

SOCIAL LEARNING THEORY AND CRIMINAL OFFENDING: SOURCES, MECHANISMS AND CONTEMPORARY EXPRESSIONS IN SELECTED EUROPEAN UNION MEMBER STATES

Krenar Bardhi¹; Prof. As. Dr. Linert Lirëza²

¹ PhD Candidate, Faculty of Law, Department of Criminal Law Sciences, Varna Free University “Chernorizets Hrabar”, Bulgaria; Attorney at Law, Albania

² Dean, Faculty of Political Sciences and Law, Department of Law, “Aleksandër Moisiu” University, Durrës, Albania

Abstract: *This article examines social learning theory as an explanation of the acquisition, maintenance, escalation and abandonment of criminal conduct. Its central claim is deliberately qualified: social learning is not the single source of criminality, but a transmission mechanism through which structural disadvantage, criminal opportunity and individual vulnerability may be converted into actionable definitions, skills, expectations and routines. The study uses a structured narrative review and a functional comparative case-study design. Sweden, Denmark, the Netherlands, Italy and Bulgaria are selected because they illuminate different learning environments: hierarchical recruitment of minors into street networks, peer effects in prison, cyber-dependent offending and intergenerational organised crime, mafia-related territorial and family socialisation, and a juvenile prevention system documented through administrative data. The analysis finds the strongest support for differential association and definitions favourable to offending, while evidence for imitation and differential reinforcement is more context-dependent. Digital platforms accelerate exposure, visibility and vicarious reward, but they rarely operate independently of offline relationships and opportunities. Prisons and residential placements can reinforce specialised criminal capital when unstructured contact links less experienced offenders with credible and experienced peers. The article proposes a five-stage analytical sequence—exposure, definition, capability, reinforcement and network consolidation—and derives policy implications for youth justice, corrections, cybercrime prevention and organised-crime disruption. Effective prevention must change the learning ecology around the person, not merely increase the formal severity of punishment.*

Keywords: *social learning theory; criminal offending; differential association; differential reinforcement; juvenile delinquency; organised crime; cybercrime; prisons; European Union; crime prevention*

1. Introduction

Why do individuals begin, repeat and sometimes specialise in criminal conduct? Criminology has never produced a credible single-factor answer. Economic deprivation, weak social control, adverse childhood experiences, individual traits, criminal opportunity and institutional failure may all contribute, but none explains by itself how a person learns what to do, how to justify it, whom to trust, what rewards to expect, or how to persist after the first offence. Social learning theory addresses that intervening process. It shifts attention from the abstract existence of risk to the concrete social transmission of conduct.

The starting proposition is that criminal behaviour is learned rather than inherited as a fixed identity. Sutherland’s differential association theory located that learning in communication within intimate groups and argued that law violation becomes more likely when

definitions favourable to offending outweigh definitions favourable to conformity.¹ Burgess and Akers later connected differential association with operant conditioning, while Bandura supplied a psychological account of observational learning, modelling and reciprocal interaction between person, behaviour and environment.^{2 3} Akers's mature formulation integrates these ideas through four connected concepts: differential association, definitions, differential reinforcement and imitation.⁴

This framework remains particularly relevant because contemporary criminal markets are organised around networks. Street groups recruit through neighbourhood and kinship ties; organised crime depends on trust and apprenticeship; cybercrime communities circulate techniques and reputational signals; extremist milieus distribute narratives and examples; and prisons bring together people with different forms of criminal experience. The social setting may be physical, digital or hybrid, but the core question is similar: which models are encountered, which messages become credible, which conduct is rewarded, and which sanctions actually matter to the actor?

The phrase "source of criminality" therefore requires precision. If it means an exclusive and universal origin, social learning theory cannot sustain the claim. If it means a causal mechanism that translates exposure and opportunity into criminal cognition, competence and persistence, the theory has substantial explanatory value. A major meta-analysis found comparatively strong relationships between offending and both differential association and pro-criminal definitions, but weaker and less stable effects for imitation and differential reinforcement.⁵ The correct conclusion is neither that peers mechanically cause crime nor that learning is irrelevant. It is that different components of the model have different evidential strength and operate within broader developmental and structural conditions.

The article develops this qualified position in four steps. It first reconstructs the theory and identifies its causal mechanisms. It then considers how digital environments, organised networks and custodial institutions change the form of criminal learning. Third, it compares five European Union Member States selected for the distinct learning environments they reveal. Finally, it derives prevention principles for youth justice, prisons, cybercrime and organised

¹ Edwin H Sutherland, *Principles of Criminology* (4th edn, JB Lippincott 1947) 5–9.

² Robert L Burgess and Ronald L Akers, 'A Differential Association-Reinforcement Theory of Criminal Behavior' (1966) 14(2) *Social Problems* 128–147, <https://doi.org/10.2307/798612>.

³ Albert Bandura, *Social Learning Theory* (Prentice Hall 1977) 22–29.

⁴ Ronald L Akers, *Social Learning and Social Structure: A General Theory of Crime and Deviance* (Northeastern University Press 1998) 47–75.

⁵ Travis C Pratt and others, 'The Empirical Status of Social Learning Theory: A Meta-Analysis' (2010) 27(6) *Justice Quarterly* 765–802, <https://doi.org/10.1080/07418820903379610>.

crime. The contribution is an analytical sequence—exposure, definition, capability, reinforcement and network consolidation—that makes the theory operational without treating association as a synonym for causation.

