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Sex offenders in jail: a mini review of treatment programs and outcomes

Breve rassegna della letteratura sui programmi e sugli esiti dei trattamenti destinati agli autori di reati sessuali in carcere

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Abstract
The debate in the scientific literature about sex offender treatment and its effectiveness remains divided and controversial. Several studies have uncovered that psychological treatment reduces the risk of recidivism in such subjects (Gallagher, et al., 1999; Hall, 1995; Hanson, et al., 2009; Hanson et al., 2002; Lösel & Schmucker, 2005; Reitzel & Carbonell, 2006; Schmucker & Lösel, 2008, 2015), whilst other studies have shown that there is insufficient evidence for this conclusion (Furby, Weinrott, & Blackshaw, 1989; Harris, Rice, & Quinsey, 1998; Kenworthy, et al., 2004; Rice & Harris, 2003). In order to clarify which treatments are applied to the sex offender population in jail, together with the associations between these treatments and reduced risk of recidivism, the present study comprised a review of the literature to determine the current state of research in this area.

Keywords: sex offender, treatment, jail, recidivism risk, Italian programs

Riassunto
Il dibattito nella letteratura scientifica sul trattamento degli autori di reati sessuali e sulla sua efficacia rimane diviso e controverso. Diversi studi hanno scoperto che il trattamento psicologico riduce il rischio di recidiva (Gallagher, et al., 1999; Hall, 1995; Hanson, et al., 2009; Hanson et al., 2002; Lösel & Schmucker, 2005; Reitzel & Carbonell, 2006; Schmucker & Lösel, 2008, 2015), mentre altri hanno dimostrato che non ci sono prove sufficienti per questa conclusione (Furby, Weinrott e Blackshaw, 1989; Harris, Rice, & Quinsey, 1998; Kenworthy, et al., 2004; Rice & Harris, 2003). Al fine di chiarire quali trattamenti sono applicati agli autori di reati sessuali detenuti in carcere, nonché l'associazione tra i trattamenti e la riduzione del rischio di recidiva, il presente studio effettua una review della letteratura per determinare lo stato della ricerca in questo settore.

Parole chiave: sex offender, trattamento, carcere, rischio di recidiva, programmi italiani

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1. Introduction

Sexual violence can be defined as "actual, attempted, or threatened sexual contact with a person who is nonconsenting or unable to give consent" (Boer, Hart, Kropp, & Webster, 1998, p. 9). Such violence (Campobasso et al, 2009) is a major public health concern and the common public sentiment is that sexual offenders should receive strong punitive measures (McAlinden, 2012). Sex offenders, themselves, comprise a heterogeneous and largely diversified group reflecting a range of sociodemographic characteristics, evolutionary experiences (Di Cori, Fedeli & Sabatello, 2012), and criminal histories (Knight & Prentky, 1990). Furthermore, they present different psychopathological traits and multiple paraphilic disorders (Marshall, 2007; Grattagliano, Mele, Ieva, & Carabellese, 2008; Carabellese, Candelli, La Tegola, & Catanesi, 2010), as well as a variety of other disorders (Bogaerts, et al., 2005; Langstrom, et al., 2004; Levenson, 2004). Considering all of these variables, it is difficult to define a unique clinical and pathological profile of sexual deviants. Usually, offenders are classified according to their victim's age (i.e., child molester, perpetrator of adolescents, rapist) and receive a specific treatment according to their group. However, the scientific literature on *sex offender treatment* and its effectiveness remains divided and controversial (Hanson & Yates, 2013).

According to the literature, the best treatment for sex offenders is a cognitive behavioral intervention based on a relapse prevention model employing individual and group therapy (Osborn, 2007). Interventions of this nature are administered across the US, Canada, Australia, New Zealand, Ireland, and the UK (see Brown, 2011, for a detailed description of these programs). The principal aim of cognitive behavioral *sex offender treatment programs* is to change the offenders' patterns of behavior and internal processes (thinking patterns, feelings, and physiological arousal) that have been developed and maintained through learning and reinforcement, resulting in maladaptive and deviant responses associated with sexual offenses. These patterns are then replaced with adaptive, prosocial attitudes and behaviors (Yates, 2003) that are expected to reduce the likelihood of recidivism (Dennis et al., 2012). The treatment goals also include skills acquisition, reduction of cognitive distortions, development of problem-solving strategies, improvement of social and victim perspective taking, and reduction of deviant sexual arousal (Marshall, et al., 1999; Yates, 2003; Yates, et al., 2000). Furthermore, the programs aim at helping the offenders to identify future risk scenarios and develop alternative and adaptive coping (*relapse prevention*) strategies in order to reduce the likelihood of recidivism (Dennis, et al., 2012; Laws, Hudson, & Ward, 2000).

Conventionally, cognitive behavioral treatment (CBT) is often combined with medication intended to suppress sexual appetite. When hypersexuality is present, an anti-androgen drug treatment such as *cyproterone acetate* may be administered in association with the cognitive behavioral therapy. In Western Europe and Canada in 1960, *cyproterone acetate* (CPA) was used as a preventive measure for sex offenders, as part of the sentence; CPA is an anti-androgen hormone treatment that significantly affects plasma testosterone to moderate deviant sexual behavior (Bourke, 2009). Currently, the most frequently used drug in subjects presenting sexual hyperactivity or compulsive sexual behavior is *medroxyprogesterone acetate* (MPA), which acts on the brain by reducing the secretion of testosterone. MPA is often prescribed in association with psychological treatment, such as psychotherapy. It is widely administered in Europe, specifically Germany since 1969 (for subjects older than 25 years, followed by medical and clinical evaluation), Sweden since 1993 (with consent and following an assessment of recidivism risk), Denmark since 1973 (as a replacement for surgical castration), and France since 1997 (Petruccelli, et al., 2008). In Italy, unlike other European and non-European countries, there is no law that permits the chemical castration of sexual offenders.

In order to bring a specific focus to the treatment of sex offenders, the present study involved a mini-review of the literature, using the search strings shown in **Appendix 1**.

