

From Adversity to Aggressive Behaviour: A Longitudinal Study of Institutional Misconduct Among Romanian Juvenile Inmates

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ABSTRACT

This study examines the predictors of violent conduct among juvenile inmates within the Romanian correctional system, with a specific emphasis on property-destructive behaviours occurring during incarceration. Responding to a critical gap in the national literature, the research utilizes a longitudinal design to follow a cohort of 439 adolescents (Mage = 16.21; 5.2% female) over a two-year observation period. Findings from survival analyses demonstrate that incidents of violence directed at institutional infrastructure, such as the destruction of windows, doors, furniture, and walls, are significantly associated with both pre-incarceration adversities and institutional conditions. In addition, psychological variables, including low frustration tolerance, impaired self-esteem, and emotion dysregulation, emerge as salient predictors of such misconduct. These results advance current theoretical and empirical understandings of institutional violence and carry important implications for correctional policy development and targeted intervention strategies.

1. Introduction

The aetiology of prison misconduct remains a critical area of inquiry, particularly in determining whether the prevalence of violent incidents is primarily attributable to environmental conditions within the prison or to inmates' pre-existing cognitive frameworks, values, and behavioural patterns developed prior to incarceration. Property destruction represents a particularly consequential form of institutional misconduct, often associated with prior patterns of violent and disruptive behaviour. Many of the juveniles in this study had been incarcerated on charges directly related to acts of vandalism, destruction of property, or malicious mischief committed prior to detention. Within the prison context, such behaviours frequently persist, manifesting in damage to institutional infrastructure, including windows, doors, walls, furniture, and other essential facilities. These incidents typically require substantial repair efforts and may prompt increased staffing, upgraded surveillance systems, or other costly security enhancements, thereby placing significant financial and operational burden on correctional institutions. Property damage incidents can disrupt prison operations, leading to a loss of productivity. For example, if a housing unit or a facility is damaged and rendered unusable, it may affect the ability to accommodate inmates, conduct programs, or provide services. This can result in additional costs and logistical challenges for the prison administration. Additionally, property damage incidents caused by violent offenders can

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negatively impact the public perception of the prison system. This, in turn, can influence funding decisions by government authorities or stakeholders. If a prison has a reputation for frequent property damage incidents, it may face challenges in securing adequate funding for repairs, maintenance, and upgrades.

Given the persistent nature of property-destructive behaviours among incarcerated youth, the primary research question of this study is to identify juveniles in custody who exhibit known risk factors for violent behaviour and to examine the extent to which these factors contribute to property-destructive conduct during incarceration. This analysis controls for institutional strains, such as the detention regime and frequency of visits from family or significant others, as well as other potentially confounding or correlated variables.

The secondary question of this study is how these risk factors intertwine over time with different types of prison environments and criminogenic factors, thereby influencing misconduct in prison.

In seeking to understand the causes of violence within custodial settings, three primary theoretical frameworks have dominated the literature. The deprivation model asserts that violent behaviour arises as an adaptive response to the restrictive and stressful conditions of institutional life, with the prison environment itself serving as the primary catalyst (Clemmer, 1940). The importation model however, hypothesized that the inmate adapts to the strains of prison life using a repertoire of social values and mentalities that they had before incarceration. (Ellis et al., 2019; Irwin & Cressey, 1962). The ability to cope maturely or immaturely was explained by Zamble and Porporino (2013) as a continuum sequence of adjustment and maladjustment. Adaptation to institutional life is influenced by the inmates' perception of strain, importation values e.g., gang culture, social support, social and human capital and having sufficient coping resources. More recently, the general strain theory has received increasing scholarly attention, emphasizing the importance of identifying circumstances that compel individuals to adopt destructive or maladaptive responses to stress (Agnew et al., 2002).

Managing individuals with violent behaviour poses significant challenges for prison staff, who report a wide range of emotional responses to destructive incidents, including anger, frustration, sadness, and trauma (DeHart et al., 2009). These experiences have highlighted widespread concerns among correctional personnel regarding the adequacy of their training, with many advocating for a more participatory approach in the design of staff learning requirements. Specifically, incorporating employee perspectives in identifying learning needs and co-developing training content has been emphasized as a critical step toward improving institutional responses. An essential component of such training should involve raising awareness of the strong correlation between violent behavior during incarceration and the risk of future violent recidivism (Yexley et al., 2002).

Despite the relevance of this issue, research remains limited regarding the psychological impact of institutional violence on staff attitudes, as well as the underlying mechanisms driving destructive inmate behavior. Understanding when and how these patterns emerge is crucial, as they may reflect processes of behavioral emulation or broader ecological dynamics within the correctional environment. To address these concerns, we conducted a study on violent destructive behavior in Romania's juvenile prison system.

1.1. Romanian Justice Background for Young People

Drastic reforms were required in the Central and Eastern European justice system after the major political changes of 1989. In the decades that followed, several countries in the region, including the Czech Republic, Russia, the Baltic States, Croatia, and Slovakia, undertook

significant restructuring of their juvenile justice systems. These reforms led to the emergence of independent youth justice frameworks that acknowledged the distinct developmental, educational, and legal needs of young offenders. The impetus for such reform was driven by the imperative to dismantle judicial structures shaped by Soviet ideology and to align national practices with the normative standards set forth by the Council of Europe and the United Nations.

In Romania, this transition was marked by the adoption of a new Criminal Code in 1992, representing a foundational step toward justice system modernization. However, the reform was not supported by the requisite institutional capacity or pedagogical infrastructure to deliver meaningful rehabilitation for juvenile offenders. Compounding these limitations, the concurrent decline in access to social welfare services left large segments of the population, particularly youth, vulnerable to criminal involvement. A subsequent reform introduced in 1996 aimed to redirect the rehabilitative mandate from custodial settings to community-based interventions, reflecting a broader shift toward deinstitutionalization and reintegrative justice.

A significant policy shift occurred in 2004 with the enactment of the *Law on the Protection and Promotion of Children's Rights*, which enhanced procedural safeguards within the juvenile justice system in alignment with international standards. This legislative reform marked a critical step toward the institutionalization of child-centered justice practices in Romania. By 2020, the use of custodial sanctions had markedly declined; incarceration had become an exceptional measure, typically reserved only for juveniles convicted of the most serious offenses.

The justice systems of Soviet and post-Soviet Eastern Europe have historically reflected substantial regional heterogeneity, shaped by divergent legal and ideological influences. Two primary models were particularly influential: the legal traditions of the German Democratic Republic and Czechoslovakia in the western part of the region, and the Soviet-oriented frameworks implemented in countries such as Bulgaria and Romania. In contemporary European juvenile justice systems, there has been a widespread shift toward diversionary practices under judicial oversight, with custodial sentences employed only in response to the most serious and violent offenses. In Romania, alongside countries such as Croatia, the Czech Republic, Hungary, Latvia, and Slovenia, custodial measures have largely been supplanted by community-based sanctions. Consequently, the use of incarceration for juveniles has become increasingly infrequent, especially in comparison to its continued application within adult criminal justice systems (Dünkel, 2014).

