

PNP 2021
Personality in norm and in pathology**PERSONALITY AND CRIMINAL TRAJECTORIES IN YOUNG
ADULTS HELD IN CHILEAN PRISONS**

Ricardo X. Pérez-Luco (a), Carolina A. Armijo (b), Alejandra Estrada (c),
Paula A. Alarcón (d)*, Lorena S. Wenger (e), Sergio A. Chesta (f)

*Corresponding author

- (a) Departamento de Psicología, Universidad de La Frontera, Montevideo 0830, Temuco, Chile. ricardo.perez-luco@ufrontera.cl
- (b) Centro de Reinserción Social de Alto Hospicio, Gendarmería de Chile, Av. Los Cóndores 3341, Alto Hospicio, Chile. carolinarmijo@gmail.com
- (c) Carabineros de Chile, X Zona Los Lagos, Calle Miramar 1500, Puerto Montt, Chile. alejandraestrada@gmail.com
- (d) Departamento de Psicología, Universidad de La Frontera, Montevideo 0830, CP 4811322, Temuco, Chile. paula.alarcon@ufrontera.cl
- (e) Departamento de Psicología, Universidad de La Frontera, Montevideo 0830, CP 4811322, Temuco, Chile. lorena.wenger@ufrontera.cl
- (f) Departamento de Psicología, Universidad de La Frontera, Montevideo 0830, CP 4811322, Temuco, Chile. sergio.chesta@ufrontera.cl

Abstract

Aim: The study is framed in evolutionary criminology, analyzing the role of personality, risk and criminal history in the development of persistent criminal trajectories observed in young adulthood. Personality variables observed with the Millon Clinical Multiaxial Inventory (MCMI-III), criminal risk levels according to the Risk-Need-Responsivity model (RNR), and criminal trajectory according to the Multidimensional Model of Differentiated Intervention with Adolescents (MMIDA) are identified. **Method:** 200 young men (18 to 26 years old) held in two Chilean prisons took part. All voluntarily responded to two instruments (MCMI-III and EDA-A) in individual applications and penitentiary professionals assessed the risk instrument (IGI). **Results:** A cluster analysis was performed with the scores obtained on the MCMI-III, establishing 5 groupings that define and describe risk levels and criminal history, comparing them conceptually with the typology of the MMIDA. **Discussion:** It was concluded in 4 clusters that central characteristics of the types defined by the MMIDA in adolescents are preserved, whereas in the fifth differences attributable to neuropsychological maturation processes inherent to the age are observed. The results are discussed, demonstrating the need to recognize the period of youth, beyond 18 years, as a phase that requires specialized interventions from the youth penal system, given their greater neuropsychological plasticity and receptivity to interventions.

2357-1330 © 2021 Published by European Publisher.

Keywords: Criminal trajectories, MCMI-III, MMIDA, personality, RNR



This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 Unported License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

1. Introduction

Delinquency is among many countries' public policy priorities because it constitutes a threat to the well-being of citizens who experience fear and demand greater security from their governments. In 2019, 82% of the Chilean population perceived an increase in crime, although the evidence showed a 2.5% decrease over the previous year (CEAD, 2021). Official records and quarterly police statistics show that the evolution of serious crimes has been dropping since 2014, but criminal recidivism reveals that the penitentiary system has substantial deficiencies (Morales et al., 2018).

The Chilean evidence concerning recidivism shows that one in every two people who leaves prison will be convicted again, with the greatest percentage given custodial sentences who complete their sentence in full and those with lower sanctions. 64% of those aged 18-23 years reoffend at least once during their follow-up, and 55.9% of those aged 24-29 years do so. This finding is consistent with the international evidence that shows higher rates of recidivism in the youngest age groups (Morales et al., 2018).

Greater recidivism is also observed in subjects who have custodial sentences, but the Chilean judicial system persists in applying more sanctions of this type than non-custodial ones, exhibiting higher levels than the South American reality (Morales et al., 2018). The total penal population in Chile as of December 31, 2020 was 114,988 people, 89.5% men and 10.5% women. Of these, 42,335 were men in custody (36.8%), with a rate of 226 inmates for every 100,000 inhabitants. By the end of 2019, 19.3% of the custodial population were young adult men aged 18 to 24 years (GENCHI, 2021).

The data agree with the numbers of incidence and prevalence of antisocial behavior observable in adolescence and early adulthood, and in the heterogeneity of such behavior. Follow-up studies have recognized different trajectories, demonstrating the association between age and criminal productivity, and the literature provides evidence that criminal activity at a young age is presented as a transition process that has undergone changes in the last decade, evolutionarily affecting its concept and psychosocial dimension, as being plural, unequal and complex processes (Tong et al., 2016). The determination of personal characteristics related to recidivism will make it possible to orient specific interventions according to the needs of this group (Alarcón et al., 2018).

