

RASSEGNA ITALIANA DI CRIMINOLOGIA

ANNO XVI N.3 2022



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Singolo fascicolo € 25,00

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Le richieste d'abbonamento vanno indirizzate a:
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La rivista può essere acquistata nella sezione
e-commerce del sito www.pensamultimedia.it
ed è consultabile in rete all'indirizzo web
www.rassegnaitalianadicriminologia.it

Le richieste per inserzioni pubblicitarie vanno indirizzate a
Pensa MultiMedia Editore s.r.l.
Via A.M. Caprioli, n. 8 - 73100 Lecce - Tel. 0832 230435
e-mail: info@pensamultimedia.it - www.pensamultimedia.it

Stampa e grafica di copertina
Gioffreda per Pensa MultiMedia
Impaginazione ed editing Pensa MultiMedia

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C.C.I.A. 241468

Iscritta al Registro degli Operatori di Comunicazione al n. 11735

Registrazione presso il Tribunale di Milano n. 522

Finito di stampare nel mese di settembre 2022

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Pensa MultiMedia Editore s.r.l.

73100 Lecce – Via A.M. Caprioli, 8

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OPEN  ACCESS

Double blind peer review

How to cite this article: Konopelskyi V. et alii (2022). Procedure and conditions of life executing punishment: essence and tendencies of reform in criminal executive legislation of Ukraine. *Rassegna Italiana di Criminologia*, XVI, 3, 177-188. <https://doi.org/10.7347/RIC-032022-p177>

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Received: 25.03.2022

Accepted: 03.06.2022

Published: 22.12.2022

Pensa MultiMedia
ISSN 1121-1717 (print)
ISSN 2240-8053 (on line)
[doi10.7347/RIC-032022-p177](https://doi.org/10.7347/RIC-032022-p177)

Abstract

The article is devoted to the consideration of essence and tendencies of reforming the criminal-executive legislation of Ukraine concerning the procedure and execution and serving life imprisonment conditions. Certain debatable provisions, both theoretical and legal, concerning procedure and conditions of life service executing punishment are considered. In particular, attention is paid to the problems of legal nature and objectives of life imprisonment, priority of aims and opportunities to achieve correction (resocialization) of convicts, appropriate legal mechanism (tools) that would prevent irreversible negative changes in convict's personality, which occurs under the influence of indefinite isolation. Particular attention is paid to the analysis of more specific problems related to criminal-executive criteria for the perception of life imprisonment as subspecies of imprisonment for a certain period; systemic content ratio of general penitentiary norms, which determine the legal status of convicts sentenced to life imprisonment, and special ones, which should reproduce peculiarities of regime requirements of penitentiary institutions of different security levels (in particular, medium and maximum). It is proved that clarity, completeness and system-legal balance will be facilitated by the formal reproduction in the law of classification of all criminal-executive norms of Chapter 22 of the Criminal Executive Code (hereinafter—CEC) (based on a certain criterion) into norms of general and special significance, which in turn should be divided into the following subtypes. General penitentiary provisions, which determine the initial legal status of persons sentenced to life imprisonment, provide a list and features of the rights, legitimate interests, responsibilities of convicts, ways (mechanism) to comply with safe conditions of detention, etc. General penitentiary provisions, which define the basic principles for implementation of changes in detention conditions during execution and serving a sentence (essence, tasks, forms, general requirements for material grounds for application, procedural issues of progressive system implementation, definition of disciplinary system). Particular attention to specific characteristics on the gender basis is determined, inter alia, by different levels of security of institutions where punishment takes place, and accordingly by different procedures and conditions of detention, the legal status of convicts.

Keywords: execution, serving, life imprisonment, criminal-executive legislation, punishment, imprisonment for a definite term, tendencies, resocialization, reforming

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Procedure and conditions of life executing punishment: essence and tendencies of reform in criminal executive legislation of Ukraine

Introduction

Life imprisonment is a new type of punishment for the criminal legislation of Ukraine, which should, on the one hand, provide preventive functions of the death penalty (severe punishment, fear), the application of which was imposed in Ukraine in 2000, and subsequently decided by the legislator on exclusion from the current system of criminal penalties, and on the other hand, is one of the types of criminal penalties, the purpose of which is not only punishment, but also correction and re-socialization of convicted person. The dualism of this type of punishment, when against the background of the prevailing importance of its punitive nature and content is the problem of forming a positive attitude to the executive regime and serving a sentence, motivation to achieve positive results while serving a sentence - is reproduced in complexity and multifaceted understanding of its legal nature imprisonment for a specified period.