Nevertheless, as evidenced in jurisdictions such as England and Wales, disciplinary approaches within juvenile justice systems often lack substantive rehabilitative content and fail to provide effective mechanisms for reintegration into society. Preventative measures are frequently individualized, relying heavily on the subject's capacity for self-regulation and personal agency, rather than being embedded within a coherent institutional framework. Similar dynamics are observable in Romania, where the juvenile justice system continues to exhibit a high rate of recidivism, low public confidence in rehabilitative strategies, and a pervasive mistrust of law enforcement institutions (Baiaș, 2022). The estimated recidivism rate among Romanian juvenile offenders is approximately 45%, underscoring systemic limitations in the efficacy of current interventions. While this figure remains substantial, it is comparatively lower than that reported in England and Wales, where recidivism reaches approximately 70%, indicating that the majority of offenses are committed by individuals with prior custodial experience (Baiaș, 2022).

The human costs associated with destructive behaviors in correctional settings often eclipse the material and institutional consequences, given their strong association with elevated risks of

both suicide and homicide among incarcerated populations. Empirical evidence consistently identifies such behaviors as among the most salient predictors of suicide attempts and completed suicides within prison environments. The persistence and severity of these incidents underscore a critical disparity between the prevalence of violence and self-harm in custodial institutions and that observed in community-based contexts. These patterns necessitate further inquiry into the extent to which acts of property destruction may function as maladaptive coping mechanisms, symbolic or overt manifestations of psychological distress linked to the experience of incarceration and institutional deprivation.

1.2. The Current Study

This study undertakes a longitudinal examination of both pre-incarceration and institutionally situated factors that may influence the persistence or desistance of property-destructive behavior among Romanian juvenile offenders, an understudied population within empirical criminological research.

1.3. Heterogeneity of Risk Factors

High rates of violence are associated with a series of developmental adversities that may increase the suicide risk in prison. These adversities include: insecure/avoidant attachment styles and affectionless parental bonding (Muris et al., 2004), childhood trauma (Rivlin et al., 2013), low levels of social support and poor ability to cope with prison distress (Dear et al., 2001), exposure to domestic violence (Muniz et al., 2019; Yexley et al., 2002), and being physically/sexually abused (Matsumoto et al., 2009).

The predominant theoretical models addressing disruptive behaviour in the general population identify emotional distress relief and arousal downregulation as primary motivators for violent acts (Chapman et al., 2006; Dixon-Gordon et al., 2012). However, the mechanisms through which individuals regulate emotions via such maladaptive behaviours remain insufficiently understood. Specifically, it is unclear why individuals choose to manage emotional states through the use of violence.

Within the framework of behavioral theory, the perpetuation of destructive conduct is understood to be maintained through processes of both positive and negative reinforcement. Positive reinforcement may involve tangible or social rewards, such as the acquisition of resources, elicitation of attention, assertion of dominance, or facilitation of peer affiliation, that serve to increase the likelihood of behavioral repetition. In contrast, negative reinforcement functions through the removal or avoidance of aversive stimuli, such as situations characterized by interpersonal tension or perceived threat. Evidence from community samples suggests that individuals frequently attribute destructive behaviors to perceived social utility, including a desire to exert control, dominance, or provoke responses from others (Hilt et al., 2008). In custodial contexts, correctional officers and clinical professionals have identified a strong association between institutional violence and early exposure to adverse childhood experiences, including abuse and neglect (Sorensen & Cunningham, 2008). Moreover, institutional variables such as prolonged isolation, environmental monotony, perceived insecurity, interpersonal intimidation, and resource theft from other inmates, have been consistently reported as salient situational triggers for violent and destructive behavior within prison settings (Dixon-Gordon et al., 2012).

The transition from pretrial detention to sentenced status has been identified as a particularly volatile phase in the incarceration trajectory, marked by heightened susceptibility to violent behavior directed both at others and at institutional property. This transitional period often

entails significant psychological stress, uncertainty, and adaptation to more rigid institutional structures. Notably, empirical evidence indicates that individuals incarcerated for property-related offenses demonstrate a stronger association with in-prison violence than those convicted of crimes against persons (Sorensen & Cunningham, 2008). These findings challenge reductionist frameworks that attribute institutional violence primarily to individual psychological characteristics or the gravity of the index offense. Instead, they underscore the necessity of adopting a more ecologically grounded perspective, one that accounts for the influence of institutional context, including the degree of restrictiveness embedded in the detention regime, the quality of the correctional environment, and broader systemic factors that may mediate behavioral outcomes.

A previous history of imprisonment has been a variable shown to have predictive power on prison violence (Gendreau et al., 1997). The evidence suggests that those who have been incarcerated previously are more at risk of being violent in future instances of incarceration. (Sorensen & Cunningham, 2008). Furthermore, existing research indicates that repeat offenders account for a significant proportion of prison violence, exhibiting violent behaviour at disproportionately high rates compared to first-time offenders (Arbach-Lucioni et al., 2012). In contrast, other studies have found no evidence between the presence of criminal records and institutional misconduct (Morris et al., 2013). However, these results should be taken with caution, because these conflicting findings may be attributable to the variations in the sample constructions and the conceptualization of violence (Arbach-Lucioni et al., 2012).

Notwithstanding the mixed empirical evidence, prior exposure to the prison system has been consistently identified as a salient factor in the analysis of institutional violence. Specifically, previous incarceration experience should be taken into account when classifying and predicting violent misconduct within custodial settings, as it may condition inmates' behavioral adaptations and responses to institutional stressors. Various psychosocial stressors, such as experiences of bullying, receipt of distressing news, bereavement, financial strain, and low self-esteem, have been frequently cited as proximal triggers for destructive behavior. In addition to these situational antecedents, destructive acts may also serve specific psychological functions. Prior research has identified instrumental motivations, such as attempts to assert control over an otherwise restrictive environment (Nock, 2008), as well as intrapersonal functions, including the regulation or release of intense emotional states (Gross, 1998).

Research Hypotheses

In addressing the core research questions, this study investigated the influence of both proximal and distal parental factors on violent behaviour within the prison setting by testing the following hypotheses:

1. Juveniles who experienced physical or psychological abuse during childhood or adolescence are more likely to exhibit heightened levels of aggression while incarcerated, including acts of property destruction.
2. The likelihood of engaging in aggressive behaviour within the prison system increases among adolescents and young adults who report the use of drugs, alcohol, or other substances.
3. Having at least one parent with a criminal history exerts a direct influence on the juvenile's propensity to engage in violent conduct while incarcerated.

Multiple theoretical perspectives have emerged to explain the origins and functions of destructive behavior in correctional environments, many of which are complementary in nature. Clemmer's (1940) deprivation theory posits that the incarceration experience itself

operates as an independent stressor, contributing to psychological deterioration and facilitating maladaptive behavioral patterns, including institutional violence. In contrast, other scholars have challenged the notion that misconduct arises solely from maladaptation, suggesting instead that behavioral outcomes differ across inmates based on the duration of their sentences (Ellis et al., 2019). From this perspective, longer periods of incarceration may afford greater opportunities for adjustment, resulting in reduced behavioral infractions over time. Importantly, much of the extant literature on prison violence is cross-sectional in design, thereby limiting its capacity to elucidate the temporal dynamics through which individual and contextual factors influence the persistence or desistance of destructive behavior.