2. Problem Statement

Offensive and antisocial behavior has been explained by the hedonistic desire to seek satisfaction and pursue one's own interests, weighing benefits and costs without considering the social bond. In persistent offenders, antisocial interaction reinforces criminal behavior, producing beliefs consistent with them, and making their offenses more extreme, which include violence and other antisocial behaviors, weak bonding with the family and community, and criminal modeling. In addition, psychological development stands out, because neuropsychological deficit, difficult temperament and parental deficits have been observed at an early age that imply a lack of affective bonds and inconsistent discipline; deficits that become more pronounced during adolescence, making the successful transition to adulthood complicated (Hill et al., 2016). Other authors have studied the role of executive functions such as moral values and judgment expressed in self-control, emphasizing rational deliberation and habits in the

decision to offend, learning processes that suggest that moral values are taught through instruction and observation in a socialization process, and that the promotion of cognitive abilities influences the executive functions (Hoeben & Weerman, 2016).

Developmental and life-course criminology have offered theoretical and empirical support of this understanding from longitudinal studies that have enabled the definition of predictor variables from the beginning, maintenance and desistance of antisocial behavior, characterizing persistent delinquency by the presence of major risk factors, the pursuit of utilitarian reasons, cognitive deficits, impulsiveness, poor self-control and hyperactivity, among others (Moffitt, 2015; Morizot & Kazemian, 2014). However, a significant process of rehabilitation of the constructs related to the executive functions is demonstrated, such as cognitive alternation, self-regulation, planning, and cognitive flexibility; and the social cognitions, such as emotional recognition, empathy and theory of the mind (Arana et al., 2019).

This group requires interventions of greater intensity due to their high criminal commitment, determined by the frequency, volume, severity, density and continuity of the crimes committed; due to their social habits in which they prioritize commitment, participation and adherence to antisocial groups; and due to their personality, characterized by egocentrism, extroversion and low self-regulation (Farrington et al., 2016). Thus, developmental criminology examines changes and continuities in criminal trajectories over time, and personal variables appear to be a key factor to explain different evolutions. In addition, criminal involvement has been explained by risk factors different from those which promote desistance. Olver et al. (2014) indicate that antisocial tendency is one of the criminogenic risk factors of greater effect size in the prediction of recidivism. This evidence is supported by follow-up studies that agree, reporting that personal variables play a differentiating role in persistent criminal trajectories.

A deepening of this understanding with Chilean evidence is contributed by the Multidimensional Model of Differentiated Intervention with Adolescents (MIIDA in Spanish), which differentiates three types of delinquency: complex, transitory and persistent. This last one is characterized by early onset (before 13 years), abundant criminal behavior (high volume), heterogeneity (crimes against property, people and public goods, individually, in groups or in criminal organizations), increasing severity and prolonged duration, projecting into early adulthood (Pérez-Luco et al., 2017).

Using the Millon Adolescent Clinical Inventory, MACI, based on the adolescent personality evolutionary model of Theodore Millon, which conceives the personality as a "...complex pattern of deeply ingrained psychological characteristics, (...) in the main unconscious and difficult to change, (which) are expressed automatically in almost all areas of functioning (...)", it has been possible to establish the weight of personal variables in the determination of criminal trajectories, discriminating traits of adolescent offenders from adolescents of an equivalent but conventional sample. The patterns of a transgressive and powerful personality, together with scales insensitivity scales, criminal predisposition, tendency to substance abuse, impulsiveness and anxiety are the ones that show the largest effect size (Alarcón, 2015).

The analysis of personal variables, risks and criminal behavior make it possible to identify five trajectories for the 14-20-year age group: Hopeless Passive (TPD), Stabilized Antisocial (TAE), Self-destructive Explosive (TEA), Bonded Transgressor (TTV) and Deviated Normal (TND). TPD are characterized by difficulty with experiencing pleasure and anticipating psychological pain, perceiving life

pessimistically with little hope of reward. They show a special tendency to suppress their emotions, exhibiting to those around them feelings of reluctance, demotivation, boredom and hostility, with conflicts of identity and devaluation of themselves, a high tendency to substance and alcohol abuse, with very low self-esteem and predominance of a passive way of dealing with experiences. In TAE the personality would be a risk factor, due to the special orientation inward, little capacity for affective bonding, reduced concern for the impact of their actions on their community and high social insensitivity that validates the criminal behavior. This is so for TEA also, who present emotional instability and disorganization, engaging in impulsive behaviors with increased involvement of violence and self-aggression, associated with little emotional regulation that generates poorly planned actions, but with high receptivity, seeking affective attention from others. TTV reveal a rebellious, challenging and non-conformist personality that usually skips over the social rules, but avoids transgressing the limits of others, because they favor interpersonal relations, feeling a strong need to bond. Finally, TND exhibit a pattern of flexible psychological functioning adapted to the demands of the surroundings, similar to that of conventional adolescents, but with a slight immaturity and tendency to transgress laws, favoring their interests and needs over those of others, and revealing themselves to be strongly influenced by their peers (Alarcón et al., 2018).

The notions of trajectories, transitions, continuity and behavioral change contribute to a greater understanding of antisocial behavior and its development throughout life, although challenges persist that invite science to produce more evidence in the young adult criminal population, contributing to the effective operation of the penal system (Maruri, 2016). A recent line of research is the relation between brain maturity and juvenile justice, with the debate focusing on whether turning 18 makes people fully functioning, mature adults and without considering the life disadvantages that many young people experience (Liefwaard et al., 2016). The interest in “brain function” seeks to establish when a brain becomes adult, an important question to solve in how criminal justice approaches young people who have reached the age of majority (Somerville, 2016).