Appendix 1

Search engine	**Search string**
Pubmed	(sex* offend*[Title/Abstract]) AND treatment [Title/Abstract] AND outcome [Title/Abstract]
Cochrane Library	sex* offend* AND treatment AND outcome
PsychInfo	sex* offend* [Title] AND treatment [Title] AND outcome [Title]

2. Materials and methods

Selection of Studies

The inclusion criteria were:
- descriptions or reports of sex offender treatment programs with a focus on the main outcomes; and
- year of publication between 2008 and 2019.

The exclusion criteria were:
- reviews and meta-analyses;
- articles not pertinent to the topic;
- full text articles unavailable; and
- papers not written in English.

Data Sources and Search Strategy

Three electronic databases (PubMed, Cochrane Library, PsycINFO) were searched from 2008 to 2019, with the search strings reported in **Appendix 1**. Articles were selected in accordance with the *Preferred Reporting Items for Systematic Reviews and Meta-Analyses* (PRISMA) guidelines (Moher, et al., 2015; Shamseer, et al., 2015). Two reviewers (CM and ER) independently selected titles, abstracts, and full text publications using the inclusion and exclusion criteria specified above. Disagreements were resolved through discussion with a third reviewer (PR). The following information was extracted from all publications: participants, characteristics of the treatment, and a summary of the main study findings, with respect to treatment.

3. Treatment of sex offenders

The search retrieved 89 articles: 85 articles remained after duplicates were removed, 54 were excluded on the basis of the title, abstract, or full text (as they were not completely relevant to the topic), 19 were excluded due to the type of publication (review or meta-analysis), and 3 were excluded because full text articles were not available. Most of the excluded articles were not focused on the study population (sex offenders) or the selected topic (treatment outcome). Ultimately, 9 articles were selected for the mini-review.

The PRISMA flowchart is shown in **Figure 1**.

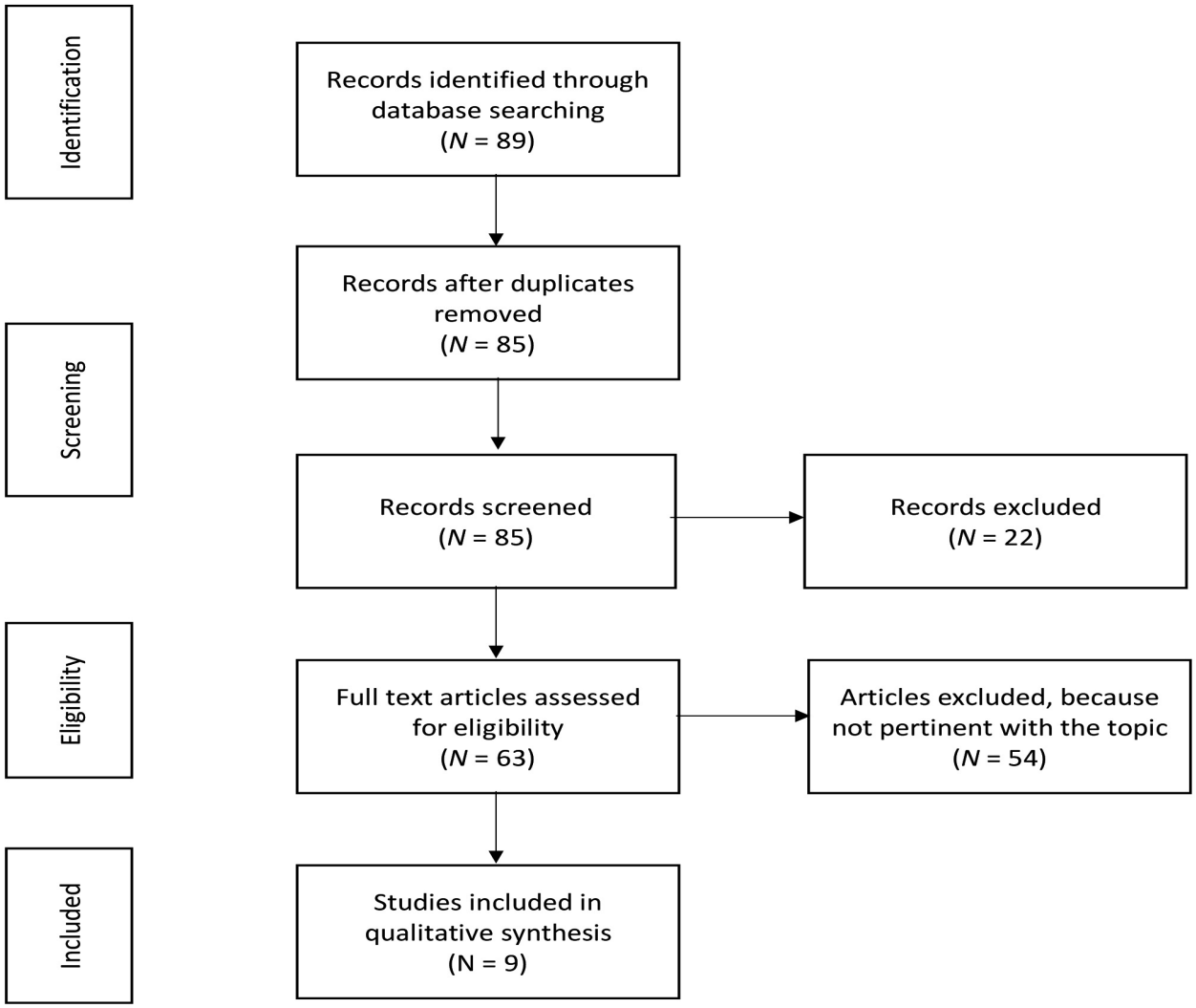

Fig. 1 *PRISMA flowchart*

One of the selected studies (Olver, et al., 2009) was an extension of the Nicholaichuk et al. (2000) study and described the treatment outcome of a high-intensity inpatient sex offender treatment program by comparing the sexual recidivism rates of 472 treated and 282 untreated offenders. In more detail, the researchers assessed the *Clearwater Program*—a 48-bed treatment unit for moderate- to high-risk sexual offenders, using a cognitive behavioral approach and relapse prevention. They also used the Static-99 (Hanson & Thorton, 1999) and the Violence Risk Scale-Sexual Offender Version (VRS-SO; Olver, Wong, Nicholaichuk, & Gordon, 2007) to assess the risk of sexual recidivism. Moreover, they ran a Cox regression survival analysis to control determinate variables such as length of follow-up, age at release, and sexual offending history (presence/absence of prior sexual convictions), which are recognized to be predictor variables of sex offender recidivism (Hanson & Morton-Bourgon, 2004). The results showed that treated offenders sexually recidivated significantly less often than the comparison group over nearly 20 years of follow-up.