In response to this gap, the present study seeks to identify predictors of aggression manifesting as property damage following incarceration and to examine the developmental trajectory of such behavior across the duration of juveniles' custodial sentences.

2. Method

2.1. Study Design

This research employs a longitudinal design. The average duration of incarceration among participants was 33.51 months, with a median duration of 28 months.

2.2. Participants

The study sample consisted of 439 juvenile detainees held in Romanian penitentiaries and rehabilitation centers over a two-year period. This cohort represented more than 90% of the total juvenile prison population at the time of data collection. Of the total sample, 23 participants were female and under the age of 18, accounting for approximately 4% of the incarcerated juvenile population.

2.3. Data Collection and Ethical Aspects

Data for this study were obtained from the Romanian Prison System Database. Upon entry into the correctional facility, each participant was required to provide demographic information and complete a standardized health screening questionnaire. Prior to the commencement of the research, written authorization was granted by the National Administration of Penitentiaries, permitting the use of institutional data for academic purposes. The researcher maintained no direct contact with the participants, and no identifiable personal data were used, thereby ensuring that no legal or ethical harm was incurred by the individuals involved. Ethical approval for the study was obtained from the West University of Timișoara, where the research was conducted between 2020 and 2022. In addition, comprehensive data protection protocols were implemented to ensure the security and confidentiality of the collected information throughout the research process.

Custodial Educational Measures

Legal interventions and the involvement of correctional or rehabilitative institutions in Romania vary according to the age of the juvenile at the time the offense was committed and the assessment of legal discernment. Once a minor reaches the age of 14, they may be held criminally responsible; however, between the ages of 14 and 16, the law presumes a limited capacity for discernment. As such, criminal liability during this period is contingent upon a formal determination that the minor was fully aware of the nature and consequences of their

actions at the time of the offense. After the age of 16, the presumption of discernment is applied, and the juvenile is considered fully criminally liable for offenses committed.

The geographical proximity of an offender's residence to the place of detention represents a sine qua non condition for sustaining familial contact during incarceration. In practice, however, financial limitations and other structural barriers frequently hinder families from traveling long distances to visit their incarcerated juvenile relatives. In rehabilitation centers, minors who exhibit consistent, balanced, and prosocial behavior may be granted discretionary privileges by the Council of Professors. These may include family visits during holiday periods, participation in educational outings, or supervised shopping excursions. By contrast, such privileges are generally unavailable in juvenile prison settings, even for those who maintain exemplary conduct. Nevertheless, prison regulations do provide for certain incentives: minors recognized for outstanding behavior may qualify for sentence reductions and additional benefits, such as more frequent family visits and expanded access to care packages.

Demographic and Pre-incarceration Factors

A summary of relevant risk factors mapped to the Romanian prison system includes both static and dynamic factors such as predictors of prison violence, starting with personal background and adverse pre-incarceration experiences (including exposure to violence in the family, or inconsistent parenting, criminal history, and psychological vulnerabilities) were presented in Baias and Beckwith (2021) and Baias (2022).

The five domains of information, as outlined in Baias and Beckwith (2021) and Baias (2022), encompassed the following categories of variables:

- 1) Demographic data, which included variables such as age, religion, and ethnicity.
- 2) Penitentiary and criminal history, comprising variables such as relapse status, type of conviction, detention regime, nature of the offense, sentence length, and records of institutional rewards and disciplinary sanctions.
- 3) Institutional incidents, including destructive events, self-aggressions, hetero-aggressions, and acts of property damage, documented by date of occurrence, whether medical assistance was requested, and any associated disciplinary sanctions.
- 4) Socio-economic data, including family structure (e.g., both parents present, single-parent household, or parentless), history of adoption or institutionalization, parental civil status, parenthood status, household income level, educational attainment, occupational status, and the presence of criminal records within the family.
- 5) Psychological risk factors, encompassing exposure to familial violence, experiences of abuse or abandonment, and substance use or dependency.

The Romanian Prison Service maintains a comprehensive institutional database that systematically documents daily incidents of destructive behavior, including both interpersonal violence and acts of property damage within correctional facilities.

Description of the variables

Demographic data: age, gender.

Age was recorded as a continuous variable, measured in years at the time of incarceration.

Socio-economic data focused on key indicators related to the marital and familial context of each participant. Variables of interest included parental marital status (single parent, dual parents, or parentless), history of adoption or institutionalization, civil status of the parents (married, divorced, or cohabiting), and parenthood status, specifically, whether the parents resided in the same household at the time of the juvenile's incarceration.

Family status was operationalized as a nominal categorical variable, encompassing categories such as extended families living in the same household, recomposed families, and single-parent households. This information was collected through the question: "Do you currently live with your parents?" Responses were coded numerically as follows: "0" for No, "1" for Yes, "8" for Did not answer, and "9" for Not applicable (N/A).

Institutionalization was coded as a binary variable indicating whether the participant had experienced abandonment or placement in institutional care. A value of "1" was assigned to individuals with such a history, while a value of "0" denoted no experience of abandonment or institutionalization.

Education level was treated as a categorical nominal variable, with categories including illiterate, elementary, middle school, and high school. Educational attainment was initially recorded on a 0–12 scale, where a value of "0" indicated participants who self-identified as completely illiterate. Values from "1" to "12" corresponded to the number of formal school years completed, with "1" representing the lowest level and "12" indicating completion of secondary education.

For analytical purposes, education levels were recoded into four categories: completely illiterate, elementary school (grades 1–4), middle school (grades 5–8), and high school (grades 9–12).

Occupational status was coded as a binary (dummy) variable, distinguishing between individuals who were employed and those who were unemployed at the time of incarceration.

The presence of previous criminal records within the family was operationalized as a binary (dummy) variable, where a value of "1" indicated that at least one family member had a history of incarceration, and a value of "0" denoted no known familial criminal record.

Penitentiary history variables encompassed the detention regime (open, semi-open, closed, or preventive), the typology of the detention facility (rehabilitation center, juvenile prison, or adult prison), the frequency of family visits during the incarceration period, and the record of institutional rewards and disciplinary sanctions.

The detention regime was also coded as a nominal categorical variable, comprising four categories: open, semi-open, closed, and preventive.

The typology of the detention facility was treated as a nominal categorical variable, with three possible classifications: rehabilitation center, juvenile prison, and adult prison.

Criminal history variables included relapse status, type of conviction, nature of the offense, and sentence length.

Relapse status was coded as a binary variable, where a value of "1" indicated prior incarceration and "0" denoted no previous criminal record.

Sentence length was treated as a continuous numerical variable, measured in days.

In addition to these legal factors, the analysis also considered key psychological risk variables, including exposure to familial violence, experiences of abuse or abandonment, and substance use.

Measures of mental well-being

In recent years, there has been growing scholarly interest in the role of psychological and personality factors in understanding prison violence. These dimensions have enabled researchers to develop more nuanced frameworks for analysing inmates' behavioural responses within correctional settings. Psychological constructs, in particular, are recognized as having a significant influence on an individual's capacity to adapt to the prison environment (Day et al., 2012). The present study incorporates objective measures of mental well-being through two validated instruments: the General Health Questionnaire (GHQ-12) and the Symptom Checklist-90 (SCL-90). Both tools are widely regarded as reliable indicators of psychological health (Andersen, 2002; Bowler, 2018), extensively utilized in clinical and correctional research (Derogatis et al., 1974; Goldberg, 1972, 1978), and have demonstrated strong reliability across various populations and retesting conditions (Arshad et al., 2015; Baumann et al., 2008).