2. Aim, research questions and methodology

The aim is to determine the extent to which social learning theory explains the origin and continuation of criminal conduct and to test its practical relevance against contemporary European evidence. Four research questions guide the analysis: how are criminal definitions, techniques and expectations acquired; which social and institutional environments intensify or interrupt that learning; what do selected EU cases confirm or qualify; and which prevention measures logically follow from the theory?

Methodologically, the article combines a structured narrative review with a functional comparative case study. The review covers foundational theory, empirical tests, network research, cybercrime studies and intervention evidence. The comparative component does not rank national crime levels. It selects Sweden, Denmark, the Netherlands, Italy and Bulgaria because each offers evidence about a different transmission setting. Sweden illustrates age-graded network recruitment and digital status signalling; Denmark provides register-based evidence on prison peer effects; the Netherlands combines cyber-dependent offending with intergenerational organised crime; Italy reveals mafia-related kinship and territorial socialisation; and Bulgaria provides current administrative data on juvenile offending and educational measures.

The sources consist of peer-reviewed research and official publications available through 23 August 2026, including reports of Europol, the Swedish National Council for Crime Prevention, the Bulgarian National Statistical Institute, the European Union Drugs Agency and the Council of Europe. The approach is explanatory rather than statistical. National administrative categories, age thresholds and reporting practices differ, so numerical comparisons cannot establish that one state has more “socially learned” crime than another. The comparison instead asks whether observed recruitment, transmission and reinforcement processes correspond to the mechanisms predicted by the theory.

Two limitations follow. First, much social-learning research relies on self-reported delinquency and respondents’ descriptions of friends, which can inflate similarity through projection. Second, official reports are designed for administration or threat assessment, not for testing criminological theory. Findings are therefore treated as convergent evidence and

interpreted cautiously. Where evidence is descriptive, the article states an inference rather than a causal conclusion.

3. The theoretical architecture of criminal learning

3.1. Differential association: access to people, messages and opportunities

Differential association concerns patterned exposure. It is not equivalent to being physically near an offender. Associations differ in frequency, duration, priority and intensity. A brief encounter with a low-status acquaintance should have less influence than repeated contact with a trusted parent, sibling, partner, close friend, gang elder or technically skilled online peer. The content transmitted includes techniques, motives, rationalisations and attitudes. Association also structures opportunity: it identifies potential co-offenders, introduces illegal markets and makes otherwise inaccessible conduct appear feasible.

Network research strengthens this point. Haynie showed that the relationship between peer delinquency and individual delinquency depends partly on the structure and composition of friendship networks, not only on the number of delinquent friends.⁶ Warr similarly demonstrated that companionship affects the timing, social meaning and perceived attractiveness of offending.⁷ These findings matter because a network is both a channel of influence and a selection mechanism. Individuals choose friends, friends influence individuals, and offending can reshape the network by generating new contacts. Causation is reciprocal rather than one-directional.

3.2. Definitions: legal rules translated into practical meaning

Definitions are attitudes and meanings attached to conduct. Some positively approve offending: violence may be framed as courage, drug distribution as entrepreneurship, fraud as intelligence, or silence as loyalty. Others neutralise rather than celebrate: the victim is said to deserve the harm, responsibility is displaced to the group, or the offence is portrayed as necessary for family survival. Sykes and Matza's techniques of neutralisation explain how people who generally recognise legal norms can temporarily suspend their moral force.⁸

Definitions are critical because legal prohibition alone does not determine subjective meaning. Within a criminal group, informal rules may compete with state law and carry more

⁶ Dana L Haynie, 'Delinquent Peers Revisited: Does Network Structure Matter?' (2001) 106(4) *American Journal of Sociology* 1013–1057, <https://doi.org/10.1086/320298>.

⁷ Mark Warr, *Companions in Crime: The Social Aspects of Criminal Conduct* (Cambridge University Press 2002) 1–15.

⁸ Gresham M Sykes and David Matza, 'Techniques of Neutralization: A Theory of Delinquency' (1957) 22(6) *American Sociological Review* 664–670, <https://doi.org/10.2307/2089195>.

immediate social consequences. A young recruit may fear ridicule, exclusion or retaliation more than a remote probability of formal punishment. Conversely, a credible teacher, parent, probation officer or former offender may reframe the same behaviour as exploitation rather than status. Social learning theory therefore explains conformity as well as crime: pro-social definitions can be learned, reinforced and stabilised through the same general process.

3.3. Differential reinforcement and imitation

Differential reinforcement concerns the balance of anticipated and actual rewards and costs. Rewards may be material—money, drugs or access to markets—or social—approval, protection, belonging, reputation and rank. Costs may include arrest and sentence, but also shame, exclusion, injury, debt and internal moral conflict. The decisive balance is the actor's experienced and socially interpreted balance, not the formal penalty printed in legislation. If a sanction increases status inside a group, its deterrent effect may be weakened or reversed.

Imitation is most important at initiation and under uncertainty. The prospective offender observes a model, retains a script, assesses whether the behaviour appears competent or rewarded, and attempts reproduction. The model need not be physically present. Videos, encrypted chats, livestreams and forum tutorials can demonstrate weapons, fraud techniques, hacking tools or ideological violence. Yet observation is not enough. Complex offending usually requires practice, feedback, access and trust. This is why online and offline learning often converge rather than substitute for one another.

