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# 2 Mental health intervention research in Latin American

# 3 correctional settings: A scoping review

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  - Abstract

- 40 **Background:** The Latin American prison population has grown faster than anywhere else globally over
- 41 the past two decades, reaching a total of 1.7 million people at any given time. However, research on
- 42 mental health prevention and treatment interventions in Latin American prisons remains scarce.
- 43 **Aims:** This study aimed to systematically review and synthesize research on prison mental health
- interventions conducted in the region.
- 45 **Methods:** We used a two-stage scoping review design guided by the *JBI Manual for Evidence Synthesis*.
- 46 Searches took place in December 2021 in nine databases using descriptors and synonyms. First, all
- 47 prison mental health research in Latin America was retained. Secondly, using title and abstract
- 48 screening, all research possibly related to interventions was retained for full text evaluation. Studies
- 49 reporting interventions were assessed by country, language, institution, population, intervention type,
- intervention focus and outcomes.
- **Results:** N=34 studies were included in this review. These were 13 case reports, 7 expert consensus
- 52 papers and 14 quantitative studies (4 randomized controlled trials, 9 cohort studies, 1 quasi-
- experimental study). Fourteen interventions were targeted at promoting prosocial behaviour, 7 studies
- each aimed to improve mental health and to treat substance use disorders. Six studies involved the
- 55 treatment of sexual offending behaviour, and 3 focused on reducing criminal recidivism.
- 56 Psychoeducation (n=12) and motivational interviewing (n=5) were the most frequent intervention
- 57 types studied. Promising data from trials showed that anger management, depression, substance use
- and reoffending could be successfully addressed through interventions.
- 59 Conclusions: Implementation and effectiveness research of mental health interventions in Latin
- American prisons is scarce. Addressing mental health, substance use and prosocial behaviour outcomes

- should be considered in future research. There is a particular dearth of controlled trials describing
- quantifiable outcomes.
- 63 Keywords: mental health, prison, criminal, psychiatry

# Background

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The world prison population, including people held in pre-trial detention and those being held under authorities that are not internationally recognized, likely exceeds 11.5 million people at any time. (Walmsey, 2021). Latin America and the Caribbean (LAC) has the world's fastest growing prison population over the past two decades and now has 1.74 million prisoners. The average prison population rate in the region is 265 per 100,000, almost twice the global average (Forrester et al., 2023). Prison occupancy levels are high, exceeding 100% in 24 out of the 33 countries in the region, rising to 454% in Haiti (Walmsey, 2021). Similarly, inmate to staff ratios, which range in Europe from 0.3 to 4.3, reach 23.4 in Panama, and are on average 8.4 for the reported countries in LAC (Carranza, 2014). Several studies in the region have shown high prevalence rates for severe mental illness (Baranyi et al., 2019; Fazel & Seewald, 2012), while the prevalence of mental health and substance use disorders at reception is particularly high (Andreoli et al., 2014; Mundt et al., 2013; Mundt et al., 2016). Diagnostic comorbidities involving mental health, substance use and personality disorders are common (Baranyi et al., 2022; Mundt & Baranyi, 2020). Effective mental health services in prisons are therefore a public health and human rights imperative (UN, 1957). For some individuals, incarceration allows a first contact to take place with mental health services, and access to treatment during imprisonment would result in health improvements during and after imprisonment (Forrester et al., 2018). According to the latest report by the World Health Organization, half of the countries in Central America, South America and the Caribbean report that no more than 20% of prisons offer any form of mental health services (World Health Organization-AIMS Regional Report on Mental Health Systems in Latin America and the Caribbean, 2013). Throughout Latin America, it is unclear what type of mental health interventions are delivered and in what circumstances, whether implementation and effectiveness have been researched and what outcomes were used to study these interventions. An overview of all intervention research conducted in Latin American prisons has not yet been conducted. The aim of this scoping review was to systematically assess and synthesize studies reporting mental health interventions in correctional settings of Latin America and the Caribbean.

#### Methods

We adopted the scoping review methodology described in the JBI Manual for Evidence Synthesis and followed the PRISMA-ScR Checklist (Andrea C. Tricco, 2018; Peters MDJ, 2020) for reporting the review. This consists of nine steps: (1) defining and aligning the objective/s and question/s; (2) developing and aligning the inclusion criteria with the objective/s and question/s; (3) describing the planned approach to evidence searching, selection, data extraction, and presentation of the evidence; (4) searching for the evidence; (5) selecting the evidence; (6) extracting the evidence; (7) analysis of the evidence; (8) presentation of the results; (9) summarizing the evidence in relation to the purpose of the review, making conclusions and noting any implications of the findings. The objectives, inclusion criteria and methods for this scoping review were specified *a priori* and documented in a protocol. The review protocol was discussed in the international research team and approved by all members prior to conducting the review.

# Inclusion and exclusion criteria, search string and sources

Inclusion criteria were developed according to the broad approach of our study aim. Through database searches, all studies relating to the **population** (i.e., individuals in prison, people with convictions, people involved with the criminal justice system, all age groups, all genders, all types of offences), **concept** (psychological, mental health problem or mental illness) and **context** (countries in Latin America and the Caribbean) were identified. All correctional settings were eligible for inclusion. Participants in closed and open-regime prison settings, on parole, or other substitutive correctional settings were included. Inclusion criterion was having been sentenced for any legal offence. All study designs were included. Populations not involved with criminal justice settings were excluded, as this review focused on vulnerable criminal justice populations affected by the increasing incarceration rates in Latin America (Walmsey, 2021). The study population presents high burden of mental disorders and intervention needs. It should thus receive more participation in research. The review focuses on mental health, which is central to the social rehabilitation and recidivism of the individuals (Durcan G. & Zwemstra, 2014; Wallace & Wang, 2020). Studies exclusively addressing other diseases, that play an important role in the prison context, such as infectious diseases, were excluded. Though culturally diverse, the Latin American and Caribbean countries form a region with several similarities and scarcity

All studies from inception of the databases to November 2021 were considered for inclusion. We did not apply any language restrictions. As recommend in the JBI Manual, a three-step search was applied (Peters MDJ, 2020). In the first step, a limited search was conducted in the database PubMed. This was followed by an analysis of the text words contained in the title and abstract of the retrieved papers, and of the index terms used to describe the articles. A systematic search using the identified keywords and index terms was undertaken across the following databases on the 6th of December 2021: PubMed, PsycInfo, Scielo, Web of Science, PsycArticles, PubPsych, WHO Global Index Medicus and BVSalud. The search string was developed based on the inclusion criteria and adapted for the different databases. The same keywords were used in all databases. Search strings differed only due to database specific connectors or highlighting techniques. All keywords were used in English. The search strings used in each database are shown in Appendix 1. Additionally, the reference lists of all included reports and

in criminal justice systems (Forrester et al., 2023), thus countries from other world regions were

#### Two-step screening

articles were screened.

We applied a two-step screening process. This was necessary to avoid missing relevant literature because of too narrow search terms. In the first step, all studies relating to mental health in Latin American prisons were retained by LB. All publications identified with the searches were imported to EndNote. Duplicates were removed, then titles and abstracts were screened by LB. Studies excluded in the first step did not match the inclusion criteria for the a) prison population, b) mental health study concept or c) the geographical context of Latin America or the Caribbean. In the following step, among the retained mental health publications, all studies referring to interventions were retained and assessed for eligibility by full-text-screening. Uncertainties were discussed by AM and LB to ensure consistent application of the inclusion criteria. Sufficient reading proficiency in Spanish, Portuguese and English is present in the research team.

#### Data extraction

A data extraction template was designed *a priori* by AM and LB to systematically extract the data from all relevant research. This included title, author, publication year, country of research, objective of the

study, participants (number, demographic characteristics, criminal variables), concept of the intervention context in which the study was conducted, key results of the study, and study design.