In a later study, Olver et al. (2013) analyzed sex offender treatment outcomes in a large national cohort of Canadian federally incarcerated sex offenders. The sample was comprised of 732 offenders: 625 had completed a sex offender treatment program and 107 had not. The findings showed that the treated sex offenders reported significantly lower rates of violent – but not sexual – recidivism, after risk and individual differences were controlled for. Moreover, after dividing offenders according to risk level, the researchers found that the treated and untreated groups showed significant differences only among moderate- to high-risk offenders. Furthermore, the results highlighted that treated and untreated offenders had higher recidivism rates when they were younger (i.e., younger than 50 years at the time of release).

Later, in the quasi-experimental study of Smid et al. (2016), similar results were found. The aim of Smid et al.'s study was to assess the effect of high-intensity inpatient treatment for sex offenders. The sample was comprised of convicted Dutch sex offenders who had been discharged from prison between 1996 and 2002; 25% had not received any treatment during their incarceration whilst the remainder had received treatment. The researchers used the Static-99R (Hanson & Thornton, 2000) to retrospectively assess risk levels and compared sexual and violent (including sexual) recidivism rates between the treated and untreated offenders, controlling for level of risk. The average follow-up was 148 months (SD = 29.6) and the base rates for recidivism were 15.0% for sexual offense and 38.4% for violent (including sexual) offense. Only among high-risk offenders was a significant treatment effect found (40.0% recidivism); no treatment effects were found in low- and low-moderate–risk offenders.

In a recent study, Kingston et al. (2014) described the *self-regulation model* (SRM)—a nine-phase, four-pathway offense process model created specifically for sex offenders. In more detail, the researchers investigated the validity and utility of the SRM in 275 adult men within Canadian federal penitentiaries who had been convicted of a contact sexual offense. All of the men had received treatment and showed improvements from pre- to post-treatment on a dynamic risk assessment and several self-reported treatment targets. Nevertheless, as the authors reported, given the absence of an untreated control group, they were unable to conclude whether these effects were due to treatment participation or simply the passage of time or an unknown variable.

Sowden et al. (2017) investigated the relationships between treatment readiness, responsivity variables, and treatment change with important sexual offender treatment program outcomes (attrition and recidivism) using the Treatment Readiness, Responsivity, and Gain Scale: Short Version (TRRG:SV; Serin, et al., 2005). For their sample, the researchers selected 185 federally incarcerated adult male sex offenders who had participated in the *Clearwater Sex Offender Treatment Program* at the Regional Psychiatric Centre in Saskatoon (Canada) between 1998 and 2001. The results showed that those with higher levels of education, a history of employment, higher cognitive ability, a marriage or equivalent partnership, and no serious mental illness or intellectual disability tended to show higher levels of treatment engagement across the TRRG:SV subscales. Moreover, positive treatment engagement was linked with increased risk-relevant treatment change, decreased program attrition, and reduced sexual and violent recidivism.

In another study, Olver et al. (2018) described the effects of two treatment programs: the *Correctional Service of Canada*'s *Standard Sex Offender Treatment Program* and an early version of Rockwood's prison-based program, using CBT and *risk-needs-responsivity* (RNR). The sample was comprised of the participants in the two aforementioned treatment programs (N = 579 and N = 625, respectively) and a group of untreated men (N = 107) who had been incarcerated for a sexual offense. The results showed that both treatment groups displayed lower rates of sexual and violent recidivism, compared to the untreated group. Moreover, the Rockwood group demonstrated the lowest recidivism rates. Overall, the findings highlighted that prison-based treatments for sex offenders can be effective.

Howard et al.'s (2019) study had two main aims: (a) to analyze the influence of treatment delivery changes in a residential sex offender treatment program and (b) to investigate whether the recidivism rates of offenders who had completed the program (N = 494) were linked to differences in participant attrition rates. The total sample was comprised of 652 offenders who had been recruited from the *Custody-Based Intensive Treatment* program in New South Wales, Australia, between 1999 and April 2015 (when data were obtained). The program used CBT based on "what works" and RNR principles. The results showed that the introduction of rolling groups and an emphasis on positive therapist characteristics were associated with a significantly increased likelihood of program completion. Furthermore, it was shown that cohort attrition and reoffending outcomes were inversely related in those who had completed the program, whereby increased cohort attrition was related to significantly decreased sexual reoffending. The authors explained this finding by suggesting that the more participants resisted treatment, the less likely they

were to obtain clinically significant changes and to return to normal functioning; therefore, the greater their likelihood of reoffending.

In a recent study, Engel et al. (2018) evaluated the effects of treatment aimed at reducing dynamic risk factors (DRF) in pedophilic men at risk of reoffending, within the prevention projects of Hannover and Regensburg. Self-report questionnaires and questionnaires measuring DRF were administered to the sample, which was divided into three groups: a treatment group (TG, $N = 51$), a group of treatment refusers (TR, $N = 51$), and a drop-out group (DO, $N = 14$). The main purpose of the study was to examine if there was reduced DFR in the treatment group; accordingly, the TG were assessed before and after treatment. The findings did not reveal any differences between the three groups with respect to sociodemographic and sociosexual variables before therapy. No differences were found in education, relationship status, and whether the individuals were fathers/stepfathers. Moreover, the results showed that the offenders (TG) had decreased hypersexual behavior and offensive attitudes and were able to better control themselves in situations that put them at risk of offending (coping self-efficacy); they also showed less identification with children.