3.4. A five-stage analytical sequence

The four classic concepts can be organised into a five-stage sequence. First, exposure places the person in contact with credible models, messages and opportunities. Second, definition changes the meaning of the contemplated act and weakens or reverses moral inhibition. Third, capability supplies the technical, relational and emotional competence needed to act. Fourth, reinforcement determines whether conduct is repeated, abandoned or escalated. Fifth, network consolidation converts episodic offending into a role by deepening trust, obligation and access to criminal opportunities. The stages are analytical, not mechanically linear. A large reward can alter definitions; successful conduct can attract new associations; arrest can interrupt a network or, in custody, create a new one.

This sequence clarifies what social learning adds to other theories. Strain may explain pressure, social disorganisation may explain weak collective control, self-control may explain impulsive choice and routine activity may explain opportunity. Social learning explains how an available opportunity becomes intelligible and executable, and why its repetition acquires social

value. It is therefore best treated as a middle-range causal process capable of integration, not as a complete account of every offence.

4. Contemporary learning environments

4.1. Criminal networks and age-graded recruitment

Organised crime depends on the controlled transmission of trust, information and skill. Europol's analysis of 821 high-risk criminal networks involving more than 25,000 members emphasises their adaptability, territorial reach and ability to operate across borders.⁹ A separate Europol warning reports that minors are involved across almost all criminal markets and are recruited for drug distribution, violence, cyber-enabled fraud and other tasks.¹⁰ From a learning perspective, minors are attractive not only because adults expect reduced suspicion or different legal treatment, but because novices can be socialised into dependency through small tasks, escalating rewards, debt and coercion.

The progression from messenger or lookout to distributor, enforcer or recruiter is a curriculum. Early tasks lower the moral and practical threshold, provide immediate reward, demonstrate loyalty and create compromising knowledge. The recruit is not simply persuaded once; conduct is shaped over repeated transactions. Hierarchy intensifies the credibility of models, while age proximity can make recruitment appear voluntary and ordinary. The same young person may be offender, learner, recruiter and victim of exploitation at different stages.

4.2. Digital platforms and accelerated visibility

Digital environments change the scale and speed of association. They reduce the cost of finding like-minded peers, preserve instructional material, display successful models and generate visible reinforcement through attention, status metrics and group approval. Research on cyber-deviance shows that a full social-learning model can operate in virtual settings, particularly through peer association and favourable definitions.¹¹ Qualitative research on extremist violence likewise supports an integrated social-control and social-learning account in which online and offline relationships contribute differently across individual pathways.¹²

⁹ Europol, *Decoding the EU's Most Threatening Criminal Networks* (Publications Office of the European Union 2024) 5–10.

¹⁰ Europol, 'Europol Warns of Organised Crime Networks Recruiting Minors for Criminal Acts' (12 November 2024) <<https://www.europol.europa.eu/media-press/newsroom/news/europol-warns-of-organised-crime-networks-recruiting-minors-for-criminal-acts>> accessed 23 August 2026.

¹¹ Thomas J Holt, George W Burruss and Adam M Bossler, 'Social Learning and Cyber-Deviance: Examining the Importance of a Full Social Learning Model in the Virtual World' (2010) 33(2) *Journal of Crime and Justice* 31–61, <https://doi.org/10.1080/0735648X.2010.9721287>.

¹² Colleen E Mills and others, 'Social Learning and Social Control in the Off- and Online Pathways to Hate Crime and Terrorist Violence' (2021) 44(9) *Studies in Conflict & Terrorism* 701–729, <https://doi.org/10.1080/1057610X.2019.1585628>.

The digital environment should not be treated as an autonomous cause. Algorithms may repeatedly expose users to sensational content, but exposure does not automatically produce offending. Motivation, technical capacity, trusted interaction and opportunity still matter. The 2025 EU terrorism situation report noted continuing growth in the involvement of minors and young people in terrorist and violent extremist activity, with social isolation, psychological vulnerability and digital dependency playing an important role.¹³ The inference consistent with social learning is conditional: online spaces can amplify frequency, apparent consensus and vicarious reward, especially when weak offline bonds leave digital groups as the primary source of identity.

4.3. Custody, residential placement and criminal capital

Custody creates involuntary association. It can support rehabilitation through structured treatment, education and pro-social staff relationships, but it can also connect offenders who would not otherwise meet. The relevant risk is not an undifferentiated claim that every prison is a “school of crime.” Learning should be expected where contact is sustained, experienced peers are credible, knowledge is transferable and the offence benefits from planning, specialisation or networks.

This distinction is supported by Danish register research discussed below: exposure did not generally create new criminal specialisations, but it reinforced existing criminal capital for several planned and network-dependent offences. The finding changes the policy question. The issue is not simply whether to separate “good” and “bad” prisoners, an impossible and potentially stigmatising binary. It is how classification, cell allocation, communication controls, programme design and staff supervision affect the transfer and reinforcement of crime-specific capital.

5. Comparative analysis of selected EU Member States

The country cases are functionally comparative. Each isolates a setting in which the theory makes a distinct prediction. The comparison does not assume that the selected phenomenon is unique to the country or representative of all offending there. It asks whether the available evidence identifies association, definition, capability, reinforcement or network consolidation, and what kind of intervention follows.

¹³ Europol, *European Union Terrorism Situation and Trend Report 2025* (Publications Office of the European Union 2025) 10–15.