#### Data analysis

Studies were sorted by type of population, country, institutional context, type of intervention and outcome variable. Descriptive frequency analyses were computed and visualized in bar graphs. A narrative synthesis was used to describe intervention types, objectives and outcomes.

## Quality appraisal

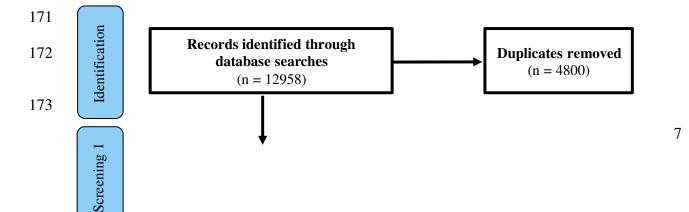
We used the four critical appraisal checklists for RCTs, quasi-experimental Studies, cohort studies and case series, available on the JBI website to assess the quality of the included studies (Aromataris et al., 2015; Moola et al., 2020; Munn et al., 2020; Tufanaru et al., 2020). Specific checklists for the different study types were used. The checklist for controlled trials evaluates 13 items. The higher scores for these studies were in line with the higher level of evidence typically reached with this research design.

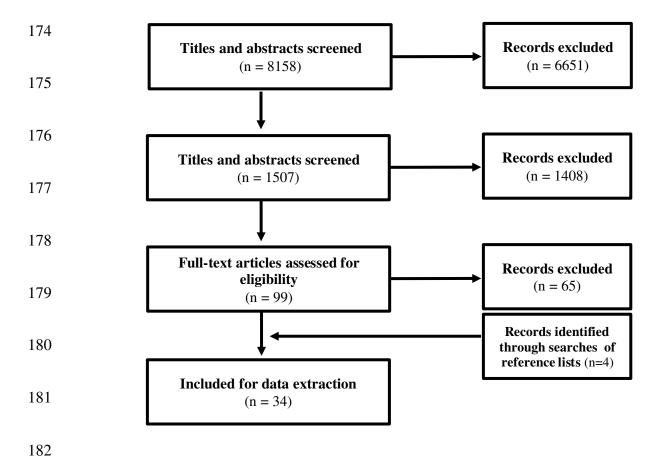
#### Results

#### Screening

Searches in the eight databases yielded 12,958 records (PubMed 1,734, PubPsych 692, PsycArticles 87, PsycInfo 2,630, Scielo 479, WHO Global Index Medicus 1,100, BVSalud 4,598, Web of Science 1,638). A total of 8,158 titles and abstracts were screened after the removal of duplicates. The first screening step led to 1,327 articles related to mental health. We continued with the second screening step focusing on the mental health intervention studies (N = 99). A total of 34 articles were retained and included after full text screening.

**Figure 1.** Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) flow diagram (Andrea C. Tricco, 2018)





The included studies were categorized by country, language, study design, type of institution, population type of intervention, and outcome. Most of the studies were from Brazil (N=14) (Amorim-Gaudêncio et al., 2017; Andretta & Oliveira, 2011; Andretta & Oliveira, 2008; Billand & Paiva, 2017; Café & Nascimento, 2012; Costa et al., 2011; Costa et al., 2020; das Neves et al., 2017; Meneses, 2016; Oliveira et al., 2010; Rodrigues, 2020; Said, 2019; Santos et al., 2010; Zambom et al., 2011), followed by Chile (N=6) (Barrientos-Low & Escaff-Silva, 2018; Huber et al., 2020; Isla & Miranda, 2019; Livacic-Rajas et al., 2004; Mundt et al., 2019; Saez et al., 2018). Three studies were from Colombia (Avendaño Castro et al., 2020; Barrera-Valencia et al., 2017; Palomino et al., 1991) and Mexico, respectively (Corchado-Vargas, 2016; Noriega Gayol, 1995; Vera & Sosa, 2015). Two studies were carried out in Costa Rica (Chacón & Cueva, 2014; Mora-Arias et al., 2020) and Trinidad and Tobago (Hutchinson et al., 2017; Spence, 2019), and one was from each of Argentina (Romero et al., 2018), Ecuador (Gomez & Banegas, 2018), Peru (Riega-Virú & Tataje-Véliz, 2020) and Honduras (Capellan et al., 2020). No studies were included from the other 22 LAC countries.

196 Thirteen studies were available in Spanish (Avendaño Castro et al., 2020; Barrientos-Low & Escaff-197 Silva, 2018; Chacón & Cueva, 2014; Corchado-Vargas, 2016; Gomez & Banegas, 2018; Huber et al., 198 2020; Isla & Miranda, 2019; Livacic-Rajas et al., 2004; Mora-Arias et al., 2020; Palomino et al., 1991; 199 Riega-Virú & Tataje-Véliz, 2020; Saez et al., 2018; Vera & Sosa, 2015), 11 in Portuguese (Amorim-200 Gaudêncio et al., 2017; Andretta & Oliveira, 2011; Andretta & Oliveira, 2008; Billand & Molinier, 201 2017; Costa et al., 2011; das Neves et al., 2017; Meneses, 2016; Oliveira et al., 2010; Rodrigues, 2020; 202 Said, 2019; Zambom et al., 2011) and 10 in English (Barrera-Valencia et al., 2017; Café & Nascimento, 203 2012; Capellan et al., 2020; Costa et al., 2020; Hutchinson et al., 2017; Mundt et al., 2019; Noriega 204 Gayol, 1995; Romero et al., 2018; Santos et al., 2010; Spence, 2019). In all, N=24, 71% of the studies 205 were only available in Spanish or Portuguese. 206 Studies were categorized by study type based on the "JBI Levels of Evidence" (Joanna Briggs Institute 207 Levels of Evidence and Grades of Recommendation Working Party, 2013). Four studies fulfilled the 208 criteria of randomized controlled trials, with sample sizes ranging from 57 to 106 study participants 209 (Barrera-Valencia et al., 2017; Capellan et al., 2020; Hutchinson et al., 2017; Spence, 2019). One study 210 had a non-randomized, quasi-experimental design with intervention and control groups (n=48) (Andretta 211 & Oliveira, 2011). There were nine cohort studies (Andretta & Oliveira, 2008; Huber et al., 2020; 212 Livacic-Rajas et al., 2004; Mora-Arias et al., 2020; Oliveira et al., 2010; Riega-Virú & Tataje-Véliz, 213 2020; Santos et al., 2010; Vera & Sosa, 2015; Zambom et al., 2011) that reported pre- and post-test 214 comparisons using quantitative outcomes. 13 studies were designed as case series with a mainly 215 qualitative description of the intervention and the perceived changes (Amorim-Gaudêncio et al., 2017; 216 Avendaño Castro et al., 2020; Barrientos-Low & Escaff-Silva, 2018; Billand & Paiva, 2017; Café & 217 Nascimento, 2012; Costa et al., 2011; Costa et al., 2020; Gomez & Banegas, 2018; Mundt et al., 2019; 218 Noriega Gayol, 1995; Palomino et al., 1991; Rodrigues, 2020; Romero et al., 2018). Seven studies were 219 classified as expert opinion or consensus, because of their approach to interview different professional 220 actors (psychiatrists, psychologists, social workers, etc.) to identify important aspects of interventions 221 applied in prisons (Chacón & Cueva, 2014; Corchado-Vargas, 2016; das Neves et al., 2017; Isla & 222 Miranda, 2019; Meneses, 2016; Saez et al., 2018; Said, 2019).