The evidence on brain maturity and antisocial behavior comes from neurobiological studies that emphasize the structural and functional changes that occur in the brain and from psychological studies on the development of maturity in adolescents and young adults and their relation to attitudes and behavior (Shulman et al., 2016). The inherent characteristic of adolescence is the immaturity of the brain; adolescent brains do not mature homogeneously and linearly, develop according to their cognitive and psychosocial abilities, and are the result of the interactions between the different cognitive functions in the maturation process, environmental demands and the context in which they appear (Mercurio et al., 2020).

In this vein, one of the most important findings is related to higher executive brain functions, which are divided into two types: cold executive functions (CEF), and hot executive functions (HEF) (Gil-Fenoy et al., 2017).

A meta-analysis on the topic shows that the CEF are involved in processes of problem solving, planning and concept formation, while the HEF coordinate cognition with emotion/motivation. The HEF network, associated with emotional control, impulsiveness and decision-making, takes longer to develop because it is affected by hormonal changes in early adolescence, and continues to develop during early

adulthood. The study shows that emotional stress, impulsiveness and inability to control emotions and follow rules is related to the appearance of risky behaviors or antisocial acts that flout the law, which provides evidence that the delayed or inadequate development of the HEF network favors the participation of adolescents in risky behaviors (Gil-Fenoy et al., 2017). Reduced development of the executive function circuits causes individuals to be an increased likelihood of presenting immature judgment, making decisions that involve them in offensive or risky behaviors; thus, young adults may be more similar to adolescents than adults in their antisocial inclinations (Somerville, 2016).

From the psychological perspective of the development of maturity, Cohen et al. (2016) report that deviation in antisocial behavior is due to an inclination towards incentives and risk-taking, presenting difficulties in suppressing attention and actions towards emotional stimuli, even when they are irrelevant to the task, implying that at this stage of development there is a greater tendency to become involved in emotional or risky situations. Other findings show the influence of criminal companions: the most convincing brain tests suggest their mere presence can directly influence the decisions and actions to become involved in risky behaviors. They make riskier decisions around friends, and show increased activity in the reward-related limbic circuits, which indicates that the need for acceptance and approval by their peers is important; therefore, they can be particularly vulnerable to peer pressure (Liefaard et al., 2016). According to the evidence, brain maturity could be reached after 30 years, much later than expected, but having throughout this stage the potential and neuropsychological plasticity to adapt to the changes they must face, and adding individual differences to face the challenges (Shulman et al., 2016). These differences allow young people to construct their own individual trajectories, with particular ways to negotiate adolescence and face young adulthood, and it is not expected that they all effectively fulfill the tasks of development (Wenger, 2018).

3. Research Questions

The evidence is robust that young adults have a greater propensity for recidivism than other adults (Mowen&Boman, 2018), but they also run a greater risk of suffering violent victimization in prison, adding to it that in these prisons their development is harmed, severely slowing continuity in the acquisition of educational, labor and social skills, which can constitute a remarkable risk factor for criminal continuity by weakening their social insertion (Howell et al., 2015). The prison experience exposes them to a negative sociability that prevents reinsertion; it weakens family and conjugal bonds, and social competences or abilities indispensable for getting by day-to-day. From what has been said, there are relevant consequences for addressing delinquency in the stage studied, including intervention and criminal sanction, which also reveals the importance of specialization of the professionals who work with this highly complex population, and the need to develop optimal treatment strategies.

4. Purpose of the Study

From the foregoing, the following study objectives are proposed: (a) to explore the existence of groups of young adults sanctioned for crimes and differentiated according to their styles of psychological

functioning, (b) associated with a history of criminal behavior and (c) recidivism risks; establishing as a question the continuity and change regarding the adolescent stage according to the MMIDA model.

5. Research Methods

5.1. Participants:

Using non-probability and deliberate sampling of typical cases, 200 young adults were selected, held in two Chilean prisons that attend populations with very little contact due to geographic distance (2,800 km) and administrative differentiation (north and south of the country). The inclusion criteria were to be male, 18 to 26 years of age and convicted of a serious crime, major offense or minor offense. Exclusion criteria were to be accused (no conviction yet), foreign, present acute psychiatric symptomatology, be convicted of sexual offenses or domestic violence, or show difficulties in basic reading or writing.

The sample had an average age of 23.02 years (range 19-26) and high rate of admission to action programs and sanctions by the Chilean juvenile criminal responsibility act, with 45.5% of cases incarcerated at least once between the ages of 14 and 18 years and an average of 5.45 admissions to the system, with a range between 0 and 40 admissions. In studies, the mode of the group, with 83 cases (41.5%), corresponded to incomplete secondary education (9-11 years) and in work experience the mode was 56 cases (28%) and corresponded to others, including those who had never worked or reported “only commits crimes”. Table 1 provides the socio-criminal characterization of the sample.