With respect to drug treatment for sex offenders, to the best of our knowledge, Gallo et al.'s (2018) study was the first to investigate the efficacy of administering leuprolide acetate (*Lupron*) in sex offender treatment. The study sample was comprised of 128 sex offenders. The first group ($N = 25$) received a combined treatment of *Lupron* and CBT and was compared to the other two groups: sex offenders receiving only CBT ($N = 22$) and untreated and non-sexual violent offenders ($N = 81$). Static-99 (Hanson & Thornton, 2000) was used to assess risk for sexual recidivism in adult male sex offenders and the *General Statistical Information on Recidivism Scale* (GSIR; Nuffield, 1982) was used to predict recidivism in male federal offenders. The results revealed that the Static-99 predicted recidivism rates were significantly higher than the observed rates of sexual recidivism. In more detail, concerning violent recidivism, both of the treated groups showed better results than the untreated group. Moreover, sex offenders who had been treated with both *Lupron* and CBT demonstrated a lower risk of reoffending than did untreated subjects. Finally, offenders who had received only *Lupron* had a significantly higher risk of recidivism and presented more paraphilia, compared to the only CBT group.

4. Discussion

Some of the treatment programs investigated in the selected articles appear to have been effective in reducing recidivism in sex offenders. In more detail, studies that investigated CBT approaches showed a greater reduction in recidivism in the treated group relative to the untreated groups (Olver, et al., 2018; Olver, et al., 2013; Olver, et al., 2009). Two other studies (Engel, et al., 2018; Howard, et al., 2019) showed that both treatment delivery in a residential sex offender treatment program (via the introduction of rolling groups and an emphasis on positive therapist characteristics) and reduced DRF were associated with a significantly increased likelihood of program completion and decreased hypersexual behavior and offensive attitudes. Furthermore, in Sowed et al.'s (2017) study, positive treatment engagement was linked with increased risk-relevant treatment change, decreased program attrition, and reduced sexual and violent recidivism. In another study (Kingston, et al., 2014), which compared a pre- and post-treatment group on dynamic risk assessment and self-reported treatment targets, improvements were found between the two groups. However, as clarified by the authors, the absence of an untreated control group did not enable them to determine with certainty whether the effects obtained were due to treatment participation or to unknown noisy variables. Moreover, as reported above, medication intended to suppress sexual appetite is often combined with CBT in treatment programs for sex offenders. The research of Gallo et al. (2018) revealed lower observed rates of sexual recidivism within subjects who had received treatment compared to those predicted by the Static-99. In particular, offenders who had been treated with both *Lupron* and CBT had a lower risk of reoffending compared to those who had not received treatment and those who had only been treated with *Lupron*.

5. Treatment programs for sexual offenders in Italy

In line with ISTAT data (collected through interviews in 2015 and 2016), in Italy, it is estimated that 8.816.000 (43.6%) women between the ages of 14 and 65 have suffered some form of sexual harassment; it is further estimated that 3.118.000 women (15.4%) have suffered sexual harassment in the past 3 years. Sexual harassment has also been detected against men: it is estimated that 3.754.000 men (18.8%) have suffered it during their lifetime, and 1.274.000 in the past 3 years (6.4%). Furthermore, according to ISTAT data in 2017, out of 60.000 prisoners in Italy, 3.215 were incarcerated for crimes of sexual violence (art. 609 *bis* of Italian penal code) (approximately 5%); of these prisoners, 61 were women. In total, 661 prisoners were incarcerated for sexual acts with a minor (art. 609 *quater* of the Italian penal code); of these prisoners, 23 were women (Caso, Da Ros & Matano, 2011).

In Italy, persons who are suspected and convicted of a sexual crime are confined to specific sections in detention centers called "protected sections," in order to guarantee their safety and protect them from punitive reactions by "common" prisoners. Common prisoners often engage in stigmatized behavior towards sex offenders, such as social exclusion, isolation, and psychic violence (e.g., denigration), as well as physical violence (e.g., beatings) and sexual violence, as a form of revenge. As a consequence, sexual offenders often suffer from poor detention conditions and, in many cases, unequal treatment during intramural work and recreational activities. Moreover, some studies have highlighted that all the stigmatized behaviors toward prisoners and the freedom's deprivation are recognized as risk factors for prisoners' mental health and are also considered predisposing factors for suicide (Fazel & Baillargeon, 2011; Kupers, 1999;

Green, et al., 1992; Roma, et al., 2013; Skegg & Cox, 1991).

An extremely alarming fact is that, in Italy, the assessment of recidivism risk is practically non-existent: no research or survey has been published on this subject; therefore, there are no national guidelines governing the implementation of targeted intervention programs. Treatment and rehabilitation programs for sex offenders must be independently and autonomously initiated by prisons' executive director, without ministerial directives and national scientific committee's acceptance. However, Italy has recently joined the Lanzarote Convention, according to which all states are meant to implement programs aimed at reducing and preventing recidivism. According to the Italian penitentiary law (art. 13 and 13 *bis* O.P.), convicted sex offenders have the right to undergo penitentiary treatment in line with scientific observation of their personality. Despite this, to the best of our knowledge, there are no recent researches that examined the personality of prisoners through the use of personality questionnaires, and consequently there are no clues about the attitude of these subjects towards the tests, and the possibility that they may present *underreporting*, *faking-good* and *faking-bad* profiles, as they are strongly motivated to present themselves in a favorable light in order to obtain secondary benefits. This tendency to *underreporting*, *faking-good* and *faking-bad* is widespread in all those contexts where personality characteristics of subject are assessed (Burla et al., 2019; Giacchetti et al., 2020; Mazza et al., 2019, 2019b, 2019c; Mazza, Monaro et al., 2020; Orrù et al., 2020; Roma et al., 2020; Roma, Marchetti, Mazza, Burla, & Verrocchio, 2020; Roma et al., 2019, 2019b; Roma, Pazzelli, Pompili, Girardi, & Ferracuti, 2013; Roma, Piccinni, & Ferracuti, 2016; Roma, Pompili, Lester, Girardi, & Ferracuti, 2013; Roma et al., 2014; Roma et al., 2018). Such observation is meant to be made prior to and throughout the treatment and is carried out by the GOT (Observation and Treatment Group)—an interdisciplinary working group within the penal institution. The GOT consists of the institution director (who presides over and coordinates group), a legal-pedagogical educator, a social worker, a doctor, and a professional expert in psychology and criminology (*ex.* art. 80 O.P.). In addition to observing an inmate's personality, the GOT also reflects on the results of the observation, anti-juridical behavior, the motivations and consequences of the offender's actions, and the possibility of repairing the consequences of the crime (e.g., compensating the victim). The prisoner, once he/she has become aware of the treatment proposals, is asked to sign a treatment pact to confirm his/her awareness and willingness to actively participate in the recovery activity. The participation requirements differ according to the project. Generally, subjects are required to be of age and sentenced at least in the first degree, know the Italian language, have no problems with alcohol/drug addiction, and have no full-blown psychopathology requiring additional treatment.