As regards the institutional context of the studies, 21 were conducted in prisons (Andretta & Oliveira, 2008; Avendaño Castro et al., 2020; Barrera-Valencia et al., 2017; Billand & Paiva, 2017; Café & Nascimento, 2012; Chacón & Cueva, 2014; Corchado-Vargas, 2016; Costa et al., 2011; Costa et al., 2020; Gomez & Banegas, 2018; Huber et al., 2020; Hutchinson et al., 2017; Mora-Arias et al., 2020; Noriega Gayol, 1995; Palomino et al., 1991; Riega-Virú & Tataje-Véliz, 2020; Rodrigues, 2020; Saez et al., 2018; Said, 2019; Santos et al., 2010; Vera & Sosa, 2015), two in open regime correctional centers (Amorim-Gaudêncio et al., 2017; Romero et al., 2018) and three in various settings working with persons on parole or recently released from prison (Capellan et al., 2020; Meneses, 2016; Mundt et al., 2019). Eight studies were undertaken in non-prison educational care centers (Andretta & Oliveira, 2011; Barrientos-Low & Escaff-Silva, 2018; das Neves et al., 2017; Isla & Miranda, 2019; Livacic-Rajas et al., 2004; Oliveira et al., 2010; Spence, 2019; Zambom et al., 2011). Participants were required to take part in these psychosocial and educational treatment programs after or instead of going to prison based on convictions for different types of offences. All interventions conducted by external bodies inside of prison were included in the prison category.

# Sociodemographics of the participant populations

The study populations included juvenile offender populations in 15 studies (Andretta & Oliveira, 2011; Andretta & Oliveira, 2008; Avendaño Castro et al., 2020; Barrientos-Low & Escaff-Silva, 2018; Corchado-Vargas, 2016; Costa et al., 2011; Costa et al., 2020; Gomez & Banegas, 2018; Isla & Miranda, 2019; Livacic-Rajas et al., 2004; Oliveira et al., 2010; Saez et al., 2018; Santos et al., 2010; Spence, 2019; Zambom et al., 2011) and adults with criminal justice involvement in 11 studies (Amorim-Gaudêncio et al., 2017; Barrera-Valencia et al., 2017; Capellan et al., 2020; Chacón & Cueva, 2014; Hutchinson et al., 2017; Meneses, 2016; Mundt et al., 2019; Riega-Virú & Tataje-Véliz, 2020; Rodrigues, 2020; Romero et al., 2018; Vera & Sosa, 2015). Five articles were limited to male adults (Billand & Paiva, 2017; Café & Nascimento, 2012; das Neves et al., 2017; Mora-Arias et al., 2020; Said, 2019), and three exclusively addressed females (Huber et al., 2020; Noriega Gayol, 1995; Palomino et al., 1991). One study was focused on mothers with infants (Huber et al., 2020). The mean sample size across all populations was 39 (SD = 34). In the mixed gender adults study populations, the mean sample

size was the highest with 63 (range: 17 - 127), followed by female adults (31, range: 6 - 60). Studies with juvenile offender populations had a mean sample size of 32 (range: 4 - 103).

Regarding convictions, 15 studies were conducted in populations with any type of offences (Amorim-Gaudêncio et al., 2017; Avendaño Castro et al., 2020; Corchado-Vargas, 2016; Hutchinson et al., 2017; Livacic-Rajas et al., 2004; Mora-Arias et al., 2020; Mundt et al., 2019; Noriega Gayol, 1995; Palomino et al., 1991; Riega-Virú & Tataje-Véliz, 2020; Rodrigues, 2020; Romero et al., 2018; Saez et al., 2018; Spence, 2019; Vera & Sosa, 2015). People charged with sexual offences were included in six studies (Barrientos-Low & Escaff-Silva, 2018; Café & Nascimento, 2012; Costa et al., 2011; Costa et al., 2020; Meneses, 2016; Said, 2019), and people who committed gender violence were recruited in two studies (Billand & Paiva, 2017; das Neves et al., 2017).

## Distributions are shown in **Figure 2.**

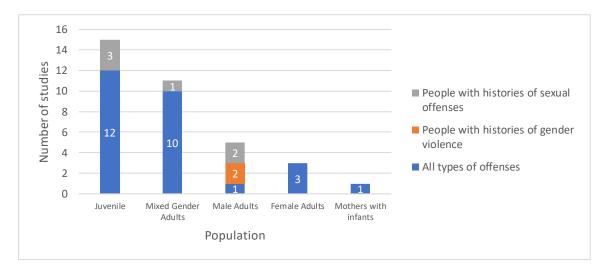


Figure 2. Number of studies by population.

#### Intervention type

One or more intervention types and settings were attributed to each study. The distribution can be seen in Figure 3. The most frequent intervention types were psychoeducation (N=12) (Avendaño Castro et al., 2020; Chacón & Cueva, 2014; Corchado-Vargas, 2016; Costa et al., 2011; das Neves et al., 2017; Isla & Miranda, 2019; Meneses, 2016; Palomino et al., 1991; Saez et al., 2018; Said, 2019; Santos et al., 2010; Vera & Sosa, 2015), motivational interviewing (N=5) (Andretta & Oliveira, 2011; Andretta & Oliveira, 2008; Oliveira et al., 2010; Vera & Sosa, 2015; Zambom et al., 2011), cognitive behavioural therapy (CBT; N=5) (Amorim-Gaudêncio et al., 2017; Barrientos-Low & Escaff-Silva, 2018; Capellan

et al., 2020; Huber et al., 2020; Hutchinson et al., 2017), psychodrama (N=4) (Café & Nascimento, 2012; Costa et al., 2020; Mundt et al., 2019; Rodrigues, 2020) and social skills programs (N=4) (Amorim-Gaudêncio et al., 2017; Livacic-Rajas et al., 2004; Noriega Gayol, 1995; Spence, 2019). Other approaches were only used in one single study each, medication (Barrera-Valencia et al., 2017), hypnotherapy (Gomez & Banegas, 2018), animal assisted therapy (Romero et al., 2018), meditation (Mora-Arias et al., 2020), modeling technique (Riega-Virú & Tataje-Véliz, 2020) and self-reparenting (Noriega Gayol, 1995). Group settings were used in 10 of the intervention studies (Barrientos-Low & Escaff-Silva, 2018; Billand & Paiva, 2017; Capellan et al., 2020; Chacón & Cueva, 2014; Costa et al., 2011; Huber et al., 2020; Hutchinson et al., 2017; Meneses, 2016; Said, 2019; Santos et al., 2010) and a telepsychiatry setting in one (Barrera-Valencia et al., 2017).

#### Intervention targets

The intervention objectives related to promoting prosocial behaviour in 14 studies, representing 41% (Amorim-Gaudêncio et al., 2017; Avendaño Castro et al., 2020; Billand & Paiva, 2017; Corchado-Vargas, 2016; das Neves et al., 2017; Hutchinson et al., 2017; Livacic-Rajas et al., 2004; Palomino et al., 1991; Riega-Virú & Tataje-Véliz, 2020; Romero et al., 2018; Saez et al., 2018; Spence, 2019; Vera & Sosa, 2015) such as anger management, reducing antisocial attitudes, and social abilities programs. Treating persons with substance use disorder (Andretta & Oliveira, 2011; Andretta & Oliveira, 2008; Gomez & Banegas, 2018; Isla & Miranda, 2019; Oliveira et al., 2010; Santos et al., 2010; Zambom et al., 2011) and improving mental health was intended in seven studies, representing 21%. These included adolescents suffering from mental disorders related to psychoactive substance use (Santos et al., 2010), people with suicide ideation (Chacón & Cueva, 2014), living with depression (Barrera-Valencia et al., 2017; Huber et al., 2020; Mundt et al., 2019; Santos et al., 2010). In two studies there was no focus on psychiatric diagnoses, but coping with stress (Mora-Arias et al., 2020) and transforming pessimist realities (Rodrigues, 2020). Persons with sexual offence histories (Barrientos-Low & Escaff-Silva, 2018; Café & Nascimento, 2012; Costa et al., 2011; Costa et al., 2020; Meneses, 2016; Said, 2019) were the intervention target in six studies (18%). Three interventions (9%) aimed to reduce criminal recidivism (Amorim-Gaudêncio et al., 2017; Capellan et al., 2020; Romero et al., 2018).