Table 1. Socio-criminal characterization of the sample

Variable	Variable value	Northern prison (n=100)	Southern prison (n=100)	Totals	
		Frequency	Frequency	Freq	%
Adolescent criminal history	Non-custodial sanctions	78	76	153	76.5%
	Incarceration	39	52	91	45.5%
	Alternative releases	21	26	47	23.5%
Basic studies	Incomplete (1 to 7 years)	19	22	41	20.5%
	Complete (8 years)	32	18	50	25.0%
Secondary studies	Incomplete (9 to 11 years)	43	40	83	41.5%
	Complete (12 years)	6	20	26	13.0%
Work status	No profession or trade	37	14	51	25.5%
	Workers	22	29	51	25.5%
	Students	12	10	22	11.0%
	Retailers	8	12	20	10.0%
	Others (includes never worked and only commits crimes)	21	35	56	28.0%

5.2. Design

The study was correlational and multivariate and was performed using a retrospective ex post facto design with a single group.

5.3. Instruments

Level of Service Inventory-Case Management, (LSI-CM). One of the most relevant instruments internationally for the general assessment of risks and needs for intervention in the penal sphere (Morales et al., 2018); it contains nine sections in which risk factors/needs and data for planning and intervention are grouped. It can be used on men and women 16 years old or older, with no maximum age limits, to estimate the likelihood of criminal recidivism (Andrews et al., 2011). The instrument was adapted in Chile to implement the law of measures alternative to incarceration, showing suitable reliability ($\alpha=0.89$) and sufficient evidence of validity, with a moderate biserial correlation ($r=0.38$) and a specificity/sensitivity ratio in the regular test interval (area under the ROC curve = 0.725).

Self-reported crime scale-adult version, (EDA-A). Guided interview, adapted from the previous version for adolescents (Pérez-Luco et al., 2014) that records the history of crimes reported by criminally convicted adults. It contains 66 items asking about 6 types of crimes: thefts, robberies, assaults, batteries, abuses and others. The adult version asks if the respondent has committed each of the crimes, estimating the number of times (volume) while he was minor and after having turned 18. Evidence is collected to distinguish type of crime, to determine criminal specialization or polymorphism, and to establish the severity (violence) of the criminal activity. The analysis of general reliability of the scale shows a moderate value ($\alpha=0.697$), a value consistent with the record of specific behaviours, and a strong association with the history of sanctions during adolescence ($r=0.524$).

Millon Clinical Multiaxial Inventory, (MCMI-III). Self-reported personality inventory for adults (Millon, 1997), analogue to the version for adolescents by the same author, which evaluates disorders described in the DSM-IV-TR and DSM-III-R. It has 175 items with dichotomous T/F responses structured on 28 scales: 11 on basic personality patterns, 3 on severe personality disorders, 7 on basic or moderate clinical syndromes, 3 on severe clinical syndromes, 3 modifying scales and 1 validity scale. The version adapted for the Chilean penitentiary population was used, which has suitable evidence of validity and reliability (Souci & Vinet, 2016).

5.4. Procedure

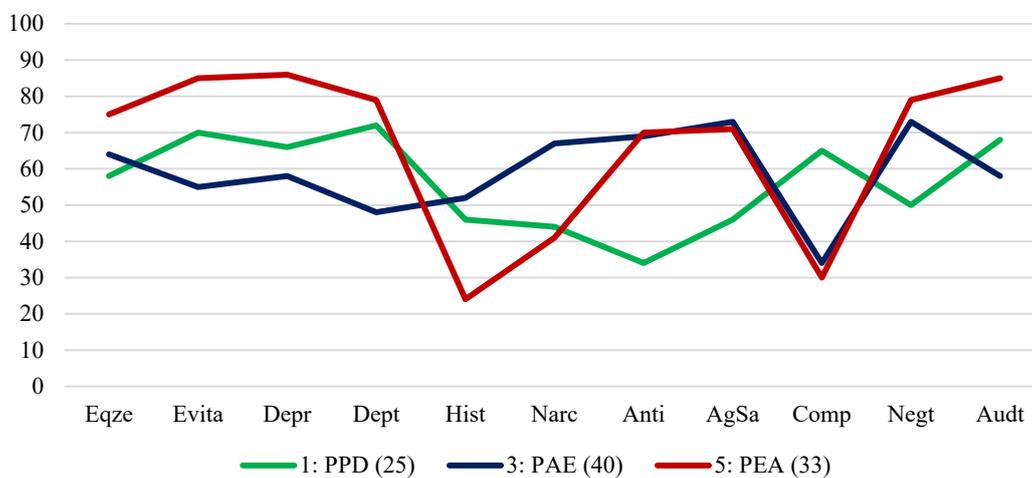
This study was authorized by the Science Ethics Committee of the Universidad de La Frontera. It followed a formal strategy with authorization from the regional offices of the Gendarmerie of Chile (Prison Service), from the wardens of the two penitentiary complexes and the regional technical heads who were made aware of the study objectives and instruments, generating the protocols for access to the participants. The purposes of the study were explained to each participant, providing them with an informed consent that detailed the safeguards during the process and the use of their responses. Once the consent had been signed, the interviews were done and the instruments were applied, without giving incentives in exchange for participation. Upon completion, the participants were thanked and the possible scope of the results was explained.

6. Findings

6.1. Determination of clusters according to personality patterns in the MCMI-III

Using SPSS v.24, a K-means cluster analysis was done with 194 cases (6 were invalidated for inconsistencies in the responses) and the 11 variables of basic personality patterns from the Millon model, assessed with the MCMI-III. An output of 5 clusters was requested to contrast their characteristics with those described in persistent criminal trajectories on the MMIDA (Alarcón et al., 2018). A model was obtained, the centers of which have a distance between 11.7 points (clusters 1 and 5) and 34.1 points (clusters 2 and 5), and their score profiles confirm 4 of the 5 groupings observed in adolescents.