Upon entry into the prison system, juveniles are required to complete the General Health Questionnaire (GHQ-12) developed by Goldberg (1972), a widely used screening tool designed to assess psychological well-being. This instrument comprises twelve items that prompt individuals to reflect on their mental health status over the preceding two weeks. Example items include: "Over the past few weeks, have you lost sleep due to stress or worry?", "Have you felt constantly under strain?", "Have you been able to face your problems?", "Have you been feeling unhappy or depressed?", and "Have you been thinking of yourself as worthless?"

Each item is rated on a four-point Likert scale ranging from 1 to 4. For negatively worded items (e.g., "Have you felt constantly under strain?"), response options are scored as follows: "Not at all" = 1, "No more than usual" = 2, "Rather more than usual" = 3, and "Much more than usual" = 4. Conversely, for positively worded items (e.g., "Have you been able to face your problems?"), the scoring is reversed: "More than usual" = 1, "Same as usual" = 2, "Less able than usual" = 3, and "Much less than usual" = 4. Accordingly, all items, regardless of positive or negative valence, are systematically scored such that higher total scores indicate elevated levels of psychological distress.

Goldberg (1997) applied the Likert scoring method (0–1–2–3) to the General Health Questionnaire (GHQ) items, whereby a response originally rated as 1 was recoded as 0, 2 as 1, 3 as 2, and 4 as 3. This scoring approach yields a total possible score ranging from 0 to 36, with higher values indicating greater psychological distress. The responses were used to create a dichotomous variable that indicates whether a young person had been at risk for psychological distress. Individuals with higher scores, identified as 'at risk' by penitentiary psychologists, were recorded in the institutional database as vulnerable and recommended for ongoing psychological monitoring.

Outcome – Destructive behaviors

To gain a deeper understanding of the motivational factors underlying destructive behaviors in prison, the present study employs event history analysis. Accordingly, the dependent variable is defined as the elapsed time until the occurrence of an incident resulting in property-damaging behavior.

2.4. Analytical Procedure

Sample size and power calculations for group comparisons using censored data were conducted in accordance with the guidelines provided by Hosmer et al. (2009). To ensure sufficient

statistical power (80%) at a significance level of $\alpha = 0.05$, sample size estimates were computed for each group comparison based on a two-year follow-up period. Survival probabilities across different groups were examined using Kaplan–Meier (K–M) survival estimates, and statistically significant differences ($p < 0.05$) were identified via the Log-rank test, with results presented in Table 2. To assess the combined influence of multiple factors on survival time—defined as time without aggressive behaviour—a multivariate Cox proportional hazards model was employed (Table 3). This model included all variables found to be significant ($p < 0.05$) in the univariate analyses. All predictor variables were measured at the time of entry into the correctional facility. Model fit was evaluated using the Akaike Information Criterion (AIC) to determine comparative goodness of fit. Data analysis was conducted using the “survival” package (version 2.36-12) in the R Statistical Computing Environment.

3. Results

3.1. Key Findings

Table 1 presents a summary of the variables of interest for male and female adolescents serving sentences within the Romanian Juvenile Prison System. A central finding emerging from the data is the pronounced overrepresentation of juveniles from disadvantaged backgrounds—specifically, those who have experienced parental absence, abandonment, institutionalization, homelessness, or extreme poverty. Notably, over 20% of the adolescents in the sample reported the absence of at least one parent from the household. Additionally, rates of neglect were strikingly high among male participants, reaching 68%, which is more than twice the rate observed among their female counterparts.

Table 1. Characteristics of Adolescents in Custody in Romanian Prison System

Social Variable	Category	Male (%)	Female (%)	Total (%)
Parenthood status	Dual Parent	219 (52.64%)	13 (56.52%)	232 (52.85%)
	No dual parent	131 (31.49%)	5 (21.74%)	136 (30.98%)
	Missing	66 (15.87%)	5 (21.74%)	71 (16.71%)
	Total	416 (94.76%)	23 (5.24%)	439 (100%)
Homelessness	Yes	60 (14.42%)	10 (43.48%)	70 (15.45%)
	No	346 (83.17%)	11 (47.83%)	357 (81.32%)
	Missing	10 (2.40%)	2 (8.70%)	12 (2.73%)
	Total	416 (94.76%)	23 (5.24%)	439 (100%)
Violence in Family	Yes	97 (23.32%)	9 (39.13%)	106 (24.15%)
	No	274 (65.87%)	12 (52.17%)	286 (65.15%)
	Missing	45 (10.82%)	2 (8.70%)	47 (10.71%)
	Total	416 (94.76%)	23 (5.24%)	439 (100%)
Criminal Parents	Yes	78 (18.75%)	3 (13.04%)	81 (18.45%)
	No	321 (77.16%)	17 (73.91%)	338 (76.99%)
	Missing	17 (4.09%)	3 (13.04%)	20 (4.56%)
	Total	416 (94.76%)	23 (5.24%)	439 (100%)
Education	Illiterate	98 (23.56%)	6 (26.09%)	104 (23.69%)
	Elementary	117 (28.13%)	5 (21.74%)	122 (27.79%)
	Middle School	178 (42.79%)	10 (43.48%)	188 (42.82%)
	High School	23 (5.53%)	2 (8.70)	25 (5.69%)
	Missing	0 (0%)	0 (0%)	0 (0%)
	Total	416 (94.76%)	23 (5.24%)	439 (100%)
Psychological actors	Category	Male (%)	Female (%)	Total (%)
Homelessness	Yes	60 (14.42%)	10 (43.48%)	70 (15.45%)
	No	346 (83.17%)	11 (47.83%)	357 (81.32%)
	Missing	10 (2.40%)	2 (8.70%)	12 (2.73%)
Substance Abuse	Yes	76 (18.27%)	6 (26.09%)	82 (18.68%)
	No	311 (74.76%)	15 (65.22%)	326 (74.26%)
	Missing	29 (6.97%)	2 (8.70%)	31 (7.06%)
Anti-social	High risk	139 (33.41%)	9 (39.13%)	148 (33.71%)
	Moderate risk	273 (65.63%)	12 (52.17%)	285 (64.92%)
	Missing	4 (0.96%)	2 (8.70%)	6 (1.37%)
Frustration	High risk	247 (59.38%)	15 (65.22%)	262 (59.68%)
	Moderate risk	162 (38.94%)	6 (26.09%)	168 (38.27%)
	Missing	7 (1.68%)	2 (8.70%)	9 (2.05%)
Empathy Lack	Yes	214 (51.44%)	13 (56.52%)	227 (51.71%)
	No	193 (46.39%)	8 (34.78%)	201 (45.79%)
	Missing	9 (2.16%)	2 (8.70%)	11 (2.51%)
Self-control	High-risk	273 (65.63%)	17 (73.91%)	290 (66.06%)
	Moderate-risk	135 (32.45%)	4 (17.39%)	139 (31.66%)
	Missing	8 (1.92%)	2 (8.70%)	10 (2.28%)
	Total	416 (94.76%)	23 (5.24%)	439 (100%)
Prison Factors	Category	Male (%)	Female (%)	Total (%)
	Rehabilitation	139 (33.41%)	16 (69.57%)	155 (35.31%)
Typology of Prison	Prisons for Minors	218 (52.40%)	1 (4.35%)	219 (49.89%)
	Adult Prison	59 (14.18%)	6 (26.09%)	65 (14.81%)
	Missing	0 (0%)	0 (0%)	0 (0%)
	Total	416 (94.76%)	23 (5.24%)	439 (100%)
Detention Regime	Open	161 (38.70%)	16 (69.57%)	177 (40.32%)
	Semi open	140 (33.65%)	3 (13.04%)	143 (32.57%)
	Closed	36 (8.65%)	0 (0%)	36 (8.20%)
Preventive	Preventive	79 (18.99%)	4 (17.39%)	83 (18.21%)
	Missing	0 (0%)	0 (0%)	0 (0%)
	Total	416 (94.76%)	23 (5.24%)	439 (100%)