#### Outcomes

300 experimental studies and cohort studies are reported. 301 Two RCTs applied a CBT-based approach, a 12-week group anger management was implemented, 302 providing teaching about the roots of anger and coping strategies (Hutchinson et al., 2017). They 303 achieved significant pre to post-test reduction in state anger [t(38) = 3.23, p = .003], trait anger [t(38) =304 1.94, p = .06], and anger expression [t(39) = 2.64, p = .012] scores, and a significant increase in the 305 Profile of Anger Coping Skills (PACS) score [t(29) = 3.02, p = .005]. In the control group, no changes 306 were detected. In the second RCT, the four-month group therapy program "Preventing Recidivism 307 Through Cognitive Behavioral Therapy" was realized, addressing topics such as self-esteem/self-308 perception, self-control/impulsivity, identification of problems, problem-solving, values/antivalues, 309 resilience. At the 18-month follow up, the intervention group was 69% less likely to reoffend compared 310 to the control group (Capellan et al., 2020). 311 A study from Colombia compared telepsychiatry services by evaluating cost-effectiveness in a group of 312 imprisoned individuals with depression (Barrera-Valencia et al., 2017). Participants in the asynchronous 313 group were assessed by a general practitioner in prison who then sent all the clinical information to a 314 psychiatrist who guided the treatment. In the synchronous group assessment and prescription was done 315 directly by the psychiatrist via videoconferencing. Clinical change was measured through the Hamilton 316 Depression Scale, and was significantly higher in the asynchronous group (-8) vs the synchronous group 317 (-3). Costs for the asynchronous model were less than half of the synchronous model. Therefore, the 318 asynchronous approach was evaluated as the more cost-effective. Motivational interviewing was carried 319 out with a group of adolescents living with substance dependence in Brazil and compared based on the 320 outcomes to a psychoeducation control group (Andretta & Oliveira, 2011). Both approaches were found 321 to be effective to induce changes. The effect of rehabilitation programs for reducing antisocial attitudes 322 in young people involved in the criminal justice system was examined in Trinidad and Tobago (Spence, 323 2019). The Risk and Resiliency Check-up and questionnaires was used and did not determine a 324 difference of antisocial traits between the intervention and control group. 325 In the category of cohort studies two with a larger sample size (n = 50, n = 60) and significant benefits of 326 the interventions will be described, for more details see the Table 1. An earlier study from Brazil also

In the following the quantitative outcomes of the randomized controlled trials (RCTs), quasi-

tested motivational interviewing and identified significant reduction in the amount of substances consumed and an increase in days of abstinence (Andretta & Oliveira, 2008). The number of participants in the stage of pre-contemplation was significantly reduced and distributed to higher motivation stages regarding change. In another study a CBT-based approach to intervene with 60 women (pregnant or with children < 2 years) was evaluated (Huber et al., 2020). Depressive symptomatology frequencies in the mothers could be significantly reduced as well as difficulties in the socioemotional development of the children.

The characteristics of all included studies can be found in in the *Table 1*.

## Quality Appraisal

Six studies were excluded from quality appraisal as they were expert consensus approaches. Twenty-seven studies were assessed with critical appraisal checklists. The RCTs fulfilled on average 70% of the quality criteria. Cohort studies fulfilled on average 46% of the quality criteria. The case series had mean quality scores of 30%.

#### Synthesis

Much of the available research comes from Brazil, which has the largest general and prison population in the region. Study designs were often qualitative, such as case series. Few RCTs have been conducted. Populations included in the research varied between studies. Several studies focused on individuals with substance use disorders and people with histories of sexual violence. Psychoeducation in a group therapy format was a common intervention format. Several interventions focused on restoring social functioning and reducing criminal recidivism.

We submitted the controlled trials and cohort studies to narrative synthesis. We found that the interventions focused mostly on reducing drug use and improving social abilities. It is noteworthy that the studies were typically aimed at achieving a specific behavioural change, such as improving anger management (Hutchinson et al., 2017), reducing cannabis or tobacco use (Andretta & Oliveira, 2011; Zambom et al., 2011) or reducing criminal recidivism (Capellan et al., 2020; Spence, 2019). Individual (mental) health measures were only considered in one paper which analysed changes in depressive

symptoms (Barrera-Valencia et al. (2017), and another which examined stress levels (Mora-Arias et al. (2020). Although all interventions targeted aspects of mental health, many studies explicitly excluded people with severe mental illnesses, or who had high scores on symptom scales. Further, it was remarkable that most of the interventions did not form part of routine practice in correctional settings but had instead been implemented for the purposes of these studies. Several interventions were implemented through international research collaborations with academic institutions from outside the LAC region.

# Discussion

# Main findings

This scoping review provides an overview of research conducted in the field of mental health interventions in people with criminal justice involvement in Latin America and the Caribbean. There were only few studies with quantitative outcomes. Most interventions conducted with the imprisoned populations were considered useful and effective to accomplish changes.

#### Comparison with the literature

Reviews conducted so far, to evaluate interventions conducted in the region, focused rather on the structure of mental health services, prison conditions or facilitating factors, than actually evaluating the effectiveness of interventions (Almanzar et al., 2015). A worldwide international review of mental health treatments in prison populations also points to a lack of high quality large trials (Fazel et al., 2016). Several of the treatment approaches (CBT, Dialectical Behavioral Therapy, meditation, group therapies) also reflect the findings of this scoping review. Small sample size was a common limitation. Medication trials for substance use disorders have also been conducted internationally and indicate usefulness for managing withdrawal, detoxification and maintenance treatments (Oldham et al., 2004). CBT and motivational interviewing were the psychotherapeutic methods found to be useful to reduce substance dependence (Ferguson & Wormith, 2013; Joy Tong & Farrington, 2006; Stein et al., 2006), which was in line with a small number of studies using those methods in our scoping review. The low number of studies available in English indicated limitations for regional research to be received in large

382 parts of the world and to exchange with researchers who do not read Spanish or Portuguese. Culturally 383 specific values and assumptions play a key role in mental health care. Thus, cross-national validation of 384 effective interventions could be of benefit to all actors (Day et al., 2021). 385 The percentage of studies including women was higher than in the global review (Fazel et al., 2016). 386 This could be related to the high proportion of women in prison, as several countries from the region 387 are exceeding the global average percentage of the female prison population (Walmsey, 2015). 388 However, older adults in prison were not specifically represented in any of the Latin American studies, 389 even though they have been identified to be at increased need of mental health care (Fazel et al., 2001; 390 Hayes et al., 2012). Only trials with control groups were included in the global review, which would 391 have limited the number of studies in our review to only five. 392 In forensic psychiatric treatment, safety interests of societies and risk-reduction are priorities. The first 393 step is often to create an intrinsic motivation for therapy and change, which can be achieved through 394 psychoeducation or motivational interviewing (Konrad, 2019). The studies we identified in this scoping 395 review mainly focused on these intervention types and objectives, implementing treatment for people 396 with histories of sexual offences, reducing criminal recidivism and promoting prosocial behaviour. 397 There were also studies using CBT and group therapies aiming to implement the Risk-Need-398 Responsivity Model or Good Lives Model (Andrews et al., 2016; Ward, 2002). Other studies aimed to 399 facilitate mental health through communication and expression towards societies of people with criminal 400 justice involvement using artistic expression (psychodrama) and growth of juvenile offender populations 401 (self-reparenting). However, these studies were less frequent and did not have controlled trial designs. 402 The effects of improvements in prosocial behaviour and reductions in drug use reported in the controlled 403 trials and cohort studies are promising and might be further evaluated at the transition from correctional 404 to community settings, as this is known to be a critical time period for rehabilitation (Hopkin et al., 405 2018). Furthermore, many of the interventions that have been tested in clinical trials should be applicable 406 as routine healthcare interventions within these correctional systems. Implementation of the 407 interventions in routine care would allow the replication of studies in different settings and longer 408 follow-up periods. Beyond specific behavioural changes, broader aspects of mental health may need 409 consideration. Self-management and better social interaction, as described above, are only two of the

key principles for recovery (Durcan G. & Zwemstra, 2014). The formation of a sense of personal identity, confidence to manage everyday life and taking social roles are also important. Collaboration between researchers from the LAC and institutions in high-income regions, as reported in some of the studies, might be a way to promote research and cross-cultural exchange on treatment targets and pathways of care.