With respect to treatment programs, as cited above, no information on rehabilitative projects (in term of promoters, number of recipients, methodology, and outcome assessment) is publicly available. The lack of a central institution to evaluate treatment initiatives, according to international standards and empirical research, could lead to continued investment in projects demonstrating poor outcomes. To fill this gap, the authors of the present study conducted a survey for over 1 year, aimed at investigating the ways in which sex offenders are treated in Italy, the methods and techniques that are used for their treatment, and the results that have been achieved. However, despite repeated requests to obtain specific data on sex offender treatment programs and their outcomes at a variety of institutions, no replies were offered, beyond the data reported below. In contrast to demonstrating data transparency, Italian institutions' opacity in terms of their procedures and treatments precludes international comparisons and leaves Italy behind on the global stage.

To the best of our knowledge, there are 190 penitentiaries in the Italian territory. Amongst these, there are 112 protected sections, of which 40 (38 male, 2 female) are formally established for sexual offenders. In addition, three prisons are specifically dedicated to sex offenders: Altamura (84 inmates), Vallo della Lucania (55 inmates), and Lanusei (32 inmates) (data up to date as of August 29, 2019).

In 2016, a survey was conducted with 30 penitentiaries to investigate sex offender treatment programs between 2014 and 2016. In total, 51 projects were examined, of which 10 had already concluded. In Italy, the first treatment initiative for sex offenders was implemented at the detention center of Lodi.

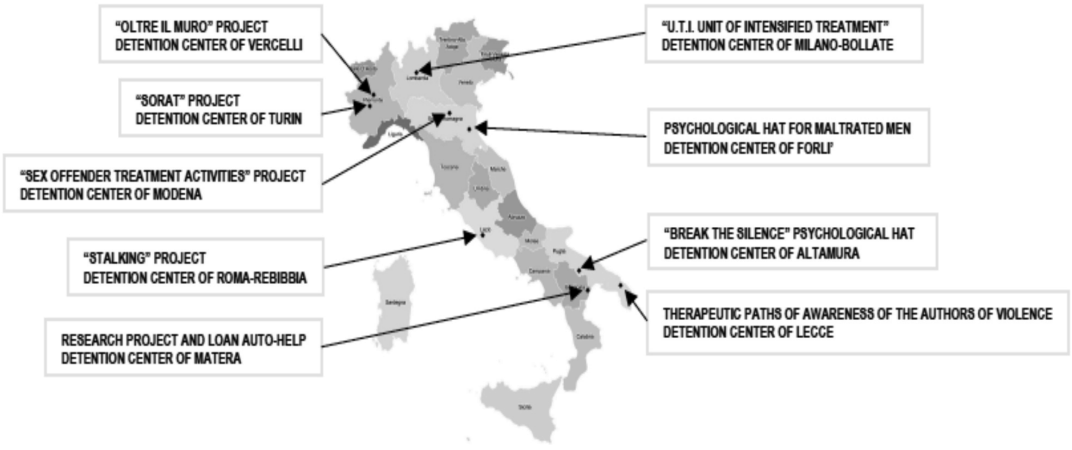

Fig. 2 *Survey performed in October 2017*

Within the penitentiaries, some projects had been developed to deepen the professional skills of prison officers called to interact with this particular type of prisoner. Largely, these projects were inspired by those carried out in other European countries. The *Working on Lessening Fear* (WOLF) project was the first project to be co-financed with European funds and was presented and managed in 1998 to 1999 by the Department of Penitentiary Administration, in cooperation with the governments of Belgium and Holland and the University of Siena. Within the project, the innovative management scheme that had previously been introduced in the Biella and Lodi institutes was adopted, whereby sex offenders were included in specific programs managed by a multi-professional team. The project continued with the FOR-WOLF project, which focused on training operators by strengthening their motivation to work with sex offenders and providing them with accurate information on the size of the phenomenon and its social and practical pathological implications. After that, numerous projects followed, dedicated to the treatment of sexual offenders.

In the Milan-Bollate detention center, a project for the treatment and rehabilitation of sex offenders in intensified treatment units started in 2005. The project aimed at eliminating the sub-culture that considers sex offenders a prison sub-population that must be isolated, and rehabilitating prisoners by actively and positively reintegrating them into social life. Although the project is still active (and funded), no study is found to have validated it effectiveness empirically. Numerous other projects were also implemented but later terminated due to lack of funding. Among these were the programs implemented at *Oltre la Colpa* and *Spiragli* (Piedmont); *Grow Inside Let's Face it Violently*; *Liberation Project Italy*; *For the Evaluation*; the *Treatment and Support of Prisoners for Sexual Violence*; *Maltreatment, Sexual Violence and Child Pornography* in Lombardy; *Against Children Sex Offenders* (AGSE) in Rebibbia NC; and the programs implemented at the Pordenone, Lucera, and Foggia detention centers. Other projects that were ultimately interrupted include those of Prato and Pesaro, which had been successful in developing significant skills and experience in the treatment of sex offenders.

