doi.org/10.1016/j.chiabu.2017.11.007

Krug, E. G., Mercy, J. A., Dahlberg, L. L., & Zwi, A. B. (2002). The world report on violence and health. *The Lancet, 360*(9339), 1083–1088.

Lauritsen, J. L., Heimer, K., & Lynch, J. P. (2009). Trends in the gender gap in violent offending: New evidence from the national crime victimization survey. *Criminology, 47*, 361–399. https://doi.org/10.1111/j.1745-9125.2009.00149.x

Loinaz, I. (2014). Typologies, risk and recidivism in partner-violent men with the B-SAFER: a pilot study. *Psychology, Crime & Law, 20*(2), 183–198. https://doi.org/10.1080/1068316X.2013.770854

Mallory, A. B., Dharnidharka, P., Deitz, S. L., Barros-Gomes, P., Cafferky, B., Stith, S. M., & Van, K. (2016). A meta-analysis of cross cultural risk markers for intimate partner violence. *Aggression and Violent Behavior, 31*, 116–126. https://doi.org/10.1016/j.avb.2016.08.004

Mazerolle, P., Piquero, A. R., & Brame, R. (2010). Violent onset offenders: Do initial experiences shape criminal career dimensions? *International Criminal Justice Review, 20*(2), 132–146. https://doi.org/10.1177/1057567710368361

McCarthy, K. J., Mehta, R., & Haberland, N. A. (2018). Gender, power, and violence: A systematic review of measures and their association with male perpetration of IPV. *PLoS One, 13*(11), Article e0207091. https://doi.org/10.1371/journal.pone.0207091

Moffitt, T. E. (1993). Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review, 100*(4), 674–701. https://doi.org/10.1037/0033-295X.100.4.674

Moffitt, T. E. (2018). Male antisocial behaviour in adolescence and beyond. *Nature Human Behaviour, 2*(3), 177–186. https://doi.org/10.1038/s41562-018-0309-4

Nagin, D., & Paternoster, R. (2000). Population heterogeneity and state dependence: State of the evidence and directions for future research. *Journal of Quantitative Criminology, 16*(2), 117–144. https://doi.org/10.1023/A:1007502804941

Nieuwbeerta, P., Blokland, A. A. J., Piquero, A. R., & Sweeten, G. (2010). A life-course analysis of offense specialization across age: Introducing a new method for studying individual specialization over the life course. *Crime & Delinquency, 57*(1), 3–28. https://doi.org/10.1177/0011128710376336

Oram, S., Trevillion, K., Khalifeh, H., Feder, G., & Howard, L. M. (2014). Systematic review and meta-analysis of psychiatric disorder and the perpetration of partner violence. *Epidemiology and Psychiatric Sciences, 23*, 361–376.

Ouellet, F., Nouvian, A., Soulier, E., & Thomas, V.. The criminal career of intimate partner violence offenders: Generalists or specialists? [Research report]. Immigration, Refugees and Citizenship Canada. https://www.canada.ca/en/immigration-refugees-citizenship/corporate/reports-statistics/research/criminal-careers-intimate-partner-abusers-presentation.html.

Pérez-Cámara, N., Teva, I., Pérez-García, M., Burneo-Garcés, C., & Hidalgo-Ruzzante, N. (2024). Specialist versus generalist intimate partner violence against women (IPVAW) perpetrators: Comparison on sociodemographic, violence, psychological, social cognition, and executive functioning variables. *Psychology of Violence, 15*(2), 142–153.

Petersson, J., & Strand, S. J. M. (2020). Family-only perpetrators of intimate partner violence: A systematic review. *Trauma, Violence & Abuse, 21*(2), 367–381. https://doi.org/10.1177/1524838018770410

Piquero, A. R., Brame, R., Fagan, J., & Moffitt, T. E. (2006). Assessing the offending activity of criminal domestic violence suspects: Offence specialization, escalation, and de-escalation evidence from the spouse assault replication program. *Public Health Reports, 121*(4), 409–418.

Piquero, A. R., Farrington, D. P., & Blumstein, A. (2003). The criminal career paradigm. *Crime and Justice, 30*, 359–506. http://www.jstor.org/stable/1147702.

Piquero, A. R., Jennings, W. G., & Barnes, J. C. (2012). Violence in criminal careers: A review of the literature from a developmental life-course perspective. *Aggression and Violent Behavior, 17*(3), 171–179. https://doi.org/10.1016/j.avb.2012.02.008

Piquero, A. R., Theobald, D., & Farrington, D. P. (2014). The overlap between offending trajectories, criminal violence, and intimate partner violence. *International Journal of Offender Therapy and Comparative Criminology, 58*(3), 286–302.

Pratt, T. C., & Cullen, F. T. (2005). Assessing macro-level predictors and theories of crime: A meta-analysis. *Crime and Justice, 32*, 373–450.

Rodríguez-Menés, J., & Safranoff, A. (2012). Violence against women in intimate relations: A contrast of five theories. *European Journal of Criminology, 9*(6), 584–602.

Roggeband, C. (2012). Shifting policy responses to domestic violence in the Netherlands and Spain (1980-2009). *Violence Against Women, 18*(7), 784–806. https://doi.org/10.1177/1077801212455359

Romain, D. M., & Freiburger, T. L. (2016). Chivalry revisited: Gender, race/ethnicity, and offence type on domestic violence charge reduction. *Feminist Criminology, 11*(2), 191–222.