## Strengths and limitations

We used a broad search strategy in the databases, later narrowing down the results through a twostep screening process. In addition to the databases used in global reviews on the topic before (PubMed, PsycInfo, Web of Science, PsycArticles, PubPsych, WHO Global Index Medicus), we also searched databases with a focus on the LAC region (Scielo, BVSalud), which offers extra knowledge inclusion. The broad search approach allowed to give a complete picture on the research conducted and methodologies used to study interventions in the region, however precluded from quantitative data synthesis. Several studies described an implementation rather than testing of an intervention in a controlled condition. We have undertaken the most comprehensive review of intervention research in Latin American prisons to date. Our search strategy may have missed reports from national bodies, which are often not published in research databases. However, those reports usually build upon existing published research. We did not systematically search for the grey literature, although several conference abstracts and dissertations were included through our database searches.

#### Conclusion

Evidence from intervention research is still scarce in Latin America given the enormous public health challenge to address mental health problems in prisons. We found a small number of studies reporting controlled trials with quantitative outcomes and a somewhat larger body of descriptive literature on a diversity of interventions. These provide information regarding current practice and which interventions may usefully form future research priorities. Controlled studies indicate preliminary effectiveness for motivational interviewing, CBT and interventions of General Practitioners supported through telemedicine by psychiatrists. Those interventions may be suitable for larger scale testing. However, only a small number of studies reported evidence for interventions aimed at people with a psychiatric diagnosis. Most of the studies focus on forensic outcomes, such as preventing recidivism

and improving pro social behaviour. This might reflect the lack of psychiatric services stated in the introduction. Effects of interventions on different mental health outcomes also need to be tested in controlled trials. The overall picture on interventions is still not yet sufficiently robust to recommend scaling up. Overoccupancy and a lack of prison workforce, place further challenges on delivering interventions on a larger scale. Future research should go beyond describing intervention programs, assess effectiveness with controlled designs and provide a clear roadmap of the structural and workforce requirements to create sustainable mental health services. The feasibility of implementation in routine care needs to be considered when designing and evaluating interventions. International cooperation between LAC and countries outside the region should be considered to ensure that research is scaled up.

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**Table 1.** en = english; pt = Portuguese; es = Spanish; CBT = Cognitive behavioral therapy; sgnft = significant; RCT = Randomized controlled trial;

Author / Year	Titel	Language	Country	Objective	Participants	Method	Setting	Results	Study design
						Controlled trials			
I. Andretta and M. D. Oliveira 2011	Motivational interviewing with adolescents who use drugs and committed an offense	pt	Brazil	To evaluate the effectiveness of Motivational Interviewing (MI)	48 adeolescents who use drugs and committed a criminal offense	compared MI (n=27) and Psychoeducation (n=21), evaluation by (a) reduction of drug consumption and (b) motivation to change (URICA = University of Rhode Island Change Assessment Scale)	Clínica escola de uma faculdade de psicologia, institution with socioeconomic measures, Porto Alegre, Brazil	MI-Group: reduction of tobacco and cannabis use;  Psychoeducation: reduction of alcohol and cannabis use; with both types of intervention decreased the pre-contemplative state, both effective to promote change.	Quasi-experimental prospectively
C. Barrera- Valencia, A. V. Benito- Devia, C. Vélez- Álvarez, M. Figueroa- Barrera and S. M.	Cost-effectiveness of synchronous vs. asynchronous telepsychiatry in prison inmates with depression	uə	Colombia	to assess and compare the cost-effectiveness of synchronous vs. asynchronous telepsychiatry interventions	106 patients with depression (Zung Self- Rating Depres- sion Scale (1965)) in detention centre; male, >18 years	randomly assigned to  a) synchronous (direct evaluation by psychiatrist via videoconference, diagnosis, medical prescripton, follow-up)  or b) asynchronous (evaluation by GP, sends information to psychiatrist who issues diagnosis and treatment; follow-up by GP)  telepsychiatry consultation model; HDRS	Medium-Security Penitentiary and Prison Establishment of Manizales, Colombia	clinical results with asynchronus model are better (HDRS difference is higher, -8 vs -3); cost of the asynchronous model is less than half of the synchronous model treatment cost; the asynchronous model is the more cost-effective	RCT

Franco- Idárraga, 2017						(Hamilton Depression Rating Scale at baseline + follow up to evaluate severity and assess changes;			
G. Hutchinson, P. Willner, J. Rose, I. Burke and T. Bastick, 2017	CBT in a Caribbean context: A controlled trial of anger management in Trinidadian prisons	en	Trinidad and Tobago + UK	To evaluate a package of CBT-based Anger Management Training	57 persons in prison (16 control, 41 intervention) male and female general prisons + male adoelescent	12-week prison-based group anger management programme; topics: the triggers that evoke anger; physiological and behavioural components of anger; behavioural and cognitive strategies to avoid the build-up of anger and for coping with anger- provoking situations; and acceptable ways of displaying anger (assertiveness); method: brainstorming + role play; pretrial and postrial outcome data assessed by STAXI (State-Trait Anger Expression Inventory) and PACS (Profile of Anger Coping Skills)	4 prisons in Trinidad; University of the West Indies (UWI), Trinidad and Tobago	intervention group: sgnft reduction in State Anger [t(38) = 3.23, p = .003], Trait Anger [t(38) = 1.94, p = .06], and Anger Expression [t(39) = 2.64, p = .012] scores, and a significant increase in the PACS score [t(29) = 3.02, p = .005] maintained at 4 months follow-up; control group: no changes	RCT
J. Spence, 2019	An analysis of the effectiveness of the restorative approach on recidivism at the Trinidad and Tobago youth training centre	cu	Trinidad and Tobago + UK	to analyse whether exposure to rehabilitative programmes would reduce the antisocial attitudes of young	61 participants (Group A: 30 intervention, Group B: 31 non- intervention group)	Risk and Resiliency Check-up (RRC) + Questionnaire to capture institutional strengthening of program	Trinidad and Tobago Youth Psychoscial Education Centre	Group A: high levels of risk + support, support not enough to impact antisocial tendencies; Group B: remain temperamental, expected high levels of behavioral problems; no support of hypothesis; recommendations: increasing length of delivery time for programs, collecting post-incarceration	RCT

				people who commited infringements		CBT: "Preventing Recidivism Through Cognitive		and behavioural monitoring data to determine long-term programme effects, and providing a continuous mentoring programme	
J. A. Capellan, S. Koppel and HE. Sung, 2020	The effects of cognitive behavioral therapy on recidivism among parolees in Central America: evidence from a Honduran experiment	en	Honduras + US	examines the effectiveness of a CBT among supervised persons with criminal justice involvement	100 parolees assigned to treatment (n = 50) or control conditions (n = 50) group	Behavioral Therapy", group therapy, 3h/weekly, 4 months;  Program based on Beck 1999, themes: self- esteem/self-percep- tion, self-control/impulsivity, identification of problems, problem-solving, values/ antivalues, resilience, delayed gratification, and support networks; group discussions + 2 sessions on entrepreneurship; 18 months follow-up	pool of persons placed on conditional release, Department of Francisco Morazan, Honduras	treatment group 69% less likely to reoffend	RCT