The first three clusters were described as having greater weight of personal variables in the determination of criminal behaviour, with characteristics similar to those described on the MMIDA, but with greater clinical emphasis (see figure 1). Then the deviated normal profile is described, which presents psychological adjustment, and an emerging profile, which replaces the bonded transgressor trajectory, but unlike that one, it does present clinical characteristics (see figure 2).



Note: The names of the variables are: *Schizoid, Avoidant, Depressive, Dependent, Histrionic, Narcissistic, Antisocial, Aggressive-sadistic, Compulsive, Negativistic (passive-aggressive) and Self-destructive.*

Figure 1. MCMI-III Profiles, 1, 3 and 5 / PPD, PAE and PEA clusters

Cluster 1: Hopeless Passive Profile “PPD” (n= 25). The decision was made to keep the MMIDA designation, because it is described as a style that undergoes a confused tension, sadness and rage due to painful past experiences. In this vacillation, he finds very little reinforcement in himself to satisfy his own needs, believing that the world is humiliating and cold. He is especially vulnerable to stronger figures, to whom he subordinates himself eagerly in seeking protection, since without them he feels anxiously alone and defenseless. He establishes dependent relationships with those who can serve and be sacrificed, allowing them to abuse him, treat him badly and even take advantage of him, because he has learned to stay in the background and act self-abnegatingly and discreetly. He shows a high dependency on the group, being easily manipulated, and his inclination to break the law is mediated by this dependency on peers with whom he has learned to survive. He tends to harbor resentment towards those on whom he depends, due to experiences of abuse, tension that can be expressed in violent acts towards others and also towards himself.

Cluster 3. Stabilized Antisocial Profile “PAE” (n=40). The decision was made to keep the MMIDA designation, because it shows an accentuated style of more stabilized antisocial pattern that combines increases on the antisocial, aggressive (sadistic), and negativist scales, with a tendency to ignore conventional norms and authorities for the pleasure he derives from violating them. He acts imprudently with respect to his own and others’ safety, exhibiting recklessness as if he were insensitive to pain and immune from punishment. Interest in personal gratification (narcissism) predominates, with no concern for the consequences for his group, being manipulative and sadistic with those around him if they are an obstacle to his goals. He assumes conflicting and changeable roles in social relationships, seeks dominance and power in them, with a hostile, affirmative, dogmatic style, and an openly oppositionist attitude. An abrasive negativist behavior is observed, an irascible and contemptuous personality, in which any person or thing serves to unload his irritability or annoy or attack. In interpersonal contact he opts for using and abusing his relationships and avoids expressions of intimacy and warmth, being suspicious of friendliness, compassion and kindness from others and always doubting the authenticity of their feelings. Bonds are not a force for him; however, the negative reaction only occurs in critical or extreme situations, because he usually adapts well to contexts in order to secure his goals.

Cluster 5. Explosive Self-Destructive Profile “PEA” (n= 33). This coincides with the characteristics of another trajectory in the MMIDA, so its designation is kept. Psychological distress predominates, with frequent mood swings and emotional outbursts that are expressed in disruptive behaviors, lability and impulsiveness. He shows depressive and self-abnegating pessimism and his affects and attitudes are increasingly self-destructive. He is high on the negativity scale, explained by the resistance to satisfy others’ expectations, he is a denier, ineffective and obstinate, with oppositional and annoying behaviors and experiences gratification by demoralizing and undermining other people’s well-being and aspirations. The combination of emotional explosions and depressive mood results in unpredictable behavior that varies abruptly between polarities, raising the depressive and schizoid style with heightened emotional disconnection (there may or may not be psychopathic characteristics), a very unstable style that under stress becomes self-destructive and violent, but with interest in relationships with others and very sensitive to rejection (borderline personality).