Sampson, R. J., & Laub, J. H. (1993). *Crime in the making: Pathways and turning points through life*. Cambridge: Harvard University Press.

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

Schwab-Reese, L. M., Peek-Asa, C., & Parker, E. (2016). Associations of financial stressors and physical intimate partner violence perpetration. *Injury Epidemiology, 3*(1), 6. https://doi.org/10.1186/s40621-016-0069-4

Spencer, C., Cafferky, B., & Stith, S. M. (2016). Gender differences in risk markers for perpetration of physical partner violence: Results from a meta-analytic review. *Journal of Family Violence, 31*, 981–984. https://doi.org/10.1007/s10896-016-9860-9

Spencer, C. M., Mallory, A. B., Cafferky, B. M., Kimmes, J. G., Beck, A. R., & Stith, S. M. (2019). Mental health factors and intimate partner violence perpetration and victimization: A meta-analysis. *Psychology of Violence, 9*(1), 1–17. https://doi.org/10.1037/vio0000156

Spencer, C. M., Stith, S. M., & Cafferky, B. (2020). What puts individuals at risk for physical intimate partner violence perpetration? A meta-analysis examining risk markers for men and women. *Trauma, Violence & Abuse, 23*(1), 36–51. https://doi.org/10.1177/1524838020925776

Spohn, C., & Beichner, D. (2000). Is preferential treatment of female offenders a thing of the past? A multisite study of gender, race, and imprisonment. *Criminal Justice Policy Review, 11*, 149–184.

Stark, E. (2006). Commentary on Johnson's "Conflict and control: Gender symmetry and asymmetry in domestic violence". *Violence Against Women, 12*(11), 1019–1025.

Straus, M. A. (1999). The controversy over domestic violence by women: A methodological, theoretical, and sociology of science analysis. In X. B. Arraiga, & S. Oskamp (Eds.), *Violence in intimate relationships* (pp. 17–44). SAGE Thousand Oaks, CA: Sage.

Tanskanen, M., & Aaltonen, M. (2022). Social correlates of specialized versus versatile offending patterns in intimate partner violence: A register-based study in Finland. *Journal of Criminal Justice, 81*, Article 101921. https://doi.org/10.1016/j.jcrimjus.2022.101921

Teva, I., Marín-Morales, A., Bueso-Izquierdo, N., Pérez-García, M., & Hidalgo-Ruzzante, N. (2023). Personality characteristics in specialist and generalist intimate partner violence perpetrators. *Clinical Psychology & Psychotherapy, 30*(1), 86–96.

Theobald, D., Farrington, D. P., Coid, J. W., & Piquero, A. R. (2016). Are male perpetrators of intimate partner violence different from convicted violent offenders? Examination of psychopathic traits and life success in males from a community survey. *Journal of Interpersonal Violence, 31*(9), 1687–1718.

Valdivia-Devia, M., Oyanedel, J. C., Andrés Pueyo, A., Fuentes Araya, M., & Valdivia-Monzón, M. (2021). ¿Trayectorias delictivas versátiles o especializadas? Agresores de violencia intrafamiliar. *Anuario de Psicologia Juridica, 31*(1), 45–54.

VanderEnde, K. E., Yount, K. M., Dynes, M. M., & Sibley, L. M. (2012). Community-level correlates of intimate partner violence against women globally: A systematic review. *Social Science & Medicine, 75*(7), 1143–1155. https://doi.org/10.1016/j.socscimed.2012.05.027

Verbruggen, J., Blokland, A., Robinson, A. L., & Maxwell, C. D. (2020). The relationship between criminal behaviour over the life-course and intimate partner violence perpetration in later life. *European Journal of Criminology, 17*(6), 784–805.

Vermunt, J. K., & Magidson, J. (2025). *Upgrade manual for LatentGOLD basic, advanced, syntax, and choice versions 6.0 and 6.1*. Tilburg, The Netherlands: Statistical Innovations Europe.

Walker, A., Lyall, K., Silva, D., Craigie, G., Mayshak, R., Costa, B., & Bentley, A. (2020). Male victims of female-perpetrated intimate partner violence, help-seeking, and reporting behaviors: A qualitative study. *Psychology of Men & Masculinities, 21*(2), 213.

Walker, K., Bowen, E., & Brown, S. (2013). Desistance from intimate partner violence: A critical review. *Aggression and Violent Behavior, 18*(2), 271–280. https://doi.org/10.1016/j.avb.2012.11.019

Waters, H. R., Hyder, A. A., Rajkotia, Y., Basu, S., & Butchart, A. (2005). The costs of interpersonal violence—an international review. *Health Policy, 73*(3), 303–315. https://doi.org/10.1016/j.healthpol.2004.11.022

Weatherburn, D., & Rahman, S. (2018). *General offending by domestic violence offenders (Crime and Justice Bulletin No. 215*. Sydney: NSW Bureau of Crime Statistics and Research.

White, S. J., Sin, J., Sweeney, A., Salisbury, T., Wahlich, C., Montesinos Guevara, C. M., … Mantovani, N. (2024). Global prevalence and mental health outcomes of intimate partner violence among women: A systematic review and meta-analysis. *Trauma, Violence & Abuse, 25*(1), 494–511. https://doi.org/10.1177/15248380231155529