6. Conclusion

The few studies found in accordance with the PRISMA guidelines (Moher, et al., 2015; Shamseer, et al., 2015) that met the inclusion criteria suggest that psychological treatment for sex offenders in European and non-European countries has an important effect in sex offender treatment and reduces the risk of recidivism in such subjects. In particular, CBT has been shown to be most effective for this purpose. Moreover, the combination of drug therapy with psychosocial treatment entails further positive effects in the outcome of sex offender treatment programs.

With respect to the Italian scenario, only minimal data are available. These data indicate that, while treatment initiatives have been implemented in recent years, the lack of evaluation of treatment efficiency makes these projects incomparable and devoid of scientific evidence-based results.

References

Boer, D. P., Hart, S. D., Kropp, P. R., & Webster, C. D. (1998). *Manual for the Sexual Violence Risk – 20: Professional guidelines for assessing risk of sexual violence*. Vancouver: British Columbia Institute Against Family Violence and the Mental Health, Law, and Policy Institute, Simon Fraser University.

Bogaerts, S., Declercq, F., Vanheule, S., & Palmans, V. (2005). Interpersonal factors and personality disorders as discriminators between intra-familial and extra-familial child molesters. *International Journal of Offender Therapy and Comparative Criminology*, *49*, 48-62.

Bourke, J. (2009). *Rape. History of sexual violence*. Bari: Laterza.

Brown, S. (2011). *Treating sex offenders: An introduction to sex offender treatment programmes*. Oxford: Routledge.

Burla, F., Mazza, C., Cosmo, C., Barchielli, B., Marchetti, D., Verrocchio, M.C., & Roma, P. (2019). *Use of the Parents Preference Test in child custody evaluations: Preliminary development of Conforming Parenting Index*. *Mediterranean Journal of Clinical Psychology*, 7(3). http://dx.doi.org/10.6092/2282-1619/2019.7.2213.

Campobasso C, Colonna M, Carabellese F, Grattagliano I, Candelli C, Morton RJ, Catanesi R (2009) A serial killer of elderly women: Analysis of a multi-victim homicide investigation, *Forensic Science International*, *185*(1-3), 7-11.

Carabellese, F., Candelli, C., La Tegola, D., & Catanesi, R. (2010). Fantasie sessuali, disturbi organici, violenze sessuali. *Rassegna Italiana di Criminologia, 2*, 347-360.

Caso, L., Da Ros, T., & Matano, C. (2011). Donne autrici di abusi sessuali: una rassegna critica della letteratura. *Rassegna Italiana di Criminologia, 1,* 39-53.

Dennis, J. A., Khan, O., Ferriter, M., Huband, N., Powney, M. J., & Duggan, C. (2012). Psychological interventions for adults who have sexually offended or are at risk of offending. *Cochrane Database of Systematic Reviews*, (12).

Di Cori, R., Fedeli, N., & Sabatello, U. (2012). Traiettorie evolutive e possibili destini del trauma nell'infanzia: dal minore vittima al giovane autore di reati sessuali. *Rassegna Italiana di Criminologia, 4*(4), 259-271.

Engel, J., Körner, M., Schuhmann, P., Krüger, T. H. C., & Hartmann, U. (2018). Reduction of risk factors for pedophilic sexual offending. *Journal of Sexual Medicine, 15*(11), 1629–1637. doi:10.1177/1079063218791176

Fadda, M. L. (2011). Il trattamento rieducativo dei detenuti sex offenders. *Rivista di Sessuologia*, *35*(2).

Fazel, S., Baillargeon, J. (2011). The health of prisoners. *The Lancet, 377* (9769), 956-965.

Furby, L., Weinrott, M. R., & Blackshaw, L. (1989). Sex offender recidivism: A review. *Psychological Bulletin*, *105*, 3–30.

Gallagher, C. A., Wilson, D. B., Hirschfield, P., Coggeshall, M. B., & MacKenzie, D. L. (1999). A quantitative review of the effects of sex offender treatment on sexual reoffending. *Corrections Management Quarterly*, *3*, 19–29.

Gallo, A., Abracen, J., Looman, J., Jeglic, E., & Dickey, R. (2017). The use of leuprolide acetate in the management of high-risk sex offenders. *Sexual Abuse. 1*–22. doi:1079063218791176.

Giacchetti, N., Pancheri, C., Mazza, C., Williams, R., Meuti, V., Giacco, S., Aceti, F., & Roma, P. (2020). Differences in MMPI-2 personality profiles among filicide and homicide women. *Rivista di Psichiatria*, 55(3), 152–160.

Grattagliano, I., Mele, A., Ieva, F., Carabellese, F. (2008). Sexual of-

fenders al femminile. *Rassegna italiana di Criminologia, 2*(1), 195-210.

Green, C., Andre, G., Kendall, K., Looman, T., Polvi, N. (1992). A study of 133 suicides among Canadian federal prisoners. *Forum Corrections Res.*, *4*(3), 1- 19.

Hall, G. C. N. (1995). Sexual offender recidivism revisited: A meta-analysis of recent treatment studies. *Journal of Consulting and Clinical Psychology*, *63*, 802–809.

Hanson, R. K., Bourgon, G., Helmus, L., & Hodgson, S. (2009). The principles of effective correctional treatment also apply to sexual offenders: A meta-analysis. *Criminal Justice and Behavior, 36*(9), 865–891. doi:10.1177/0093854809338545.

Hanson, R. K., Gordon, A., Harris, A. J. R., Marques, J. K., Murphy, W., Quinsey, V. L., et al. (2002). First report of the Collaborative Outcome Data Project on the effectiveness of psychological treatment of sex offenders. *Sexual Abuse: A Journal of Research and Treatment*, *14*, 169-194.

Hanson, R. K., & Yates, P. M. (2013). Psychological Treatment of Sex Offenders. *Current Psychiatry Reports*, *15*(3), 348.