The second finding for this research question was that inmates in this study had a very high risk of presenting low self-control, low ability to cope with frustration, lack of empathy, and antisocial behavior. More than 60% of inmates in the Romanian juvenile prison system presented a low ability to cope with frustration and conflict when screened at their entry into the prison. Empathic dysregulation was present in 47% of the inmates, and antisocial personality traits were present in 34% of them.

Differences Among Groups in Observed and Expected Aggressive Occurrences

Table 2 presents the results of the Log-rank test, which examines the association between various predictive factors and the timing of the first occurrence of property damage within a 30-month period following entry into the prison system. This analysis evaluates differences in survival distributions across groups, identifying which factors significantly influence the likelihood of engaging in property-destructive behaviour over time.

Table 2. Log-rank test, exploring the association between predictive factors of property damage

Variables	n	Events Observed (Expected) LRT
Gender Male Female	n = 416 n = 23 N= 439	85 (80.29) 1 (5.71) Chi2 (1) = 4.20 p = 0.04
Prior Criminal Records Parents Yes No	n = 338 n = 81 N= 419	60 (67.4) 23 (15.6) Chi2 (1) = 4.30 p = 0.04
Typology of Prison Rehabilitation Prisons for Minors Adult Prison	n = 155 n = 219 n = 65 N= 439	14 (36.1) 69 (39.6) 3 (10.3) Chi2 (2) = 40.7 p < 0.001
Detention Regime Open Semi-open Closed Preventive	n = 177 n = 143 n = 36 n = 83 N= 439	18 (39.09) 36 (27.93) 26 (6.59) 6 (2.39) Chi2 (3) = 74.2 p < 0.001
Frustration Yes No	n = 262 n = 168 N= 430	13 (34.6) 73 (51.4) Chi2 (1) = 22.6 p < 0.001
Empathy Yes No	n = 201 n = 227 N= 428	57 (39.9) 29 (46.1) Chi2 (1) = 13.7 p < 0.001
Low Self-Control Yes No	n = 290 n = 139 N= 429	12 (27.9) 74 (58.1) Chi2(1) = 13.5 p < 0.001

The survival experience of two (or more) groups of individuals were compared by using Log-rank tests. Survival curves for each group were computed and compared the proportions surviving at various specific times. The Log-rank test was employed to evaluate the null hypothesis that no significant difference exists between two groups, i.e., inmates with a familial model of antisocial behaviour or a history of prior contact with the justice system, versus those without such backgrounds, in terms of the probability of experiencing a violent event against prison property at any given point during the observation period.

Time to First Event Analysis for Prison Property Damage

In the Figure 1, the cumulative survival rate is on the Y-axis, and the variable “time” in months is on the X-axis. Concerning overall prison property destructive behavior within the juvenile correctional system, the probability of surviving decreases as the time spent in the prison system increases. However, during the 3-year follow-up in prison (the maximum follow-up time), the survival probability for violence against prison property did not reach a value of 0.5 across this study, as figure 1 shows. In figure 1, the 1, 2, and 2.5-year survival probability (time free of violence against property events) for adolescents in the Romanian prison system was 84%, 75%, and 73%, respectively.

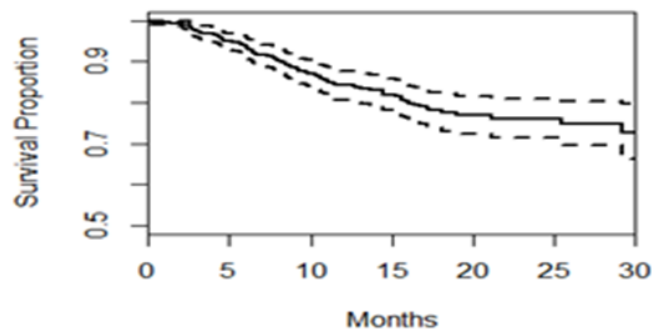


Figure 1. The survival probability (time free of violence against property events) for adolescents in the Romanian prison system

Survival probability was compared between the different groups of interest for the scope of this study using the K-M survival estimates for a number of individual and environmental variables, which resulted significant from the log-rank test at $p < 0.05$. The variables resulting significant from the Log-Rank test included: “Parental criminal history”, “frustration”, “empathy”, “low self-control”, “prison regime”, and “typology of detention facility”. The survival is calculated as the proportion surviving on the current day \times cumulative survival over the previous period as Figure 2 shows.

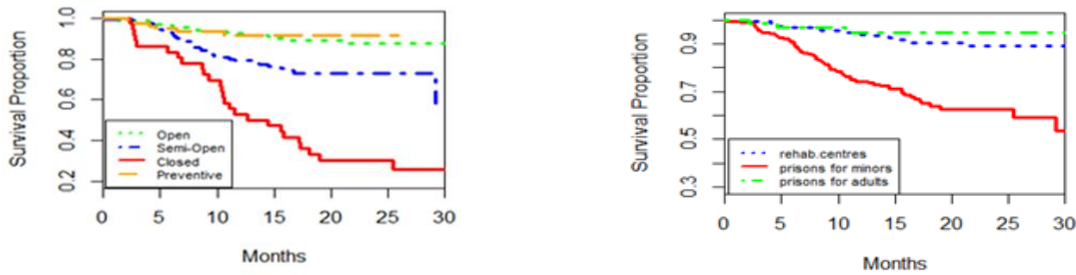


Figure 1 right. Estimates of the Kaplan-Meier survival curves ($S(t)$) describing inmates' rate of violence against prison property by typology of facility (rehabilitation centres, prisons for minors, prisons for adults)

Figure 1 left. Estimates of the Kaplan-Meier survival curves ($S(t)$) describing inmates' rate of violence against prison property by detention regime (open, semi-open, closed and preventive).

For example (see Figure 3), the probability of surviving without a destructive event at 19 months is 67.1% for an inmate coming from the group characterized by prior criminal history involvement of their parents (group2) and, conversely the survival probability is slightly more than 78.9% for those from the other group (group1). Furthermore, prison contextual variables (e.g., detention regime and typology of facility) increase the likelihood of destructive events against prison property as figures 2 show above. The probability of remaining free from a destructive event against property is reduced with the amount of time spent in prison.