It is practically generally accepted that the decision on whether life imprisonment is a subtype of imprisonment for a definite term, or whether it is a self-sufficient, specific content of the main punishment - depends on the criteria underlying the interpretation of a significant amount of criminal law factors and criminal-executive nature.

Among the latest issues are the peculiarities of the functioning of institutions for the execution of this most severe type of punishment, assessment of their ability to achieve in the process of executive purposes of punishment (correction, resocialization), search for effective legal mechanisms and tools to neutralize significant adverse effects of indefinite isolation physical and mental condition. On the background of state policy reorientation in the field of punishment execution in the direction of increasing attention to the convicts' rights and legitimate interests, the incentive social and legal penitentiary institute changes the detention conditions, depending on the sentence and the degree of correction.

In one of the historical shortcomings of the correctional labor (criminal-executive) legislation is the problem of inadequate level of systemic and consistent criminal-executive norms in terms of regulating changes in order of convicts' detention for a certain period, inadequate level of reproduction of theoretical research's results and practice requirements in this area - scientists' attention should be focused on clarifying this situation in relation to life imprisonment (Reznik et al., 2020).

Relatively insignificant term of validity of this type of punishment, absence of holistic theoretical and legal concepts of understanding the place and importance of life

imprisonment in the general system of punishment make this problem relevant.

The legal basis for defining and understanding further ways to improve criminal enforcement legislation in this area should be an approach according to which each specific area of the same (identical) criminal enforcement relations should be governed by a set of similar criminal enforcement rules. Ensuring the rights and legitimate interests of convicts in the field of life imprisonment requires a new approach to codification of legal provisions on the separation basis, systematization according to certain criteria (sequence, relationship, nature of content) in accordance with legal requirements and theoretical research.

Scientific research of domestic legislative and law enforcement practice on implementation of life imprisonment proves that the essence and tendencies' problems of reforming of the criminal-executive legislation of Ukraine in this area are reproduction of scientific discussion results on many issues.

Thus, the problems of legal nature and objectives of life imprisonment, the priority of aims and opportunities to achieve convicts' correction (resocialization), appropriate legal mechanism (tools) that would prevent irreversible negative changes in the convict's personality, which occurs under the influence of indefinite isolation are the components of scientific publications T.V. Duyunova (2014), N.V. Kolomiets (2018), V. Korotayev (2020), L.O. Mostepanyuk (2005), Yu.A. Ponomarenko (2009), V.P. Sevostyanov (2006), S.I. Skokov (2005) and O.I. Frolov (2005).

Determining the appropriate amount of restrictions, which reproduces the severity of life imprisonment; proving the possibilities and forms of changes in the legal status of a person sentenced to this type of punishment; formulation of formal and material basis for such changes; substantiation of possibilities of projection of essence and forms (stages) of progressive system of execution and serving of punishment concerning convicts who are in long isolation, on practice of realization of life imprisonment, etc., - are not possible without taking into account scientific positions of such scientists as A.P. Gel, T.I. Gorbachevska (2019), O.P. Horpynyuk (2020), O.A. Hrytenko (2015) etc., who mainly considered these issues in relation to imprisonment for a definite term.

The peculiarity of doctrinal sources of criminal and criminal-executive law on the problems of life imprisonment is that most publications have as their component an analysis of various factors of socio-demographic, legal, international and psychophysical nature on feasibility (inexpediency) of determining at the legislative level to persons sentenced to life imprisonment, Art. 81 and 82 of

the Criminal Code, which determine the criminal law grounds for the application of parole institutions and commutation of punishment to another milder one. A typical approach is to consider this problem against the background of peculiarities of the purpose of correction and re-socialization of convicts sentenced to life imprisonment, and accordingly, as the introduction of quite promising final stages of changing the conditions of life imprisonment while serving a court sentence. As criteria that should be the basis for a positive decision of the legislator, scientists (T.I. Gorbachevska (2019), O.P. Horpynyuk (2020), O.M. Kabanov (2018), V. Korotayev (2020), N.V. Kolomiets (2018), A.Kh. Lazebna (2019), Y.A. Ponomarenko (2009)) define provisions different in its socio-legal significance: the content of international legal standards and international legal experience; the level ratio of moral suffering of convicted person and torture essence, inhuman treatment; opportunities to achieve the punishment aim; the importance of changes in the legal status in achieving the correction aim and resocialization, etc.