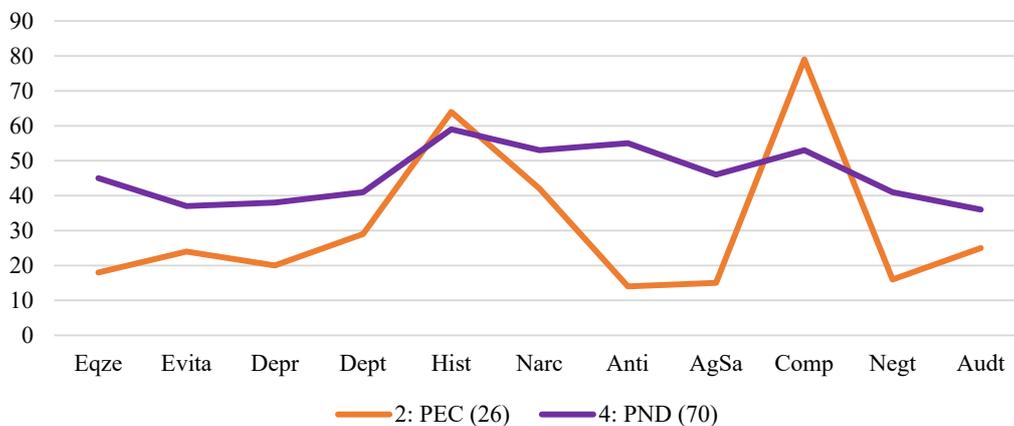


Figure 2. MCMI-III Profiles, Clusters 2 and 4 / PEC and PND

Cluster 2: Conformist Extrovert Profile “PEC” (n=26). Grouping not observed among adolescents, whose coping with the surroundings has not developed an antisocial style. Extroversion predominates as a basic style tendency, exhibiting histrionics and being particularly sensitive to the approval of those who are significant to him; therefore, he seeks to fulfill the established norms, showing loyalty, adaptation and conformity with the expectations they generate, with a self-image of apparent security, but which needs social and affective feedback from the group. However, in this grouping the subjects seem to be in conflict, dominated by an internal split that seeks to be resolved by external manipulation, but without success; the better the adaptation, the greater the feelings of rage and resentment.

Cluster 4. Deviated Normal profile “PND” (n=70). In this group, also homologous to what was described for adolescents, a personality pattern is noted with no accentuation to indicate a disorder, because it exhibits an adjusted psychological functioning. However, elevation is observed on the histrionic personality scale, which shows impulsiveness and irresponsibility, reinforced by the need for excitement and stimulation due to the inability to delay gratification, seeking momentary excitement and hedonic adventures without worrying about the consequences of his acts. It reveals immaturity and the ability to manipulate others to satisfy his immediate needs, which explains the predisposition to delinquency at this stage.

6.2. History of self-reported and recorded criminal behavior

Using a one-way ANOVA and the DMS test (post-hoc), the clusters were compared to verify differences in the self-reported criminal patterns and those recorded in their adolescent criminal history.

Only differences between clusters in the self-report of the total of thefts was observed, which includes actions before and after 18 years of age ($p=0.028$), but no specific statistical differences were noted between each of the clusters, although clusters 2 and 4 are those that report the lowest frequencies in this crime. No differences were observed in the self-report of robberies, assaults, batteries, abuses or other crimes; nor were there any differences in the history of total previous sanctions or by specific modalities. This means that personality traits do not determine the pattern of criminal behavior in this age group, with a high polymorphism being noted in the entire sample.

6.3. Risks of criminal recidivism

Using the same technique (one-way ANOVA), the recidivism risk assessment between the clusters was compared, observing that the Conformist Extrovert Profile “PEC” is the only one that differs significantly from the other four clusters in use of free time ($p=0.000$), consumption of alcohol and drugs ($p=0.022$) and total risk ($p=0.048$), with a lower record of risk in all the cases; it also recorded significantly lower scores in the antisocial pattern compared to cluster 3 ($p=0.014$), 4 ($p=0.013$) and 5 ($p=0.009$).

These results show that for this age group the differences in personality profiles affect the risk of criminal recidivism in the seven variables and the total score, except for one of the clusters representing 13% of the sample, revealing heightened accumulation of risks in all the other groupings.

7. Conclusion

The aim of the present study was to establish the differential characteristics that young adults held in prison present, considering their styles of psychological functioning, criminal history and risk of recidivism.

The results obtained reinforce the previous findings that define criminal trajectories in adolescence (Alarcón, 2015; Alarcón et al. 2018; Pérez-Luco et al., 2017), but unlike the previous stage, in the 18-to-26 age group, these differences in psychological functioning do not discriminate substantively in the criminal history, nor in the criminogenic risks present, with this result being attributed to the high levels of delinquency in the set of study participants (60%).

This idea reinforces the fact that 73% of the participants had been admitted to adolescent criminal sanction fulfilment programs. The literature review suggests passing through the protection and juvenile justice system could be a risk factor for exhibiting criminal behaviors, even developing more prolonged criminal careers, and considering institutionalization, they could be more vulnerable to the justice system, there being a high likelihood of recidivism, mainly in early adulthood (Mowen&Boman, 2018).

In this study the criminal self-report confirms the typology of persistent delinquency in the participants due to their characteristics of early onset, with a large volume of crimes before 18 years of age (56.9%), polymorphism and versatility, but also due to the high frequency of previous sanctions that have strengthened an early criminal career. These data question the comprehensive nature of therapy in the closed penitentiary system when an evaluation model/intervention beyond incarceration is not observed (Andrews et al., 2011). This statement is supported in the files reviewed and the intervention management instruments available in the system not registering or focusing protective factors in the study group, nor resources for intervention, perpetuating the tendency to work on risk reduction without enhancing greater opportunities for integration and prosocial adaptation, despite the available evidence about criminal desistance at this stage (Pérez-Luco et al., 2014).

Carefully observing the profiles described from the clusters detected, it is possible to maintain that in those adolescent trajectories where personal variables play an organizing role in transgressive behavior, criminal persistence combined with the history of sanctions and ineffective interventions that develop into prolonged periods of imprisonment at the beginning of adult life tend to accentuate the clinical and pathological traits present in the functioning of the subjects, linking them even more strongly to the criminal pattern. However, in the trajectories where the personal variables played a secondary role to the contextual risks (bonded transgressor and deviated normal), the same history of therapeutic failures and prisonization in some cases promotes the development of clinical characteristics and in others, the majority, favors processes of psychosocial maturity which harmonize psychological functioning, hypothesizing at the foundation differences in brain development.