Table 1

Functional comparison of criminal learning environments in selected EU Member States

Member State and setting	Evidence examined	Principal learning mechanism	Prevention implication
Sweden: youth recruitment into criminal networks	Older teenagers recruit younger children; status, money, grooming, coercion and digital portrayals shape entry and progression.	Age-graded differential association, imitation, rapid reinforcement and hierarchical consolidation.	Interrupt recruiters and communications; act during exit windows; combine family, school, social-service and victim-protection measures.
Denmark: prison peer effects	Register data show reinforcement of existing specialisation for several planned, skilled or group-based offences, especially after exposure to experienced peers.	Transmission of crime-specific capital and networks rather than universal initiation into new crime types.	Use dynamic classification, structured activity and targeted treatment; monitor specialist and network-building exposure without blanket isolation.
Netherlands: cybercrime and criminal families	A study of 1,240 young people links serious cyber-dependent offending to social-learning environments; family studies identify deviant learning and closed subcultures.	Hybrid online/offline association, technical capability, intergenerational definitions and assortative networks.	Combine ethical digital pathways and credible mentoring with family protection, school attachment and disruption of criminal opportunity structures.
Italy: mafia-related recruitment and youth groups	Early recruits show earlier onset, lower education and more violent co-offending; kinship, territory, reputation and mafia values shape access and identity.	Priority and intensity of family association, neutralisation, role modelling and loyalty-based reinforcement.	Intervene before role consolidation through child protection, education, lawful-status alternatives, witness support and economic opportunity.
Bulgaria: juvenile prevention and educational measures	2025 administrative data record 7,892 young people in child pedagogical rooms, 4,741 crimes and 6,890 educational measures; the data do not identify causal peer mechanisms.	Potential for peer and family learning is policy-relevant, but must be measured rather than inferred from counts.	Evaluate which measures change associations, definitions and rewards; avoid unstructured aggregation; strengthen family and pro-social peer components.

5.1. Sweden: recruitment, grooming and delegated violence

The Swedish National Council for Crime Prevention's study of children and youth in criminal networks provides an unusually clear description of a learning hierarchy. Based principally on interviews with 28 people who had participated in criminal networks, supplemented by official and case-file data, it found that children are often recruited by other children: typically, an older teenager aged 15–20 involves a younger child aged 12–15.¹⁴ Recruitment is embedded in drug-distribution systems and becomes a condition of advancement, because older teenagers increase income and status by managing their own group of younger recruits.

¹⁴ Katharina Tollin, Henrik Angerbrandt and Anna Jonsson, *Children and Youth in Criminal Networks: Network Entry, Offending, Conditions, and Network Exit* (Brå Report 2023:13, English translation 2025) 7–15.

The pattern maps closely onto the five-stage sequence. Neighbourhood visibility, family links and prior minor offending create exposure. Small tasks and age proximity normalise the conduct. Money, status and belonging reinforce participation. Debt, threats and violence then consolidate control. The report's comparison with grooming is analytically important: apparently voluntary entry may conceal incomplete understanding of the future obligations being created. Social learning here is inseparable from exploitation.

A separate Brå study of gun violence found that by the 2020s younger persons, sometimes in their early teens and distant from the underlying conflict, were increasingly recruited to carry out shootings for money and status. It also linked youth attraction to romanticised portrayals of criminal lifestyles on digital platforms and social media.¹⁵ Digital imitation supplies an image of status, but organised adults and intermediaries supply weapons, targets, instructions and payment. The Swedish case therefore shows why online-content policy alone is insufficient: the reinforcement system is anchored in an offline market.

The prevention implication is time-sensitive disruption. Removing a network elder may create both succession conflict and an exit opportunity. Institutions must be ready to act when control weakens, protect the child and family from retaliation, restrict harmful communications in placements, and replace criminal rewards with credible education, income, belonging and status. A purely punitive response to the child risks confirming the network's definition that institutions are hostile while leaving the recruiter's learning structure intact.

5.2. Denmark: prison as a setting of reinforcement, not automatic initiation

Damm and Gorinas used register data covering the Danish prison population to examine whether exposure to peers affected crime-specific recidivism. They found no general introductory effect by which prisoners acquired entirely new criminal capital. They did find reinforcing peer effects for offences requiring specific skills, planning or networks—such as drug crime, theft, burglary and fencing—and for some offences facilitated by group action. Exposure to more experienced offenders produced stronger effects.¹⁶

This is one of the most important qualifications to a simplistic learning account. Prisons do not uniformly transform novices into versatile offenders. Instead, peer exposure may deepen an existing specialisation where knowledge and contacts are useful after release. The result is consistent with capability and network consolidation: an offender already oriented towards a

¹⁵ Henrik Angerbrandt, Mariana Dufort and Victor Dudas, *Increased Gun Violence in Sweden: A Study of Gun Violence Trends in the Criminal Milieu since the Mid-2000s* (Brå Report 2024:7, English summary 2025).

¹⁶ Anna Piil Damm and Cédric Gorinas, 'Prison as a Criminal School: Peer Effects and Criminal Learning behind Bars' (2020) 63(1) *Journal of Law and Economics* 149–180, <https://doi.org/10.1086/706820>.

market encounters credible specialists, receives information, forms relationships and later recidivates in the same domain.