# Cohort Study

Y. Riega- Virú and M. Tataje- Véliz, 2020	The Modeling Technique and Penitentiary Treatment: the Case of Foreign Inmates Imprisoned due to Illegal Drug Trafficking with Rehabilitation Difficulties in the Ancón II Detention Facility, Lima, Peru	sə	Peru	to provide penitentiary treatment	67 inmates	Comprehensive Treatment for Imprisoned Foreigners Program (P.I.T.E.R.)  positive reinforcement and modeling techniques; 12  sessions 4 technques: (1) modeling of skills (communicational, expression, respones, planning, self-control, work-related); (2) Positive Reinforcement; (3) Role-Playing; (4) Feedback	The Ancón II detention facility, Lima, Peru	91% of inmates achieved sgnft Behavioral change	Cohort study without control group
M. O. Huber, M. E. Venegas and C. M. Contreras,	Group Intervention for Imprisoned Mother- Infant Dyads: Effects on Mother's Depression and on Children's Development	SS	Chile + UK	to evaluate the effect of two group interventions for pregnant women and mother-infant dyads on maternal depressive symptomatology and on the children's development	60 incarcerated women, 30 pregnant, 30 with children under 2 years	15 months follow-up; pre and post intervention evaluation by psychologists; Intervention: Attachment theory + CBT, 5 sessions; group therapy;Multilevel regression analysis for repeated measures performed for maternal symptomatology (BDI = Beck Depressions Inventar) in both groups and for children's development (ASQ-SE = Ages & Stages Questionnaires: Social-Emotional) in the dyad's group	Prisons all over the country, Chile	Reductions of the depression symptoms in pregnant women (b=-3.60, t(29)=-2.66, p=.031) and in mothers of the dyad intervention group (b=-0.1499, t(93)=-5.3, p=<.001) reduction in child social-emotional development difficulties (b=-15.26, t(18)=-4.107, p=.001)	cohort study without control group

Vicente Vázquez Vera,* Juan José Sánchez Sosa, 2015	Executive functions as predicting of response to violent criminals treatment	sə	Mexico	value of neuropsychological functions for response to treatment; examine relation between executive functions and indicators of response to CBT instead of additional punitive measures	24 inmates, 24-49 years, with aggressive/undisciplinary behavior, with frequent additional punitive measures (excluded high psychopathy, PCL-R (=Psychopathy Checklist – Revised) >30)	Intervention: Program of reasoning and rehabilitation; 8 modules: motivational interviewing, self-control, meta-cognition, cognitive solving of interpersonal problems, social abilities, emotional control, critical reasoning, consciousness of victim; 37 sessions; response to treatment assessed by Novaco's Inventory of Reaction to Provocation	maximum security sections of a prison in Mexico City, Mexico	neuropsychological tasks evaluating pre-frontal areas sgnft predicted response to treatment (Statistical regression analyses)	cohort study without control group
l. Andretta and M. da Silva Oliveira, 2008	A study of the effects of motivational interviewing on adolescent offenders	pt	Brazil	identifying the changes after motivational interviewing intervention	50 adolescent drug users who had committed offenses; 13-20 years	URICA(=University of Rhode Island Change Assessment Scale) score to rate the level of motivation to change behaviour; Negative Core Beliefs Inventory by Beck; urin toxicology screening	Porto Alegre, Brazil	changes in the patterns of drug consumption, in the motivational stages and in the cognitive beliefs; reduction of amount consumed and increase in days of abstinence for several drugs; beliefs about drugs changed; reduced number in stage of pre-contemplation; changes to higher motivational stages.	cohort study without control group
A. Santos, T.M. Salán, A.C.d.Á. Jacintho, R.C.S. Azevedo	Group Therapy of adolescents arrested in a judicial institution and with disorders related to the consumption of psychoactive substances	en	Brazil	describe the experience of group therapy with adolescents who comitted offenses related to psychoactive substance use disorder	4 adolescents who have suffered from mental disorders related to psychoactive substance use disorder	weekly group therapy for 10 weeks, outcome evaluation 1 year later; psychoeducation	Institution for minor violators  ("Fundação CASA"),  Campinas, Brazil	1 year later: 3 found, 1 with relapse but abstinent, 1 abstinent, 1 continued consuming crack and newly arrested	cohort study without control group

M. N.  Mora-Arias  L. Solano- Alpízar, B  Marín- Picado and  J. E. Prado  Calderón,  2020	Effect of a Group  Meditation Process on  Perceived Stress and  Coping Strategies in a	ప	Costa Rica	to evaluate if the meditation process generated changes in participant stress levels	32 male adults in prison, 26-58 yearswait list control group (16)	10 meditation sessions, Stress-Questionnaire Solano-Beauregard (Bertoglia, 1997), pretest— posttest experimental design Semi-structured interview to evaluate coping strategies in intervention group	Jorge Arturo  Montero Castro  Institutional Care  Center, in Costa  Rica	Quantitatively no difference between meditation and control group on stress levels after intervention; significant difference in the cognitive subscale (F(1, 15) = 5.01, p = .04); Qualitatively, participants began to use strategies like self-control, positive reevaluation and taking distance from the situation	cohort study without control group
P. Livacic- Rajas, M. Espinoza and F. Ugalde, 2004	Psychological interventions based on juvenile delinquency prevention evidence A social skills program in educational settings	જ	Chile	to assess effectiveness of a social abilities program to enlarge their socially expected behavioral repertoires	6 adolescents (4male, 2 female) 13-18 years	percentage of socially expected behavioral repertoires at baseline and after invention was compared; F-ANOVA to compare; significance level: 0,05	centro diurno de nivelación educacional, on probation; Santiago de Chile	baseline: 30,3% and 42,71 % (socially expected behavior)  after treatment: 71,10% and 78,43%; (TE=0,787; power=1,0; squared R-Value=0,787)> changes in children in 78,7% product of clinical treatment	cohort study without control group
M. da Silva Oliveira, K Del Rio Szupszynsk and C. DiClemento 2010	Estudo dos estágios motivacionais no i tratamento de adolescentes usuários de	pt	Brazil	to correlate the motivational stage of change with adherence to treatment	juvenile delinquents with ilicit substance use who committed an infraction;	short psychotherapy using the Transtheoretical  Model of Behavior Change	Laboratory of Cognitive Intervention, Pontifícia Universidade Católica do Rio Grande do Sul, Brazil	34 % adherent to complete treatment; majority of adolescents who didnt complete the treatment were in the pre-contemplative stage; significant lower adherence to treatment in adolescents with behavioral disorder and adherence	Cohort study without control group,