Hanson, R. K., & Thornton, D. (1999). *Static-99: Improving actuarial risk assessments for sex offenders* (User Report 99-02). Ottawa: Department of the Solicitor General of Canada.

Hanson, R. K., & Thornton, D. (2000). Improving risk assessments for sex offenders: A comparison of three actuarial scales. *Law and Human Behavior*, *24*, 119–136. doi:10.1023/A:10054-82921333

Harris, G. T., Rice, M. E., & Quinsey, V. L. (1998). Appraisal and management of risk in sexual aggression: Implications for criminal justice policy. *Psychology, Public Policy, and Law*, *4*, 73–115.

Howard, M. V., de Almeida Neto, A. C., & Galouzis, J. J. (2019). Relationships between treatment delivery, program attrition, and reoffending outcomes in an intensive custodial sex offender program. *Sexual Abuse*, *31*(4), 477–499. doi:10.-1177%2F1079063218764886

Kenworthy, T., Adams, C. E., Brooks-Gordon, B., & Fenton, M. (2004). *Psychological interventions for those who have sexually offended or are at risk of offending* (CD004858; Cochrane Database of Systematic Reviews, Issue 3). Chichester: John Wiley & Sons.

Kingston, D. A., Yates, P. M., & Olver, M. E. (2014). The self-regulation model of sexual offending: Intermediate outcomes and posttreatment recidivism. *Sexual Abuse*, *26*(5), 429-449. doi:10.1177/1079063213495896.

Knight, R. A., & Prentky, R. A. (1990). Classifying sexual offenders: The development and corroboration of taxonomic models. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *Handbook of sexual assault: Issue, theories, and treatment of the offender*, New York, NY: Plenum Press, 23–52.

Kupers, T. (1999). *Prison Madness: the mental health crisis behind bars and what we must do about it*. San Francisco: Jossey-Bass Publishers.

Langstrom, N., Sjstedt, G., & Grann, M. (2004). Psychiatric disorders and recidivism in sexual offenders. *Sexual Abuse: A Journal of Research and Treatment*, *16* (2), 139–150.

Laws, D. R., Hudson, S. M., & Ward, T. (2000). *Remaking relapse prevention with sex offenders: A source book*. Thousand Oaks, CA: SAGE.

Levenson, J. S. (2004). Reliability of sexually violent predator civil commitment criteria. *Law and Human Behavior*, *28*, 357–368.

Lösel, F., & Schmucker, M. (2005). The effectiveness of treatment for sexual offenders: A comprehensive meta-analysis. *Journal of Experimental Criminology*, *1*, 117–146.

Marshall, W. L. (2007). Diagnostic issue, multiple paraphilias, and comorbid disorders in sexual offenders: Their incidence and treatment. *Aggression and Violent Behavior*, 16–35.

Marshall, W. L., Anderson, D., & Fernandez, Y. (1999). *Cognitive behavioural treatment of sexual offenders*. John Wiley & Sons.

Mazza, C., Burla, F., Verrocchio, M.C., Marchetti, D., Di Domenico, A., Ferracuti, S., & Roma, P. (2019). MMPI-2-RF profiles in child custody litigants. *Frontiers in Psychiatry*, 10. https://doi.org/10.3389/fpsyt.2019.00725.

Mazza, C., Monaro, M., Orrù, G., Colasanti, M., Ferracuti, S., Burla, F., et al. (2020). Introducing machine learning to detect personality faking-good in a male sample: a new model based on Minnesota multiphasic personality inventory-2 restructured form scales and reaction times. *Front Psychiatry, 10* (389). doi: 10.3389/fpsyt.2019.00389

Mazza, C., Monaro, M., Burla, F., Colasanti, M., Orrù, G., Ferracuti, S., & Roma, P. (2020). Use of mouse-tracking software to detect faking-good behavior on personality questionnaires: An explorative study. *Scientific Report*, 10, 4835. doi.org/-10.1038/s41598-020-61636-5.

Mazza, C., Orrù, G., Burla, F., Monaro, M., Ferracuti, S., Colasanti, M., et al. (2019c) Indicators to distinguish symptom accentuators from symptom producers in individuals with a diagnosed adjustment disorder: A pilot study on inconsistency subtypes using SIMS and MMPI-2-RF. *PLoS ONE, 14*(12), e0227113. https://doi.org/10.1371/journal.pone.0227113

McAlinden, A.-M. (2012). The governance of sexual offending across Europe: Penal policies, political economies and the institutionalization of risk. *Punishment & Society, 14*, 166–192.

Moher, D., Shamseer, L., Clarke, M., Ghersi, D., Liberati, A., Petticrew, M., et al. (2015). Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. *Systematic Reviews*, *4*(1). doi:10.1186/2046-40 53-4-1.

Nicholaichuk, T. P., Gordon, A., Gu, D., & Wong, S. (2000). Outcome of an institutional sexual offender treatment program: A comparison between treated and matched untreated offenders. *Sexual Abuse: A Journal of Research and Treatment, 12*, 139–153.

Nuffield, J. (1982). *Parole decision-making in Canada: Research towards decision guidelines*. Ottawa: Solicitor General of Canada.

Olver, M. E., Marshall, L. E., Marshall, W. L., & Nicholaichuk, T. P. (2018). A long-term outcome assessment of the effects on subsequent reoffense rates of a prison-based CBT/RNR sex offender treatment program with strength-based elements. *Sexual Abuse*, 1–27. doi:10.1177/1079063218807486

Olver, M. E., Nicholaichuk, T. P., Gu, D., & Wong, S. C. (2013). Sex offender treatment outcome, actuarial risk, and the aging sex offender in Canadian corrections: A long-term follow-up. *Sexual Abuse*, *25*(4), 396–422. doi:10.1177%2F10790632-12464399

Olver, M. E., Wong, S. C. P., Nicholaichuk, T. P., & Gordon, A. E. (2007). The validity and reliability of the Violence Risk Scale-Sexual Offender version: Assessing sex offender risk and evaluating therapeutic change. *Psychological Assessment, 19*, 318-329.