The findings of this study contribute to a comprehensive view of antisocial behaviour and its development throughout life (Laub, 2016), and they are considered a contribution for the effective performance of the criminal justice system (Maruri, 2016), where continuity is established in the functioning of adolescents and young adults mediated by the process of neuropsychological and psychosocial maturity, but aggravated by the history of sanctions and ineffective interventions that,

without reducing the criminal risk, induce the development of mental health disorders and chronification of clinical traits and psychological maladjustment, reducing the options of desistance at the end of the sentence (Bustamante et al., 2016). This analysis underscores the need to rethink the design of adolescent criminal justice, extending the vital period of application to at least 24 years to lend consistency to the earliest interventions and reduce the negative impact of imprisonment.

Acknowledgments

This study was conducted as a thesis for the Master's degree in Legal and Forensic Psychology at the Universidad de La Frontera and did not have specific funding, with partial funding from the University's Directorate of Research.

References

- Alarcón, P. (2015). Una aproximación multidimensional al comportamiento antisocial durante la adolescencia [A multidimensional approach to antisocial behavior in the adolescence]. Doctorado en Psicología, Universidad Pontificia de Salamanca, España. <https://www.educacion.es/teseo/mostrarRef.do?ref=1258779>
- Alarcón, P., Pérez-Luco, R., Wenger, L., Salvo, S., & Chesta, S. (2018). Personalidad y gravedad delictiva en adolescentes con conducta antisocial persistente [Personality and offense severity in adolescents with persistent antisocial behavior]. *Revista Iberoamericana de Psicología y Salud*, 9(1), 58-74. <https://doi.org/10.23923/j.rips.2018.01.015>
- Andrews, D. A., Bonta, J., & Wormith, S. (2011). The Risk-Need-Responsivity (RNR) Model. Does adding the Good Lives Model contribute to effective crime prevention? *Criminal Justice and Behavior* 38(7), 735-755. <http://doi.org/10.1177/0093854811406356>.
- Arana, C. M., Álvis, A., Restrepo, J. C., & Hoyos, E. (2019). Rehabilitation of executive functions and social cognition, in people with antisocial personality disorder, linked to the armed conflict in Colombia. *Revista Argentina de Clínica Psicológica* 23(1), 92-104 <http://doi.org/10.24205/03276716.2018.1073>
- Bustamante, Y., Álvarez, L., Herrera, E., & Pérez-Luco, R. (2016). Apoyo social percibido y su influencia en el desistimiento delictivo: Evaluación del rol institucional [Perceived social support and its influence on desistance from crime: Evaluation of the institutional role]. *Psicoperspectivas*, 15(1), 132–144. <http://doi.org/10.5027/PSICOPERS-PECTIVAS-VOL15>
- Centro de Estudios y análisis del Delito [CEAD] (2021). Estadísticas delictuales [Crime statistics]. <http://cead.spd.gov.cl/estadisticas-delictuales/#descargarExcel>
- Cohen, A. O., Breiner, K., Steinberg, L., Bonnie, R. J., Scott, E. S., Taylor-Thompson, K. A., Rudolph, M. D., Chein, J., & Richeson, J. A. (2016). When is an adolescent an adult? Assessing cognitive control in emotional and nonemotional contexts. *Psychological Science*, 27(4), 549–562. <http://doi.org/10.1177/0956797615627625>
- Farrington, D. P., Ttofi, M. M., & Piquero, A. R. (2016). Risk, promotive, and protective factors in youth offending: Results from the Cambridge study in delinquent development. *Journal of Criminal Justice*, 45, 63-70. <http://doi.org/10.1016/j.jcrimjus.2016.02.014>
- Gendarmería de Chile [GENCHI]. (2021). Estadística penitenciaria [Prison statistics]. <https://www.gendarmeria.gob.cl/estadisticaspp.html>
- Gil-Fenoy, M. J., García-García, J., Carmona-Samper, E., & Ortega-Campos, E. (2017). Antisocial behaviour and executive functions in young offenders. *Psicodidáctica*, 23(1), 70-76. <http://doi.org/10.1016/j.psicod.2017.09.001>
- Hill, J. M., Blokland, A. A. J., & van der Geest, V. R. (2016). Desisting from crime in adulthood: Adult roles and the maturity gap. *Journal of Research in Crime and Delinquency*, 53(4), 506–535. <https://doi.org/10.1177/0022427816628586>