L. F. Zambom, J. Garcia da Silva, I. Andretta and M. da Silva Oliveira, 2011	Motivação para mudança em adolescentes usuários de maconha: um estudo longitudinal	pt	Brazil	To assess changes in marijuana use and the stages of adolescent motivation after participation in a program of motivational intervention.	30 adolescents; condemned for ilicit drug use (marihuana);	Motivational interviewing; longitudinal assessment of motivational stage, drug use before and three years after treatment; adherence to treatment  Case series	clínica-escola de uma faculdade de Psicologia de Porto Alegre, Brazil	50% of adolescents who regularly used marihuana in the beginning do not at all today; 30% adhered to treatment, 70% didn't; of the adolescents who still use marihuana 57,9% didn't adhere to treatment; 66,7% of the adolescents who don't use marihuana today adhered to treatment	Cohort study without control group
L. F. Costa, A. Ribeiro, E. L. Junqueira, F. F. F. Meneses and L. M. C. Stroher, 2011	Multifamiliar group with sexual offender adolescents	þ	Brazil	to implement multifamiliar group (=MG) methodology in the treatment of adolescent with histories of sexual offenses	adolescent sexual offenders + family + friends (28 total)	5 multifamily encounters with themes: protection; sexuality; sexual violence is a crime; transgenerationality; dating project; steps: Articulation with the net; levelling of the methodological and theoretical knowledge of the MG; Family interviews with every participant of family; MG with adolescents; Evaluation of the effectiveness.	Psychopedagogical Medical Orientation Center, Brasília, Brazil	Important aspects: space for reflection and expression for all members;develop resignification of the experience;develop future projects	Case series
M. B. Café and N. I. d. Nascimento, 2012	The use of psychodrama with sexual offenders	eu	Brazil	to test psychodrama + individual attendance as a psychotherapy method	6 male sexual offenders, 21-59years	50 min. sessions 1/week, 7 months; dramatic action, performance of roles, creation of characters, spontaneity-creativity	prison in Brazil	positive feedback by atendees, faced their greatest fears, myths and prejudices	Case series

B. Barrientos- Low and E Escaff- Silva, 2018	Relevant elements in the therapeutic intervention of young people who have committed sexual offences: perception of the Chilean adolescents emerging from a specialized program	sə	Chile	study the perception of young chileneans emerging from a program addressed to adolescents who have committed sexually abusive acts	18 adolescents who present sexually abusive acts	semi-structered interview to assess perception of the program and induced changes in adolescents;  Programa de Tratamiento para el Control de la Agresión Sexual [CAS-R]:  -individual (weekly sessions with psychologist, main objective to interrupt abusive behavior)  -familiar (with social worker, to avoid risk situations)  -group workshops (modules: (1) recognize emotions  (2) overcome cognitive distorsions that justify or minimize abusive acts (3) develop empathy for the victim 4) recognize sexual violence (5) develop conflict-solving skills and to confront sexuality without hurting others or themselves	Chile, Psychosocial Education Centre	perceived changes:  1) Improved: conflict solving skills, social skills  3) prosocial values  4) responsible perception of sexuality  5) improved impulse control  6) family: more united, closer relationship  7) recognize reason for entering program, associate it with feelings of guilt, some compensatory actions to victims	Case series
M. D. Gomez and E. C. Banegas, 2018	Hypnotherapy and ist impact on the reduction of signs and symptoms resulting from withdrawal to cocaine in the center of adolescents in conflict with the law	es	Ecuador	Discovering an effective method to decrease or reduce the set of signs and symptoms resulting from Cocaine Withdrawal Syndrome	20 teenage boys, 12- 18years, diagnosed with cocaine addicton and withdrawal syndrome	Hypnotherapy, Hamilton Anxiety Scale + Hamilton  Depression Scale, pre- and post intervention  symptoms	Juvenile detention center, Machala, Ecuador	symptoms of abstinence modified: regular sleep + eating behavior, psychomotoric balance, 75% increased participation in educational activities, increased communication with family; anxiety + depression levels decreased	Case series

J.E. Romero, J. Cepeda, P. Quinn & S. Underwood 2018	Prisoner rehabilitation through animal-assisted activities in Argentina: the <i>Huellas de</i> Esperanza Prison Dog Programme	en	Argentina	describes the operation and achievements of Huellas de Esperanza (Traces of Hope), the argentine prison dog programme	85 male + female + adolescent (18-21 years), transgender	Implementation of prison dog programmes founded by Pauline Quinn; mid-term and final assessments; 18-24 months dog training phase, persons living in prison were responsible for care	2 Open Pre-release houses, 1 Penitentiary Complex for Young Adults, 1 Penitentiary Complex with Transgender community	reducing prison violence (0 % among participants); reducing reoffending (0,01%)	Case series
A. P.  Mundt, P.  Marín, C.  Gabrysch,  C.  Sepúlveda,  J. Roumeau  and P.  Heritage,  2019	Initiating Change of People With Criminal Justice Involvement Through Participation in a Drama Project: An Exploratory Study	en	Chile	to assess effects of the participation in a theatre project on the mental health problems of people with criminal justice involvement and relatives	5(3 formerly incarcerated persons + 2 parents of a person in jail who had died), 36-65 years, 1 with current illicit drug depence, 3 with major depression, all had mild suicide risk; + professional actors	rehabilitative programs with technical and life-skill components (6-8months)	CoArtRe, Santiago de Chile	Types of change/development: control of addiction, therapeutic effect, rehabilitation on personal level; subjectively improved emotional state related to trauma, improved capacities to regulate interpersonal relationships Possible mechanisms: commitments with the group and with performing the work, expression of emotions, and traumatic experiences, being heard in public and positive perception by others; improved future work	Case series

L. F. Costa, L. d. S. Wolff, A. S Tavares, R. N. Nogueira and M. M. Marra, 2020	Treatment to adult  perpetrators of intrafamilial sexual a abuse in Brazil: psychodrama as strategy	uə	Brazil	to describe psychodrama as a strategy of intervention for adults with histories of sexual offenses against children and adolescents	15-18 adults who committed intrafamiliar sexual violence; in closed or semi-open system	psychodrama techniques:  "intermediary object" -> objects to facilitate expression of feelings, reducing stress  "as if" -> experiencing situations, taking on roles session themes: group integration, stigma, personal suffering due to suffered and practiced violence, expression of sexuality, gender relations, risk and protection thoughts, sexual desire for children and adolescents, and reconstruction for the future  3 stages each: warm-up, dramatization, and sharing	prison in Brasilia, Brazil	possibility for facilitating group construction; to come into contact with the suffering coming from the various forms of violence suffered during their lifetime (physical, emotional, psychological, sexual); recognizing own/victims suffering; reflection on sexuality: playing a male character that has sexual desire for children: explore helping mechanisms	Case series
J. Rodrigues, 2020	Education and Theater in prison - A pedagogical experience	pt	Brazil	the pedagogic experience with drama workshops held with inmates	inmates between 2005- 2013	drama is proposing free expression in an oppressor space; functions: artistic expression, deconstruction of a marginalized and oppressed identity	Papuda Prison System, Brasilia, Brazil	capable of transforming their pessimist reality, looking at themselves in a new way, and leading a transforming and liberating future	Case series
J. Billand and V.S. Facciolla Paiva, 2017	Deconstructing gender expectations from a minority standpoint: how to enter into a dialogue with male perpetrators of violence against women?	pt	Brazil	discusses limits and possibilities of the practice of a reflection group together with male individuals who presented violence against women	3 participants in intervention; 1 included in study	Reflective group conversations; 16 sessions, weekly	Prison, intervention conducted by Feministe collective in Sao Paulo	room for exchanges of experiences among participants, increased awareness about what violence was, discussions on gender issues; prevention of criminal recidivism; men began to review their gender expectations and rethink their happiness projects; helps to prevent violence + step towards gender equality	Case series