Finally, the analysis included research on degree and nature of the impact of socio-demographic and psychophysical characteristics of convicts on order and conditions of execution and serving sentences, the essence of which lies in significant isolation from society with regard to men and women, the degree and nature of changes dependence in the detention conditions during the execution of this punishment on gender characteristics are practically unexplored. Thus, the doctrine defines the rights of regularity in relation to the significant relationship between gender and effectiveness of the execution of imprisonment (V.A. Badyra 2009; O.A. Hrytenko, et al., 2015) is the basis for further research in terms of determining the special criminal-executive rules governing life imprisonment.

Materials and Methods

Chosen by us methodological approach to the interpretation of identified source data, certain indicators and information was to help solve a specific problem – to determine the nature, tendencies and shortcomings of reforming the criminal executive legislation of Ukraine in terms of determining the order (conditions) of execution and serving a life sentence. The scope of execution of punishment in the form of life imprisonment is regulated by Art. 150, 151, 151-1, 151-2 of Chapter 22, Section IV of the CEC of Ukraine. Relevant legislation has changed several times (in 2006, 2010, 2013, 2016). The changes were reproduced not only in another version of certain articles, but also in the formulation of new criminal executive norms.

The corresponding structure of criminal-executive law and legislation enhances the importance of general theoretical methods of system-legal (comparative-legal) and historical-comparative (retrospective) analysis. It is gener-

ally accepted that the observance of theoretical principles of legislation systematization, types and nature of relations between legal norms (of one or different law branches), systematic harmonization of content and essence of general and special norms, continuity of law, etc. – contribute to unity and correct interpretation of law norms.

Attaching special importance to the impact of proper systematization of the Criminal Executive Code of Ukraine on the quality of their interpretation and, accordingly, on law enforcement in the field of execution and serving a sentence of life imprisonment, - considered it necessary to analyze the content and essence of those rules that directly were contained in these structural units, as well as those related to regulation of imprisonment for a certain period and indirectly reproduced both the positive achievements and shortcomings of the current criminal-executive legislation on life imprisonment. The results were obtained on the basis of the analysis at two levels: historical – from the standpoint of determining the continuity of criminal executive legislation and the nature of persistent problems; modern – from the standpoint of determining promising areas for further improvement of existing legislation.

The theoretical basis in the research of the problem identified by the authors are doctrinal sources (doctrinal conceptual provisions) on certain aspects of the state and areas of solving persistent problems of the most severe type of criminal punishment, which is life imprisonment. The use of these sources allowed not only to determine the current problems of criminal executive legislation in this area, with the peculiarities of the continuity of legal provisions, but also to form their own vision of trends in further reform of criminal executive legislation of Ukraine.

Results

In view of the fact that the CEC of Ukraine has undergone repeated changes since its entry into force in 2004 and to date in terms of determining procedure and conditions of execution and serving a sentence of life imprisonment, the nature and direction of these changes becomes relevant. It is important to what extent these changes reproduced the substantive, substantive and systemic patterns of the relationship between the legal norms of Section IV of the CEC, as well as between them and other penitentiary provisions, in particular those governing the execution and serving of imprisonment for a certain period.

The answers to these questions include an appeal to the analysis of more specific problems related to criminal-executive grounds (criteria) for the perception of life imprisonment as a subspecies of imprisonment for a certain period; systemic ratio of the content of general penitentiary norms, which determine the legal status of persons sentenced to life imprisonment, and special ones, which should reproduce the peculiarities of regime requirements of penitentiary institutions of different levels of security

(in particular, medium and maximum); the presence (absence) of systematization of legal provisions on application regulation of changes in detention's conditions of convicts while serving their sentences for general and special ones; the reproduction state in the criminal-executive provisions of socio-demographic and psychophysical properties of convicts; identification of content and characteristics of life imprisonment's implementation for different categories of convicts: males and females.

The general penitentiary provisions governing the execution and serving of life imprisonment should be analyzed at two levels: as relating to the previous legal status of convicts, which is established and must accompany them from the first day of serving the sentence; and general provisions concerning changes in the conditions of detention of lifers, regardless of their gender.