For prison policy, offence type and peer expertise matter more than a broad label of dangerousness. Dynamic allocation should consider criminal specialisation, network ties, coercion risk and treatment needs, while avoiding prolonged isolation or categorical assumptions. Structured education, work and cognitive-behavioural programmes can replace informal status systems with pro-social reinforcement. The European Prison Rules require allocation and treatment to respect dignity, safety, individual assessment and preparation for release; learning-informed classification should operate within those safeguards, not displace them.¹⁷

5.3. The Netherlands: cyber-dependent skill and intergenerational transmission

A 2026 study of 1,240 Dutch young people examined password guessing, denial-of-service attacks, technically assisted hacking and website defacement. Simpler forms were initially associated with low self-control, but that relationship disappeared after social-learning variables were included. More serious cyber-dependent conduct showed a different pattern: it was embedded in online and offline social environments and required young people with sufficient capability and patience to learn.¹⁸ The finding is theoretically significant because technical sophistication may be inconsistent with a purely impulsive account.

The Dutch context also demonstrates intergenerational learning in organised crime. A qualitative study of 25 organised-crime offenders and 48 adult children found that many sons followed their fathers into offending; the identified mechanisms included deviant social learning, parental and family risk, reputation and protective factors.¹⁹ Research on seven criminal families in the south of the Netherlands similarly found closed deviant subcultures, assortative friendship and partnership choices, and rapid adaptation to emerging illegal markets.²⁰ These studies do not prove that parental modelling alone causes continuity, but they show how family, opportunity and network selection interact.

¹⁷ Council of Europe, Recommendation Rec(2006)2-rev of the Committee of Ministers to Member States on the European Prison Rules (adopted 11 January 2006, revised 1 July 2020), rules 17–18, 25–28 and 102–107.

¹⁸ Luuk MJ Bekkers, Thomas J Holt and Eric Rutger Leukfeldt, ‘The Psychological Correlates of Cybercrime Offending: Exploring the Self-Control/Social Learning Relationship in Serious Cyber-Dependent Crime’ (2026) 23(4) *European Journal of Criminology* 610–637, <https://doi.org/10.1177/14773708251378356>.

¹⁹ Meintje van Dijk, Edward Kleemans and Veroni Eichelsheim, ‘Children of Organized Crime Offenders: Like Father, Like Child?’ (2019) 25 *European Journal on Criminal Policy and Research* 345–363, <https://doi.org/10.1007/s10610-018-9381-6>.

²⁰ Toine Spapens and Hans Moors, ‘Intergenerational Transmission and Organised Crime: A Study of Seven Families in the South of the Netherlands’ (2020) 23 *Trends in Organized Crime* 227–241, <https://doi.org/10.1007/s12117-019-09363-w>.

The combined lesson is that prevention must be technically credible and relationally embedded. A generic warning that hacking is illegal will not compete with a peer community that provides skill, recognition and challenge. Ethical cybersecurity education, supervised competitions, apprenticeships and mentors can redirect the same competence towards lawful status. For criminal families, early protection must address violence, trauma, school exclusion, parental supervision, access to illicit wealth and friendship networks. Intervention focused only on the convicted parent may leave the transmission environment unchanged.

5.4. Italy: family, territory and mafia-related role formation

Italian organised crime makes the priority and intensity of association especially visible. Research comparing early and late recruits into Italian mafias found heterogeneous pathways. Early recruits had earlier criminal onset, lower educational attainment, more serious offences compressed into a shorter period and more frequent violent co-offending; later recruits were more prolific and versatile but less serious before recruitment.²¹ The result does not support a single “mafia personality.” It supports different learning and opportunity pathways into the same organisational destination.

Recent analysis of youth groups in Naples, Rome and Milan distinguishes fluid aggregations, imitative groups, autonomous gangs and mafia-derived gangs. The Italian setting is shaped by the coexistence of flexible youth groups and mature mafia organisations, especially where territorial boundaries between juvenile delinquency and organised crime are permeable.²² The social-learning content varies accordingly. An imitative group may reproduce symbols and performances without operational ties, while a mafia-derived group transmits roles, obligations, contacts and violence within a durable structure.

Family transmission is also normative. Child-protection research in Calabria describes the socio-cultural transmission of mafia behaviour through family bonds, loyalty, silence and role expectations.²³ In such settings, the law competes with a dense local order that provides identity, protection and material advantage. The relevant intervention cannot be reduced to information about criminal penalties. It must weaken the credibility and rewards of the criminal role while providing a safe alternative identity.

²¹ Cecilia Meneghini and others, ‘Criminal Careers Prior to Recruitment into Italian Organized Crime’ (2023) 69(11) *Crime & Delinquency* 2243–2273, <https://doi.org/10.1177/00111287211035994>.

²² Valentina Punzo, ‘Youth Gangs and Mafia-Type Organisations in Italy: A Two-Dimensional Typology beyond the Evolutionary Paradigm’ (2026) *Trends in Organized Crime*, <https://doi.org/10.1007/s12117-026-09611-w>.

²³ Anna Sergi, ‘Widening the Antimafia Net: Child Protection and the Socio-Cultural Transmission of Mafia Behaviours in Calabria’ (2018) 18(2) *Youth Justice* 149–168, <https://doi.org/10.1177/1473225418791420>.