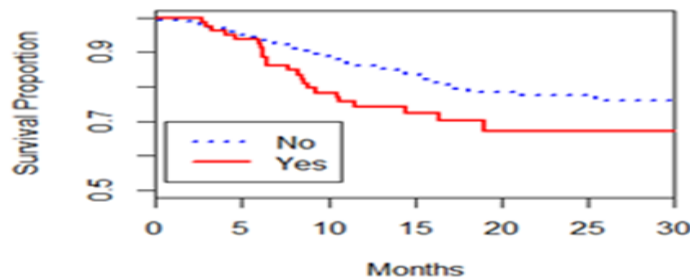


Figure 3. Estimates of the Kaplan-Meier survival curves ($S(t)$) describing inmates' rate of violence against prison property rate by absence or presence of parental criminal history involvement

Figure 4 shows how aggression, i.e., survival probability for violence directed against prison property, decreases significantly for those characterized by significant low self-control. The probability of remaining free of violence against prison property at 18 months of prison stay was 71% for the group marked by a high risk of a lack of individual self-control compared to 87% for the counter group not considered at risk.

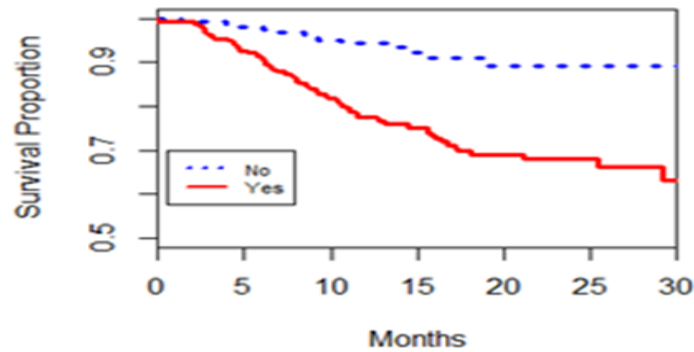


Figure 4. Estimates of the Kaplan-Meier survival curves ($S(t)$) describing inmates' violence rate against prison property by risk of low self-control ("Yes" high-scores vs "No normative")

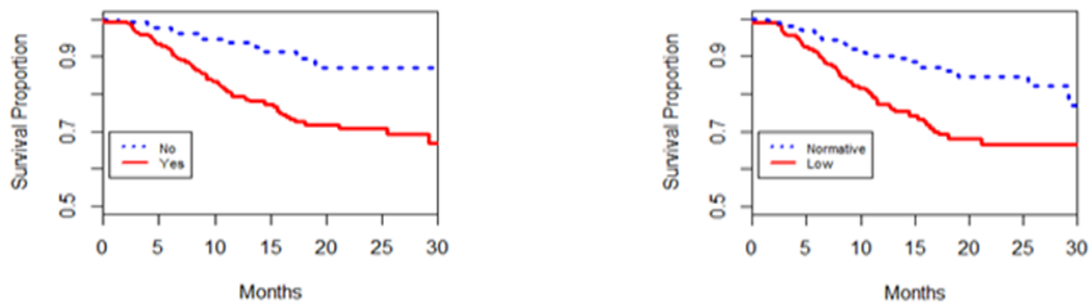


Figure 5 right. Estimates of the Kaplan-Meier survival curves ($S(t)$) describing inmates' rate of violence by empathy scores (low vs normative)

Figure 5 left. Estimates of the Kaplan-Meier survival curves ($S(t)$) describing inmates' rate of violence against prison property by risk of low ability to cope with frustration (yes vs no)

Figures 5 show how aggression i.e. survival probability for violence against prison property decreases significantly for those marked by critical values that indicate inability to cope with stress, such as high scores of frustration and low empathy. In figures 5 right and left both the variables "empathy" and "frustration" have above a 60% probability of remaining free from violent events against prison property until the end of the study (30 months). However, the differences in time free of violence against prison property within the groups are significant. For the variable "frustration", the difference between the two categories assessed by the log-rank test is statistically significant (see table 2). In the present work, the group marked by high-scores of frustration is more likely to present an event that is destructive against prison property as early as the first three months of detention whilst, unexpectedly, for the normative group our research shows that the first destructive act against prison property occurred after the first month. Nevertheless, as figure 5 shows, the survival curve for the "high-score of frustration" group decreases faster than for the normative group. The probability of surviving without a violent event against prison property at 18 months is 68.3% for an inmate coming from the group characterized by low ability to cope with frustration compared with 89% for the counterpart group. Conversely, the survival probability at 18 months is slightly higher than

85% for those from the empathetic group compared with 66% survival probability for the group characterized by emotion regulation difficulties.

Cox proportional Hazard Regressions for Violence Against Prison Property

Table 3. Multivariate semi-parametric Cox regression estimates for violence against prison property, followed by HR, 95% confidence intervals and linear correlations coefficient between Schoenfeld standardized residuals, and the time for each of the covariates

Variable	β	p	exp(β)	IC (95%)	Fit rH ₀	quality p-value
Empathy	-0.51	0.05	0.60	0.35-1.09	0.04	0.73
Prior Criminal Records Parents	-	ns	-	-	-	-
Frustration	0.89	0.008	2.45	1.26-4.75	-0.03	0.81
Low Self-Control	-	ns	-	-	-	-
Detention Regime	ref	-	-	-	-	-
Open	1.03	<0.001	2.81	1.58-5.03	0.01	0.89
Semi-open	1.92	<0.001	6.82	3.72-12.5	0.20	0.06
Closed	-	<0.001	6.82	3.72-12.5	0.20	0.06
Preventive	0.001	ns	0.99	0.37-2.72	-0.06	0.59
		N = 409	N	events =	86	

From the multivariate Cox analysis, the covariates “prison regime” and “frustration” resulted significant ($p < 0.05$) whilst the coefficient of the variable “empathy” is marginally significant $p = 0.05$. However, the coefficients for the covariates “prior criminal history for parents” and “low self-control” were no longer statistically significant. The p-value for the semi-open and closed detention regimes are both less than 0.001, with corresponding hazard ratios (HR = exp(coef)) of 2.81 and 6.82, respectively. These results indicate a strong and statistically significant association between the restrictiveness of the detention environment and the increased risk of engaging in property-destructive behaviour. Specifically, the more restrictive the detention regime, the greater the likelihood of violent conduct. The coefficients for the "detention regime" variable suggest that, controlling for other covariates, placement in a semi-open or closed facility increases the hazard of destructive incidents by factors of approximately 3 and 7, respectively, relative to placement in an open regime. Thus, incarceration under more restrictive conditions is associated with a poorer prognosis for remaining free of violent behaviour toward prison property. By contrast, the p-value for the “preventive” regime is not statistically significant ($p = 0.99$), indicating no meaningful difference from the open regime in this regard.

The hazard ratio for “elementary” is $HR = \exp(\text{coef}) = 1$. This result indicates that the preventive regime makes little or no additional contribution to the difference in the HR after adjusting for the frustration values and an inmate’s empathy. The estimates also indicate that frustration contributes to increasing the hazard by a factor of 2.45. Being unable to modulate impulses and anger in response to a frustrating situation is associated with a bad prognosis. The p-value for the three overall tests (Likelihood ratio, Wald, and score (log-rank)) are significant, indicating that the model is significant and the null hypothesis - all the beta coefficients are 0 - is robustly rejected.