W. R. Avendaño Castro, A. E. Parada Trujillo and E. Casadiego Rivera, 2020	The Effects of Applying the Instrumental Enrichment Program to a Group of Juvenile Offenders	sə	Colombia	to analyze the effects of applying Reuven Feuerstein's Instrumental Enrichment (FIE) Program to a group of juveniles who commited infringements	10 juveniles who committed infringements (male + female), 15-17 years	Virtual relationship instruments, comparisons and FIE spatial relationships, 8h/week, 4 months; principles of intervention: behavior regulation, differentiation, mediation of meaning, transcendency, feeling of capability; training: cognitive routines, planed search for information, reflecting on the questions	Prison resocialization process by Fundación El Faro in the municipality of San José of Cúcuta, Colombia	cognitive functions and mental operations changed; achievements: - capacity to set hipothesis - colection + organization of information - verbal skills, precise answers - impulse control - ability to establish relationships	Case series
M. L. Palomino, G. H. Ríos and J. Samudio Díaz, 1991	Life projects and rehabilitation of prisoners	S	Colombia	Establishing life projects to improve internal and external conditions	6 Women volunteers, 18- 35 years, <1 year to liberation, robbery, drug posession, fraud	individual interviews, workshops on self- consciousness, interpersonal relationships, specific + work problems	Cárcel Nacional de mujeres "Buen Pastor" in Bogota, Colombia	personally specific, qualitative descripton: mayority achieves to formulate goals, to be conscious of their qualities, etc., in general improved to prior-intervention	Case series
Noriega Gayol, G. 1995	Self-reparenting with female delinquents in jail	en	Mexico	Prove usefulness of Self-Reparenting to promote change	28 women, 11-18 years in juvenile prison	self-reparenting workshops	female juvenile jail  Mexico city	positive changes in n-1, conflict decreased with parents, resistance to treatment decreased, capacity for insight + consciousness increased, agressive behaviour decreased, self esteem increased, recognition of their value/identity increased, passivity decreased, interest and motivation for new life goals increased, beginning to learn how to give and receive love, refusing to accept labels as "incorrigible" increased	Case series

C. Amorim-Gaudêncio, K. G. Correia-de-Oliveira, L. F. G. Braz and V. N. d. Figueiredo Filho, 2017	Promoção de comportamentos proativos em reeducandos em processo de reintegração: Um relato de experiência	pt	Brazil	results of educational intervention based on CBT to promote social adapted behavior and interpersonal relationships	42 persons with convictions on open regime, 24-70 years, men+women, reintegration process	10 sessions: (1) explain concept (2+3) assertiveness (4)Resilience (5+6) Difficulties of work relationships (7) Emotional self-control (8) Value of work (9) Resolving Problems (10) Recapitulation	Paraiba, Brazil	implementation of pro social behaviors and reduced criminal recidivism	Case series		
	Expert consensus / proposal										
A. L. das Neves, F. A. Silva, I. R. Silva, T. S. dos Santos and F. P. P. Calegare, 2017	Analysis of psychosocial intervention methodologies in group of men perpetrators of conjugal violence	pt	Brazil	to analyze methodologies of psycho-social intervention of the extension project "Education and Psychosocial Care for Men Authors of Spousal Violence"	professionals and participants	reports from psychologists were analyzed with focus on intervention methodologies	Manaus / Amazonas, Psychosocial education centre	methodologies: (1) subjectivation (2) Questioning the parents (3) Making sense of experience (4) Construction of violence (5) Reflecting on the couple alliance (6) Creating "catalogue of citizienship"	expert consesus / proposal		

D. M. A. Saez, A. X. Z. Constanzo and A. R. Morales, 2018	Teenagers' Personal liability in Chile: proposals for conducting psychosocial intervention in Juvenile Sections	es	Chile	aim to analyze the design and management characteristics of psychosocial intervention projects; identify proposals to improve service	experience of 32 professionals of psychosocial teams	Group interviews, analysis of documentation of technical suggestions and weekly reports, diagnosis and planned intervention	juvenile detention centers, South of Chile	most important theoretic model: model of risk, necessity, responsiveness; others: cognitive- behavioral, systemic-familiar, social networks, human occupation; 3 phases of intervention: 1. Diagnosis 2.  Treatment 3. egress + follow-up  Proposals to improve: (1) Permanence of teams (2) coherence + complementarity + integrate a psychoeducative approach (3) Specialization of staff (4) mechanisms to guarantee continuity in psicosocial intervention (5) Implementation of social community inclusion (6) orientate work on criminal paths	expert consesus / proposal
C. C. Isla and C. C. Miranda, 2019	The work of the psychologist on dual pathology in juvenile offenders	ప	Chile	to analyze the work of psychologists on treatment of juvelines with dual pathology who comitted an infringement	4 psychologists, a director, a psychiatrist, a user and a family member; 4 social workers, 3 rehabilitation technicans	in-depth interviews with psychologists, a directoer, a psychiatrist, a user, a family member; focus group with social workers and rehabilitation technicans; qualitative interpretative, grounded theory, axial coding	centro de tratamiento ambulatorio perteneciente a la red de tratamiento de drogodependencia de adolescentes infractores de ley, Concepcion, Chile	dual patient: aggressive, impulsive and disruptive, refractory + higher rate of desertion; prognosis differ; treatment: compensation (remission of psychiatric symptoms + modification of substance use disorder); positive factor: family support; objectives: stabilization, connecting with his/her vulnerability, promoting his/her social reintegration; release: modification of substance use disorder, stabilized environment	expert consesus / proposal

A. P. Said, 2019	Psychosocial intervention with intrafamilial sex offenders: Reflections and process evaluation components	pt	Brazil	to identify contextual factors, barriers and facilitators for the implementation of an intervention focusing on persons with histories of sexual offenses against childs and adolescents	intervention for male adults with histories of sexual offenses, closed regime & open regime; professional team interviewed (1 psychologist, 1 social worker, 1 supervisor)	2 semi structured interviews with professionals	Brasilia, Brazil	Principles of intervention: take protective attitude and behavior, treat them in a respectful and empathic way, focus on patients potentials, to adquire new forms of confrontation;	expert consesus / proposal
F. F. F. Meneses, Stroher, L. M. C., Setubal, C. B., Wolf, L. S., & Costa, L. F., 2016	Psychosocial intervention with the adult responsible for intra-familiar sexual violence against children and adolescents	þf	Brazil	present a report of the group psychosocial intervention experience with adults responsible for intra-familiar sexual violence against children and adolescents.	16 participants, 27-71 years, people with former incarceration	team: 3 psychologists, 1 social worker, 1  psychiatrist  group intervention: 9 sessions,	on parole, recently released, Brasilia,	Content of sessions:  1) therapeutic contract, distinction between judiciary and therapeutic context  2) discuss necessary limits for actions against children/adolescents  3) discuss pictures with violence situations, identify themselves with perpetrator/victim  4) create future plans  5) assess quality of thinking (negation of violence, distorsion of violent act, culpability of victim)  6) discussion of prejudices ("machism", sexism)  7) Transgenerationality  8) Expression of sexuality  9) establish life path with to recognize life achievments and losses; be aware of future obstacles	expert consesus / proposal

M. B. Chacón, M. M. Cueva, 2014	Suicidal ideation in prisoners: A proposal for your attention	S	Costa Rica	identify suicide ideation and contribuiting factors, psycho- educational prevention proposal for identified risk group	127 persons in prison	Psychoeducative Service in Group Workshops,8 sessions, themes: basic aspects of CBT, generality of suicide, irrational ideas, cognitive distorsions, autocontrol and impulsivity, handling frustration, self esteem, life project	Centro del Programa de Atención Institucional (CPI) de Liberia, Costa Rica	10,2% of inmates have suidice ideation, relation with experiences in prison, ruptured relationships, death or disease of family; intervention helps to identify cognitive and behavioral dysfunctions that cause suidical ideation	expert consesus / proposal
A. Corchado- Vargas, 2016	Intervention with Young Mexicans in Conflict with the Law Based on Community Psychology	SS	Mexico	describe the activities that applicates the community psychology model to mexican adolescents who comitted infringements	10 activites 2004-2012; aimed at adolescents	various interventions that have been made in juvenile detention centers are listed	juvenile detention centers, Mexico	(1) group workshop emotion management + life projects; (2) development group and inidividual counselling to develop self-esteem; (3) psychoeducative workshop with parents to promote communicative skills to prevent antisociality; (4) educative workshop and individual counselling to with parents and children to use emotional intelligence and follow rules; (5) workshop in encounter group with parents and children to promote subjectivity and self- knowledge; (6) workshop with parents and adolescents to improve family functioning	expert consesus / proposal