Olver, M. E., Wong, S. C., & Nicholaichuk, T. P. (2009). Outcome evaluation of a high-intensity inpatient sex offender treatment program. *Journal of Interpersonal Violence*, *24*(3), 522–536. doi:10.1177%2F0886260508317196

Orrù, G., Mazza, C., Monaro, M., Ferracuti, S., Sartori, G., & Roma, P. (2020). *The Development of a Short Version of the SIMS Using Machine Learning to Detect Feigning in Forensic Assessment. Psychological Injury and Law*. https://doi.org/10.1007/s12207-020-09389-4.

Osborn, L. (2007). *Sex offender treatment programs in correctional settings. Participant selection, treatment experience and treatment completion*. New York, NY: LFB Scholarly Publishing.

Petruccelli, I., Pedata, L. T., & Simonelli, C. (2008). *The author of sexual offenses: Assessment, treatment and prevention of recidivism*. Milano: Franco Angeli.

Reitzel, L. R., & Carbonell, J. L. (2006). The effectiveness of sexual offender treatment for juveniles as measured by recidivism: A meta-analysis. *Sexual Abuse: A Journal of Research and Treatment, 18*(4), 401–421. doi:10.1177/107906320601800407

Rice, M. E., & Harris, G. T. (2003). The size and sign of treatment effects in sex offender therapy. *Annals of the New York Academy of Sciences, 989*, 428–440.

Roma, P., Giromini, L., Burla, F., Ferracuti, S., Viglione, D. J., & Mazza, C. (2020). Ecological Validity of the Inventory of Problems-29 (IOP-29): An Italian Study of Court-Ordered, Psychological Injury Evaluations Using the Structured Inventory of Malingered Symptomatology (SIMS) as Criterion Variable. *Psychological Injury and Law*, 1-9.

Roma, P., Marchetti, D., Mazza, C., Burla, F., & Verrocchio, M. C. (2020). MMPI-2 Profiles of Mothers Engaged in Parental Alienation. *Journal of Family Issues*. https://doi.org/10.1177/-0192513X20918393

Roma, P., Mazza, C., Ferracuti, G., Cinti, M.E., Ferracuti, S., Burla, F. (2019). Drinking and driving relapse: data from BAC and MMPI-2. *PLoS One, 14* (1), e0209116. doi: 10.1371/journal.pone.0209116

Roma, P., Mazza, C., Mammarella, S., Mantovani, B., Mandarelli, G., Ferracuti, S. (2019b). Faking-good behavior in self-favorable scales of the MMPI-2: a study with time pressure. *Eur J Psychol Assess,* 1–9. doi: 10.1027/1015-5759/a000511

Roma, P., Piccinni, E., & Ferracuti, S. (2016). Using MMPI-2 in forensic assessment. *Rassegna Italiana di Criminologia*, *10*(2), 116-122.

Roma, P., Pompili, M., Lester, D., Girardi, P., & Ferracuti, S. (2013). Incremental conditions of isolation as a predictor of suicide in prisoners. *Forensic Science International*, *233* (1-3), 1-2.

Roma, P., Pazzelli, F., Pompili, M., Girardi, P., & Ferracuti, S. (2013). Shibari: Double hanging during consensual sexual asphyxia. *Archives of Sexual Behavior, 42*(5), 895-900. https://doi-org.ezproxy.uniroma1.it/10.1007/s10508-012-0035-3

Roma, P., Ricci, F., Kotzalidis, G.D., Abbate, L., Lavadera, A.L., Versace, G., et al. (2014). MMPI-2 in child custody litigation: a comparison between genders. *Eur J Psychol Assess, 30* (2), 110–6. doi: 10.1027/1015-5759/a000192

Roma, P., Verrocchio, M.C., Mazza, C., Marchetti, D., Burla, F., Cinti, M.E., et al. (2018) Could time detect a faking-good attitude? A study with the MMPI-2-RF. *Front Psychol, 9* (1064). doi: 10.3389/fpsyg.2018.01064

Schmucker, M., & Lösel, F. (2008). Does sexual offender treatment work? A systematic review of outcome evaluations. *Psicothema*, *20*(1), 10-19.

Schmucker, M., & Lösel, F. (2015). The effects of sexual offender treatment on recidivism: An international meta-analysis of sound quality evaluations. *Journal of Experimental Criminology*, *11*(4), 597–630. doi:10.1007/s11292-015-9241-z

Serin, R. C., Kennedy, S. M., & Mailloux, D. L. (2005). *Manual for the Treatment Readiness, Responsivity, and Gain Scale: Short Version* (TRRG:SV). Ottawa: Carleton University.

Shamseer, L., Moher, D., Clarke, M., Ghersi, D., Liberati, A., Petticrew, M., et al. (2015). Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015: Elaboration and explanation. *British Medical Journal*, *349*. doi:10.1136/bmj.g7647

Skegg, K., & Cox, B. (1991). Impact of psychiatric services on prison suicide. *The Lancet*, *338* (8780), 1436-1438.

Smid, W. J., Kamphuis, J. H., Wever, E. C., & Van Beek, D. J. (2016). A quasi-experimental evaluation of high-intensity inpatient sex offender treatment in the Netherlands. *Sexual Abuse*, *28*(5), 469–485. doi:10.1177/1079063214535817

Sowden, J. N., & Olver, M. E. (2017). Sexual offender treatment readiness, responsivity, and change: Linkages to treatment completion and recidivism. *Journal of Forensic Nursing*, *13*(3), 97–108. doi:10.1097/JFN.0000000000000160.

Yates, P. M., Goguen, B. C., Nicholaichuk, T. P., Williams, S. M., & Long, C. A. (2000). *National sex offender programs*. Ottawa: Correctional Service of Canada.

Yates, P. M. (2003). Treatment of adult sexual offenders: A therapeutic cognitive-behavioural model of intervention. *Journal of Child Sexual Abuse, 12*(3-4), 195-232.