- Hoeben, E. M., & Weerman, F. M. (2016). Why Is Involvement in unstructured socializing related to adolescent delinquency? *Criminology*, 54(2), 242–281. <https://doi.org/10.1111/1745-9125.12105>
- Howell, J. C., Feld, B. C., Mears, D. P., Farrington, D. P., Loeber, R., Petechuk, D., & Redondo, S. (2015). Delincuencia juvenil en Norteamérica: intervención combinada desde los sistemas de justicia juvenil y adulto [Juvenile delinquency in North America: combined intervention from the juvenile and adult justice systems]. *Revista Española de Investigación Criminológica REIC, Serie especial: Transición desde la delincuencia juvenil a la delincuencia adulta, N°5 [Special series: Transition from juvenile to adult delinquency N°5]*, 171(2015), 1–38.
- Laub, J. (2016). Life course research and the shaping of public policy. In *Handbook of the Life Course* (pp. 623–638).
- Liefwaard, T., Rap, S., & Bolscher, A. (2016). Can anyone hear me? Participation of children in juvenile justice: A manual on how to make European juvenile justice systems child-friendly. International Juvenile Justice Observatory.
- Maruri, J. A. (2016). La Criminología como base fundamental de la Política Criminológica en México: Aspectos esenciales del nuevo proceso penal [Criminology as a fundamental basis for Criminological Policy in Mexico: Essential aspects of the new penal process]. *Archivos de Criminología, Seguridad Privada y Criminalística*, 16, 119–130. <https://dialnet.unirioja.es/descarga/articulo/5290987.pdf>
- Mercurio, E., García-López, E., Morales-Quintero, L. A., Llamas, N. E., Marinaro, J. Á., & Muñoz, J. M. (2020). Adolescent brain development and progressive legal responsibility in the Latin American context. *Frontiers in Psychology*, 11627, 1-12. <https://doi.org/10.3389/fpsyg.2020.00627>
- Millon, T. (1997). Millon Clinical Multiaxial Inventory III (MCMI III) (2nd ed.). National.
- Moffitt, T. (2015). Life-course-persistent versus adolescence-limited antisocial behavior. In D. Cicchetti & D. Cohen (Eds.), *Developmental Psychopathology* (pp. 570–598). John Wiley & Sons, Inc.
- Morales, A. M., Pantoja, R., Piñol, D., Sánchez, M., MacLean, G., & Espinoza, O. (2018). Una propuesta de modelo integral de reinserción social para infractores de ley [A proposal for a comprehensive model of social reinsertion for law offenders]. Santiago: Universidad de Chile, Instituto de Asuntos Públicos y Fundación Paz Ciudadana.
- Morizot, J., & Kazemian, L. (2014). The development of criminal and antisocial behavior: theory, research and practical applications (p. 564). <http://doi.org/10.1007/978-3-319-08720-7>
- Mowen, T. J., & Boman, J. H. (2018). A Developmental perspective on reentry: Understanding the causes and consequences of family conflict and peer delinquency during adolescence and emerging adulthood. *Journal of Youth and Adolescence*, 47(2), 275–289. <https://doi.org/10.1007/s10964-017-0794-1>
- Olver, M. E., Stockdale, K. C., & Wormith, J. S. (2014). Thirty years of research on the level of service scales: a meta-analytic examination of predictive accuracy and sources of variability. *Psychological Assessment*, 26(1), 156-76. <https://doi.org/10.1037/a0035080>
- Pérez-Luco, R., Alarcón, P., Zambrano, A., Alarcón, M., Chesta, S., & Wenger, L. (2017). Taxonomía de la delincuencia adolescente con base en evidencia chilena [Chilean adolescent delinquency taxonomy evidence based]. In C. Bringas & M. Novo (Eds.), *Psicología Jurídica, conocimiento y práctica*. Colección Psicología y Ley N° 14 (pp. 251–270). Sevilla: Facultad de Derecho de la Universidad de Sevilla.
- Pérez-Luco, R., Alarcón, P., Zambrano, A., Alarcón, M., Lagos, L., Wenger, L., Muñoz, J., & Reyes, A. (2014). MMIDA®. Modelo Multidimensional de Intervención Diferenciada. Manual de intervención diferenciada: Prácticas que transforman vidas [Multidimensional Model of Differentiated Intervention. Differentiated intervention manual: Practices that transform lives] (Vol. 1). Temuco: Ediciones Universidad de La Frontera. <https://drive.google.com/file/d/0B4q15INYRAbTZzVuZ3FEWFWvdjg>
- Shulman, E., Smith, A., Silva, K., Icenogle, G., Duell, N., Chein, J., & Steinberg, L. (2016). The dual systems model: Review, reappraisal, and reaffirmation. *Developmental Cognitive Neuroscience*, 17, 103-117.
- Somerville, L. H. (2016). Searching for signatures of brain maturity: What are we searching for? *Neuron* 92, 1164-1167. <https://doi.org/10.1016/j.neuron.2016.10.059>

- Souci V., M., & Vinet, E. V. (2016). Examen psicométrico exploratorio del Millon Clinical Multiaxial Inventory III (MCMI-III) en población penitenciaria chilena [Exploratory psychometric examination of the Millon Clinical Multiaxial Inventory III (MCMI-III) in Chilean prison inmates]. *Salud & Sociedad*, 4(2), 168-184. <https://doi.org/10.22199/S07187475.2013.0002.00005>
- Tong, T. S., Ku, L., & Zaroff, C. M. (2016). The influence of culture-specific personality traits on the development of delinquency in at-risk youth. *International Journal of Offender Therapy and Comparative Criminology*, 60(5), 535–554. <https://doi.org/10.1177/0306624X14556609>
- Wenger, L. (2018). Comportamiento antisocial, personalidad y madurez en adolescentes y jóvenes [Antisocial behavior, personality and maturity in adolescents and young adults]. Tesis de doctorado en cerebro cognición y conducta. Universidad de Barcelona, España.