Based on the obtained frequencies of destructive behavior in relation to different risk scores, three risk categories of increasing severity were formed, the scores being: (-3 0], (0 0.7], (0.7 3]. For example, at the sample means, serving a sentence in an open regime decreases the risk score of having destructive behavior against prison property by 0.52 points, while being unable to regulate empathy and frustration increases the risk score of presenting violence against

prison property by 0.24 points and 0.54, respectively. The overall risk score becomes $(-0.52) + (-0.24) + (-0.54) = -1.29$ if they are serving a sentence in an open regime, and are able to cope with their emotions. In contrast, the risk score increases to $1.41 + 0.26 + 0.35 = 2.03$ if they are serving a sentence in a closed regime and are unable to regulate empathy and frustration.

4. Discussion

The central objectives of the present study are to identify salient predictors of property-destructive behavior at the point of entry into juvenile detention and to examine the developmental trajectory of such behavior over the course of incarceration. A key empirical finding is the disproportionate representation of adolescents from structurally disadvantaged backgrounds, particularly those who have experienced parental absence, institutionalization, abandonment, homelessness, or extreme poverty. These socio-environmental risk factors appear to exert a cumulative effect, increasing the likelihood of behavioral dysregulation within custodial settings.

The findings further suggest that youth entering the correctional system with disrupted or insecure parental attachments are significantly more prone to exhibit impulsivity, affective instability, and diminished capacity for self-regulation. Many of these individuals have histories marked by chronic familial dysfunction, prolonged institutional care (e.g., foster systems, orphanages), and exposure to physical or emotional neglect. These results align with existing scholarship indicating that children subjected to abandonment, institutionalization, or street-involved living conditions frequently present with complex psychopathological profiles and heightened vulnerability to comorbid health conditions upon incarceration—including, but not limited to, HIV/AIDS, sexually transmitted infections, tuberculosis, and malnutrition (Graham et al., 2002).

4.1. Dysfunctional Familial Bonds and Prison Strains as Risks

The findings of this study indicate that pre-incarceration factors significantly influence both internalizing and externalizing symptomatology among juvenile offenders. Early exposure to dysfunctional familial environments, characterized by conflict, neglect, or abuse, emerges as a critical antecedent to the development of violent tendencies and maladaptive psychological traits. Such conditions are strongly associated with impaired emotional regulation, diminished frustration tolerance, reduced empathy, and deficits in impulse control, all of which are key indicators of compromised mental well-being. Importantly, these pre-existing vulnerabilities are compounded by the structural and psychological strains of incarceration. The correctional environment itself often functions as a source of additional trauma, exacerbating latent psychopathology and heightening the risk of behavioral dysregulation. The cumulative effect of prior adversity and institutional stress appears to increase the likelihood of persistent misconduct during detention. Thus, imprisonment not only fails to mitigate pre-existing mental health concerns but may, in fact, intensify them, thereby reinforcing a cycle of violence and psychological deterioration among already vulnerable youth populations.

The findings of this study further substantiate the hypothesis that originating from socioeconomically disadvantaged backgrounds and/or experiencing adverse childhood events prior to incarceration significantly increases the risk of developing emotional regulation disorders. Moreover, the results suggest a significant negative association between early life adversity and maladaptive developmental trajectories, particularly with regard to property-destructive behavior exhibited during detention. This relationship underscores the long-term psychological and behavioral impact of early trauma and deprivation.

Aligned with both social learning theory (Bandura, 1977) and the importation model of prison behavior (Thomas, 1977), a key insight from the current study is the potentially protective role of parental support in the pre-incarceration period. In this context, the analysis identified seven variables as significantly associated with property-destructive behavior: lack of empathy, poor frustration tolerance, low self-control, parental criminal history, detention regime, and type of institutional setting. These findings reinforce the importance of addressing both individual-level psychological vulnerabilities and broader contextual variables when developing intervention strategies aimed at mitigating institutional misconduct among juvenile offenders.

The present findings underscore the salient role of parental incarceration as a predictor of violent behavior in juveniles, supporting the hypothesis that antisocial conduct is transmitted intergenerationally through social learning mechanisms. The incarceration of a parent not only disrupts the child's caregiving environment and imposes economic hardship but also models maladaptive behavioral scripts that may be internalized during critical developmental periods. This dual impact, structural and behavioral, contributes to a cumulative risk trajectory wherein the child becomes increasingly susceptible to emotional dysregulation and institutional misconduct.

More broadly, the individual-level risk factors identified in this study, including histories of neglect, abuse, abandonment, and exposure to domestic violence, appear to crystallize into entrenched patterns of maladaptive functioning within correctional settings. These findings suggest that the enduring consequences of chronic exposure to relational trauma and household instability may have a more deleterious impact on behavioral development than acute or isolated traumatic events. The presence of unpredictable, emotionally unavailable, or self-dysregulated caregivers during early childhood is particularly detrimental, often resulting in deficits in core psychosocial competencies such as self-regulation, empathy, and impulse control. Consistent with this, elevated levels of mood dysregulation were found to be significantly associated with higher rates of property-destructive behavior among incarcerated youth, further emphasizing the psychological and behavioral sequelae of early adversity.

Within the framework of social learning theory, parenting is widely recognized as the primary conduit through which foundational behavioral repertoires are acquired, serving as the initial context for normative and maladaptive socialization processes (Giordano, 2010). This conceptualization is supported across multiple explanatory models of violence, including the subculture of violence theory and broader social learning paradigms, which posit that exposure to dysfunctional parenting exerts an indirect but potent influence on the development of aggressive and antisocial behavior. Such environments often normalize violence as a conflict resolution strategy and diminish the development of prosocial competencies. Nevertheless, beyond traditional assessments of parenting practices, further empirical investigation is warranted into the nuanced mechanisms through which familial social learning occurs, particularly with respect to the structural and relational dynamics of the family unit. Special consideration should be given to the ways in which antisocial parental behaviors—such as emotional dysregulation, coercive control, or chronic disregard for social norms—may serve to reinforce maladaptive behavioral schemas in children. These processes are frequently implicated in the erosion of self-regulatory capacities and the amplification of violent tendencies. Moreover, children reared in chronically adverse or conflict-laden domestic environments may develop cognitive distortions, such as hostile attribution bias and impaired social information processing, both of which are empirically linked to externalizing behaviors and institutional misconduct.

Consequently, institutional violence should not be viewed exclusively through an instrumental lens, as behavior strategically employed to obtain material resources or exert control, but rather

as a potential manifestation of accumulated developmental frustration. Such frustration is often rooted in the chronic deprivation of emotional, psychological, and physical needs during formative stages of childhood and adolescence (Blau & Blau, 1982). This perspective underscores the affective and experiential dimensions of violent conduct, highlighting its origins in structural and relational adversity rather than mere opportunism.

In light of these unpredictable and inconsistent parenting practices, when compounded by the structural and psychological constraints of the prison environment, adolescents may come to discount the value of prospective rehabilitative incentives, perceiving such rewards as unattainable or fundamentally unreliable. Faced with chronic environmental uncertainty, they may exhibit heightened impulsivity and diminished willingness to delay gratification.