The policy implication is early, sustained and protective intervention. Schools can teach legality, but education is unlikely to prevail if families face coercion, economic dependence or violent retaliation. Child protection, witness support, confiscation that is visibly converted to community benefit, lawful employment and credible local mentors must operate together. Agent-based research on organised-crime recruitment also suggests that policies targeting both socialisation and strategically central network actors are more promising than undifferentiated enforcement.²⁴

5.5. Bulgaria: administrative evidence and the need to measure mechanisms

Bulgarian official data provide a current picture of juvenile contact with prevention institutions but do not identify why offending occurred. In 2025, 7,892 minors and juveniles were registered in child pedagogical rooms, including 2,385 new entrants. Registered young people committed 4,741 crimes, of which property theft was the largest category, and local commissions imposed 6,890 educational measures on 4,840 persons.²⁵ These figures describe administrative activity and recorded behaviour; they cannot establish differential association, imitation or reinforcement.

The limitation is itself instructive. A prevention system cannot become learning-informed merely by relabelling existing measures. It must collect information on family offending, peer networks, school attachment, online groups, victimisation, rewards, criminal attitudes and changes over time. The most frequently imposed measures—warnings, public-tutor supervision and parental supervision—should be evaluated by whether they actually alter exposure, definitions and reinforcement, not only by whether a case is administratively completed.

Bulgaria's institutional structure creates an opportunity for local, family-centred prevention because the commissions and child pedagogical rooms already occupy the space between policing, education and social intervention. The risk is unstructured aggregation: bringing high-risk adolescents together without skilled supervision can produce “deviancy training,” in which stories, humour and approval reinforce problem behaviour.²⁶ Small,

²⁴ Francesco Calderoni and others, ‘Recruitment into Organized Crime: An Agent-Based Approach Testing the Impact of Different Policies’ (2022) 38 *Journal of Quantitative Criminology* 197–237, <https://doi.org/10.1007/s10940-020-09489-z>.

²⁵ National Statistical Institute of Bulgaria, ‘Anti-Social Acts and Crimes of Minors and Juveniles – 2025’ (29 April 2026) <<https://www.nsi.bg/en/press-release/anti-social-acts-and-crimes-of-minors-and-juveniles-2025-9003>> accessed 23 August 2026.

²⁶ Thomas J Dishion, Joan McCord and François Poulin, ‘When Interventions Harm: Peer Groups and Problem Behavior’ (1999) 54(9) *American Psychologist* 755–764, <https://doi.org/10.1037/0003-066X.54.9.755>.

individually planned interventions should therefore build pro-social peer contact and adult mentorship while limiting opportunities for criminal networking.

6. Critical assessment: explanatory strength and limits

The comparative evidence supports three propositions. First, association and definitions are the most consistently visible components. Swedish recruits encounter age-proximate models and hierarchical meanings; Dutch criminal families transmit attitudes and opportunity; Italian mafia contexts intensify identity and loyalty; cyber communities connect skill with recognition. Second, reinforcement is strongest where rewards are immediate and socially visible. Third, imitation alone is rarely sufficient for complex crime; capability, access and trust determine whether observed conduct becomes executable.

Four limitations prevent a monocausal conclusion. The first is selection. People with existing propensities choose similar friends and communities, so peer similarity is partly a cause and partly a consequence of offending. The second is projection and measurement error: respondents may overestimate their friends' delinquency or assume that friends resemble them. The third is scope. Spontaneous expressive violence, offences committed in acute emotional states and some opportunistic acts may require little transmitted technique. The fourth is structural omission. Learning theory explains transmission better than it explains why disadvantaged and segregated environments expose some populations to more criminal models and fewer lawful rewards.

These limits do not invalidate the theory; they define its proper use. Social learning is most convincing when the conduct requires repeated interaction, specialised knowledge, shared rationalisation or group reinforcement. It is less complete where offending is isolated, highly impulsive or driven by factors not mediated through social meaning. The Denmark case is exemplary: it identifies specific reinforcing effects instead of assuming universal contamination by custody.

The theory also explains desistance. New employment, intimate relationships, parenthood, treatment, faith communities and pro-social peers can change associations and rewards. A former criminal identity loses force when lawful conduct produces belonging, competence and recognition. This symmetry is important: a learning theory that only describes acquisition but not change is incomplete. The practical goal is not simply to remove deviant peers, which may leave isolation, but to replace the functions those relationships served.

7. Implications for crime prevention and offender rehabilitation

7.1. Assess the learning ecology, not only the offence

Risk assessment should identify who supplies definitions, skill, opportunity and reward. Two people convicted of the same offence may require different interventions: one may be coerced by a network, another embedded in a criminal family, another technically motivated by online peers, and another acting alone under acute strain. The Risk–Need–Responsivity framework is compatible with this approach because criminal associates and pro-criminal attitudes are dynamic criminogenic needs, while intervention intensity and method should match risk and individual capacity.²⁷

7.2. Disrupt reinforcement without manufacturing deviant status

Sanctions should reduce the expected payoff and certainty of criminal reward, but excessive reliance on severity can fail where detection is unlikely or punishment generates status. Rapid, proportionate and procedurally fair responses are more likely to connect the conduct with a credible cost. At the same time, authorities should avoid public practices that romanticise minor offenders, expose operational detail or strengthen the network’s persecution narrative. Asset confiscation has preventive value when it visibly undermines illicit success rather than merely producing another symbol of conflict with the state.

7.3. Replace criminal competence and belonging with lawful alternatives

The person must receive a functional substitute for what crime provides. For cyber-capable youth, this may mean supervised technical training, ethical hacking pathways and employment. For network-involved youth, it may require relocation, protected exit services, income support and a mentor with local credibility. For prisoners, structured work, education and peer-led programmes should reward reliability and skill without allowing informal criminal hierarchies to control access.

7.4. Use family- and community-based interventions, but evaluate transferability

Family-based models directly target supervision, conflict, peer association and school engagement. The European Union Drugs Agency rates multisystemic therapy as “possibly beneficial” on the basis of European studies, while also reporting mixed results across Sweden, Norway, the Netherlands and the United Kingdom.²⁸ This is the correct evidential stance. A

²⁷ James Bonta and Donald A Andrews, *The Psychology of Criminal Conduct* (6th edn, Routledge 2017) 176–220.

²⁸ European Union Drugs Agency, ‘Multisystemic Therapy (MST): Intensive Family- and Community-Based Intervention for Antisocial Behaviour in Juvenile Offenders’ <https://www.euda.europa.eu/best-practice/xchange/multisystemic-therapy-mst_en> accessed 23 August 2026.

programme should not be imported as a brand. Its theory of change, fidelity, target population, costs and outcomes must be tested in the national context.

7.5. Design custody to prevent specialist networking

Prisons and residential institutions should use dynamic intelligence on co-offending links, criminal specialisation, coercion and communication. Allocation decisions should be reviewed because networks evolve. Staff must supervise the informal economy, digital access and group status systems while expanding purposeful activity. The response must remain proportionate: indiscriminate isolation harms rights and rehabilitation, and indiscriminate mixing can strengthen criminal capital. The learning-informed solution is structured contact, individualised treatment and carefully managed pro-social peer influence.

7.6. Treat digital prevention as a social intervention

Content removal can reduce exposure, but it does not address the need for identity, competence and belonging that made the content attractive. Digital outreach should use credible messengers, challenge favourable definitions, provide safe routes to assistance and redirect technical or creative skill. Where online conduct is connected to offline recruiters, prevention requires coordinated investigation and safeguarding. The European Commission's work on online radicalisation likewise stresses that the internet is one element within broader pathways and that prevention must include education, family support, community engagement, exit work and prison interventions.²⁹

8. Conclusion

Social learning theory offers a powerful but bounded answer to the source of criminality. It does not establish that crime is produced by peers alone, that every offender is imitative, or that structural and individual conditions are secondary. It explains how social exposure converts risk and opportunity into definitions, capability, reward expectations and durable criminal roles. The strongest evidence concerns differential association and pro-criminal definitions; reinforcement, imitation and peer effects vary by offence, setting and research design.

The European cases show distinct forms of the same process. Sweden reveals rapid age-graded recruitment and delegated violence; Denmark identifies reinforcement of specialised criminal capital in prison; the Netherlands shows hybrid digital learning and intergenerational criminal subcultures; Italy demonstrates the intensity of family, territory and mafia role

²⁹ European Commission, Radicalisation Awareness Network, *Online Radicalisation* (Publications Office of the European Union 2023) 18–35.

expectations; and Bulgaria illustrates both the reach of juvenile prevention institutions and the limits of administrative data that do not measure causal mechanisms.

The practical conclusion is direct. Punishment that leaves associations, definitions, capabilities and rewards unchanged is unlikely to produce durable prevention. Effective policy must alter the person's learning ecology: interrupt exploitative networks, reduce criminal reinforcement, protect exit, build pro-social relationships, redirect competence and evaluate outcomes. Social learning theory is most useful not as a label for blaming families or peers, but as a disciplined framework for identifying where the transmission of crime can be interrupted and where lawful conduct can be learned, rewarded and consolidated instead.

References

1. **Akers, R.L.**, 1998. *Social Learning and Social Structure: A General Theory of Crime and Deviance*. Boston: Northeastern University Press, pp. 47–75.
2. **Angerbrandt, H., Dufort, M. and Dudas, V.**, 2025. *Increased Gun Violence in Sweden: A Study of Gun Violence Trends in the Criminal Milieu since the Mid-2000s* (Report No. 2024:7). Stockholm: Swedish National Council for Crime Prevention.
3. **Bandura, A.**, 1977. *Social Learning Theory*. Englewood Cliffs, NJ: Prentice Hall, pp. 22–29.
4. **Bekkers, L.M.J., Holt, T.J. and Leukfeldt, E.R.**, 2026. The psychological correlates of cybercrime offending: Exploring the self-control/social learning relationship in serious cyber-dependent crime. *European Journal of Criminology*, 23(4), pp. 610–637. <https://doi.org/10.1177/14773708251378356>
5. **Bonta, J. and Andrews, D.A.**, 2017. *The Psychology of Criminal Conduct*. 6th ed. New York: Routledge, pp. 176–220.
6. **Burgess, R.L. and Akers, R.L.**, 1966. A differential association-reinforcement theory of criminal behavior. *Social Problems*, 14(2), pp. 128–147. <https://doi.org/10.2307/798612>
7. **Calderoni, F., Campedelli, G.M., Szekely, A., Paolucci, M. and Andrighetto, G.**, 2022. Recruitment into organized crime: An agent-based approach testing the impact of different policies. *Journal of Quantitative Criminology*, 38, pp. 197–237. <https://doi.org/10.1007/s10940-020-09489-z>
8. **Council of Europe**, 2006 (revised 2020). *Recommendation Rec(2006)2-rev of the Committee of Ministers to Member States on the European Prison Rules*. Strasbourg: Council of Europe.
9. **Damm, A.P. and Gorinas, C.**, 2020. Prison as a criminal school: Peer effects and criminal learning behind bars. *Journal of Law and Economics*, 63(1), pp. 149–180. <https://doi.org/10.1086/706820>
10. **Dishion, T.J., McCord, J. and Poulin, F.**, 1999. When interventions harm: Peer groups and problem behavior. *American Psychologist*, 54(9), pp. 755–764. <https://doi.org/10.1037/0003-066X.54.9.755>
11. **European Commission, Radicalisation Awareness Network**, 2023. *Online Radicalisation*. Luxembourg: Publications Office of the European Union, pp. 18–35.
12. **European Union Drugs Agency**, 2026. *Multisystemic Therapy (MST): Intensive Family- and Community-Based Intervention for Antisocial Behaviour in Juvenile*