Taken together, the disruptive behavior frequently observed among incarcerated adolescents appears to be rooted in relational contexts marked by a profound absence of parental involvement, both affective and regulatory. The present findings point to a broader pattern of parental disengagement, wherein caregivers fail to meet their children's developmental needs, either through emotional neglect or the absence of consistent behavioral modeling. This constellation of early relational deficits constitutes not only a deficient foundational reference model, but also a persistent psychosocial barrier that adolescents must navigate and attempt to overcome within the correctional system. The erosion of parental responsibility, thus, emerges as a critical antecedent to institutional misconduct, shaping trajectories of emotional dysregulation and behavioral maladaptation. Within this framework, the erosion of parental responsibility emerges as a central etiological factor in the developmental trajectory of institutional maladjustment, underscoring the need for early, systemic, and family-centered interventions.

4.2. Implications of Findings for Future Research of Risk for Violence

The present study identifies empathic inaccuracy and diminished frustration tolerance as salient psychological risk factors associated with increased propensity for property-destructive behavior among incarcerated juveniles. These findings underscore the critical importance of integrating juvenile justice systems with comprehensive psychosocial assessment and intervention frameworks. Early identification of psychological vulnerabilities should be operationalized through standardized, empirically validated assessment protocols administered at the point of entry into custodial settings. Such assessments must inform the development of individualized treatment plans that address not only behavioral symptoms but also the underlying affective and cognitive deficits that contribute to institutional misconduct.

Importantly, the data challenge the prevailing assumption that increased institutional restrictiveness and surveillance necessarily curtail behavioral infractions. The findings instead suggest that overly punitive regimes may aggravate existing psychological distress, thereby reinforcing maladaptive behavioral patterns. As such, correctional policy must prioritize the sustained provision of trauma-informed, developmentally appropriate mental health services throughout the period of incarceration and beyond. Post-release continuity of care is particularly vital in mitigating recidivism and facilitating the reintegration of justice-involved youth into their communities. This paradigm shift, from a custodial to a rehabilitative orientation, necessitates a systemic re-evaluation of current juvenile justice practices, placing mental health and emotional development at the forefront of institutional response.

4.3. Practice and Policy Applications

The present findings yield critical implications for juvenile justice policy, particularly concerning the need for a paradigmatic shift from punitive detention models toward developmentally attuned, rehabilitative approaches. The demonstrated association between early psychosocial adversity and property-destructive behavior in custody reinforces the necessity of embedding trauma-informed principles within all procedural stages of juvenile justice involvement. Specifically, the implementation of standardized psychological screening at intake should be codified as a statutory requirement. Such screening must extend beyond superficial assessments and function as a robust diagnostic instrument for identifying emotional dysregulation, cognitive vulnerability, and psychiatric risk.

Crucially, when early assessments indicate significant psychological distress or compromised emotional functioning, youth should be diverted from custodial placement to more therapeutically appropriate institutions, such as specialized psychiatric facilities, trauma-informed residential care, or alternative educational rehabilitation centers. This diversionary mechanism not only aligns with international best practices and human rights obligations (e.g., UNCRC, Council of Europe Guidelines) but also serves to mitigate the compounding effects of incarceration on pre-existing psychopathology. The findings of this study underscore the need for juvenile justice systems to realign custodial practices with international legal standards, particularly those articulated in the United Nations Convention on the Rights of the Child (UNCRC, 1989), the European Rules for Juvenile Offenders Subject to Sanctions or Measures (Council of Europe, 2008), and the Guidelines of the Committee of Ministers of the Council of Europe on Child-Friendly Justice (2010). These instruments collectively emphasize the primacy of rehabilitation, the protection of psychological well-being, and the necessity of individualized responses to children in conflict with the law. In this light, the evidence presented here necessitates a policy orientation that ensures early and comprehensive mental health screening upon entry into the correctional system.

Moreover, the present study problematizes the conventional presumption that restrictive detention regimes reduce institutional misconduct. Instead, findings suggest that carceral restrictiveness may exacerbate psychological distress and, in turn, reinforce patterns of violent or destructive behavior. Accordingly, correctional policy should emphasize the integration of evidence-based interventions grounded in cognitive-behavioral, affect regulation, and psychosocial development frameworks. The operationalization of such models necessitates investment in multidisciplinary treatment teams, trauma-informed staff training, and consistent access to psychoeducational and therapeutic programming.

Finally, policy must extend beyond the temporal boundaries of incarceration. The post-release period constitutes a high-risk phase for psychological destabilization and recidivism. As such, legislative mandates should ensure continuity of care through coordinated inter-agency reintegration strategies that include individualized case management, access to mental health services, vocational and educational support, and structured family reintegration protocols. Without such structural supports, the long-term efficacy of in-custody interventions is likely to be attenuated. A systemic shift toward a preventative, developmentally informed, and therapeutically grounded model of juvenile justice is not only empirically warranted but ethically imperative.

4.4. Limitations

Despite its contributions, the present study is subject to several limitations that warrant consideration. First, the data on institutional misconduct were derived from official records compiled by prison staff and psychologists. Although these records were collected through standardized institutional procedures and are consistent with internationally accepted practices

in correctional research, they may not fully capture the situational or psychological nuances underlying each reported incident. The reliance on administrative documentation, while ensuring systematic coverage, inherently limits the interpretive depth that qualitative or observational methods might provide.

Second, the use of individual-level data occasionally presented logistical challenges, particularly in cases involving the relocation or temporary unavailability of inmates. Nevertheless, these limitations were mitigated by the use of a standardized data collection protocol across all participating institutions. Furthermore, additional archival records, particularly those concerning property-destructive behavior, were retrieved from the national prison system's centralized database to enhance the completeness and reliability of the dataset.

5. Conclusion

Two principal findings emerge from the present study: first, there is a marked overrepresentation of juveniles with histories of adverse childhood experiences (ACEs) within the Romanian correctional system; and second, property-destructive behaviors exhibited during incarceration are consistently associated with deficits in emotional regulation and maladaptive coping mechanisms. These findings underscore the enduring psychological sequelae of early relational trauma and social marginalization, which manifest in diminished frustration tolerance, poor impulse control, and a propensity toward externalizing behavior under conditions of institutional strain. The elevated prevalence of early adversity among this population suggests that such experiences contribute significantly to the formation of aggressive personality structures, thereby increasing vulnerability to institutional violence. In this regard, adverse developmental trajectories appear to mediate the relationship between pre-incarceration risk factors and in-prison behavioral outcomes. These findings reinforce the necessity of embedding developmental and trauma-informed frameworks into juvenile justice policy and practice.

Moreover, the study underscores the value of sustained investment in longitudinal research methodologies, an approach exemplified by the current investigation, as a means of capturing developmental trajectories over time. Long-term, data-driven monitoring of psychological and behavioral trajectories significantly enhances the accuracy of risk screening at intake, increases the precision of individualized interventions, and allows for the systematic evaluation of rehabilitative program efficacy. Such an approach also facilitates the dynamic adjustment of treatment protocols to account for evolving psychosocial needs, thereby strengthening the rehabilitative mandate of the juvenile justice system, and aligning it more closely with international standards of best practice.

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