- Offenders*. Available at: https://www.euda.europa.eu/best-practice/xchange/multi-systemic-therapy-mst_en (Accessed 23 August 2026).
13. **Europol**, 2024a. *Decoding the EU's Most Threatening Criminal Networks*. Luxembourg: Publications Office of the European Union, pp. 5–10.
 14. **Europol**, 2025. *European Union Terrorism Situation and Trend Report 2025*. Luxembourg: Publications Office of the European Union, pp. 10–15.
 15. **Europol**, 2024b. *Europol Warns of Organised Crime Networks Recruiting Minors for Criminal Acts*. Available at: <https://www.europol.europa.eu/media-press/newsroom/news/europol-warns-of-organised-crime-networks-recruiting-minors-for-criminal-acts> (Accessed 23 August 2026).
 16. **Haynie, D.L.**, 2001. Delinquent peers revisited: Does network structure matter? *American Journal of Sociology*, 106(4), pp. 1013–1057. <https://doi.org/10.1086/320298>
 17. **Holt, T.J., Burruss, G.W. and Bossler, A.M.**, 2010. Social learning and cyber-deviance: Examining the importance of a full social learning model in the virtual world. *Journal of Crime and Justice*, 33(2), pp. 31–61. <https://doi.org/10.1080/0735648X.2010.9721287>
 18. **Meneghini, C., Campedelli, G.M., Calderoni, F. and Comunale, T.**, 2023. Criminal careers prior to recruitment into Italian organized crime. *Crime & Delinquency*, 69(11), pp. 2243–2273. <https://doi.org/10.1177/00111287211035994>
 19. **Mills, C.E., Freilich, J.D., Chermak, S.M., Holt, T.J. and LaFree, G.**, 2021. Social learning and social control in the off- and online pathways to hate crime and terrorist violence. *Studies in Conflict & Terrorism*, 44(9), pp. 701–729. <https://doi.org/10.1080/1057610X.2019.1585628>
 20. **National Statistical Institute of Bulgaria**, 2026. *Anti-Social Acts and Crimes of Minors and Juveniles – 2025*. Sofia: NSI. Available at: <https://www.nsi.bg/en/press-release/anti-social-acts-and-crimes-of-minors-and-juveniles-2025-9003> (Accessed 23 August 2026).
 21. **Pratt, T.C., Cullen, F.T., Sellers, C.S., Winfree, L.T., Madensen, T.D., Daigle, L.E., Fearn, N.E. and Gau, J.M.**, 2010. The empirical status of social learning theory: A meta-analysis. *Justice Quarterly*, 27(6), pp. 765–802. <https://doi.org/10.1080/07418820903379610>
 22. **Punzo, V.**, 2026. Youth gangs and mafia-type organisations in Italy: A two-dimensional typology beyond the evolutionary paradigm. *Trends in Organized Crime*, [online]. <https://doi.org/10.1007/s12117-026-09611-w>
 23. **Sergi, A.**, 2018. Widening the antimafia net: Child protection and the socio-cultural transmission of mafia behaviours in Calabria. *Youth Justice*, 18(2), pp. 149–168. <https://doi.org/10.1177/1473225418791420>
 24. **Spapens, T. and Moors, H.**, 2020. Intergenerational transmission and organised crime: A study of seven families in the south of the Netherlands. *Trends in Organized Crime*, 23, pp. 227–241. <https://doi.org/10.1007/s12117-019-09363-w>
 25. **Sutherland, E.H.**, 1947. *Principles of Criminology*. 4th ed. Philadelphia: J.B. Lippincott, pp. 5–9.
 26. **Sykes, G.M. and Matza, D.**, 1957. Techniques of neutralization: A theory of delinquency. *American Sociological Review*, 22(6), pp. 664–670. <https://doi.org/10.2307/2089195>
 27. **Tollin, K., Angerbrandt, H. and Jonsson, A.**, 2025. *Children and Youth in Criminal Networks: Network Entry, Offending, Conditions, and Network Exit* (Report No. 2023:13). Stockholm: Swedish National Council for Crime Prevention.

28. **Van Dijk, M., Kleemans, E. and Eichelsheim, V.**, 2019. Children of organized crime offenders: Like father, like child? An explorative and qualitative study into mechanisms of intergenerational
29. (dis)continuity in organized crime families. *European Journal on Criminal Policy and Research*, 25, pp. 345–363. <https://doi.org/10.1007/s10610-018-9381-6>
30. **Warr, M.**, 2002. *Companions in Crime: The Social Aspects of Criminal Conduct*. Cambridge: Cambridge University Press, pp. 1–15.