Regarding the first group of criminal-executive legal norms: their content and essence are reproduced first of all in Art 151 of the CEC «Procedure and conditions of execution and serving life imprisonment». This article is an integral and main component of Chapter 22 with the same title since the entry into force of the CEC in 2004 (from January 1, 2004) to the present day (Criminal Executive Code of Ukraine, 2021). Contents of Art 151 of the Criminal Procedure Code should be considered as provisions of general importance, as they apply to all convicts sentenced to life imprisonment, regardless of gender. They reproduce the features and specificity of initial legal status of convicts to the most severe type of punishment.

At the time of the CPC's entry into force, these provisions referred to the grounds for keeping a convict in solitary confinement (protection against encroachments by other convicts, prevention of committing a new crime, on medical grounds); fixed the fact that those sentenced to life imprisonment is subject to Art. 107 of the CEC, which determines the list of rights and obligations of persons sentenced to imprisonment for a certain term; determined the procedure for recruitment, secondary education, the amount of money that convicts had to spend on food and basic necessities (as at that time, up to 50% of the minimum wage earned in the colony), the number of short-term visits (two on year; long-term not provided), care packages, parcels (respectively, two per year), the duration of the daily walk (one hour).

In the future without losing its significance, as a rule of a general nature, the provisions of Art. 151 CEC have undergone qualitative changes, clarifications and additions. First, the legal status of convicts, which is established from the first day of their stay in the institution, in terms of financial costs, has undergone significant humanization. From now on, the amount of money that a convict can spend on food, clothing, shoes, linen, basic necessities is not limited. In addition, it does not matter whether these funds are earned, or received by transfer, and so on.

Secondly, the granting of the right to a monthly short-term visit and six long-term visits testify to the fact that the legislator attaches special importance to the convict's

social ties, especially with his immediate surroundings (relatives and friends), which meets international legal standards of detention imprisonment of any person.

In general, the fact that a significant improvement in custody conditions of persons sentenced to life imprisonment occurred as a logical extension of the reform of procedure and conditions of imprisonment, as well as the fact that the list of rights and responsibilities of persons sentenced to life imprisonment a certain period provided for in Art. 107 of the CEC, also applies to persons sentenced to life imprisonment – testified in favor of perception of punishment type in question as a subspecies of imprisonment as such. This conclusion, due to the reforming tendencies of the criminal-executive legislation, is essential against the background of prolonging the scientific discussion on determining the legal nature of life imprisonment and its relationship with imprisonment for a certain period (Mostepanyuk, 2005; Ponomarenko, 2009). The attitude to the considered type of punishment as to a kind of imprisonment for a certain term will allow finding that real mechanism (tools) of achievement of the correction purpose and resocialization of the most dangerous category of convicts.

Regarding the second group of criminal-executive legal norms, in general, in the previous (initial) version of the content of Art 150 and Art 151 of the CEC of Chapter 22 (Criminal Executive Code of Ukraine, 2021) did not contain provisions that would indicate the general grounds and procedure for changing the conditions of detention of convicts, depending on the term served and the of convict's conduct. There is one exception. The only norm that could be considered as concerning the system of introducing improved conditions of detention for life imprisonment was Part 6 of Art. 151 of the Criminal Procedure Code, which stated that with conscientious conduct and attitude to work after serving ten years, convicts were allowed to spend an additional month's money in the amount of 20% of the minimum wage - which could be seen as part of a progressive system of execution (serving) the type of punishment in question.

Therefore, in cases where law enforcement raised questions about the specifics of implementing any changes in life imprisonment, a comprehensive systemic interpretation of the provisions of Chapter 22 with general provisions on changes in the execution of imprisonment should have been carried out. for a certain period (Chapter 15 of the CEC). This concerned the types of changes in the conditions of serving a sentence, the procedure for documenting such changes (Article 100 of the CEC); material and formal grounds for application of such changes, and hence the grounds for application of a progressive system of execution and serving a sentence in the form of imprisonment (Article 101 of the CEC). However, these rules did not mention life imprisonment at all. So the questions remained unanswered.

A positive trend in the reform of criminal-executive legislation was that the structural component of changes it underwent was the deepening and clarification of the

content of those provisions that contained general requirements for the procedure, basis for changing the conditions of life imprisonment. This was reproduced in the formulation of new criminal executive norms contained in Art. 151-1 of the CEC «Changing the custody conditions of convicts sentenced to life imprisonment» (Criminal Executive Code of Ukraine, 2019). These include the provisions set out in Part 1 and Part 4 of Article 151-1 of the CEC. Part 1 with reference to Art 100 of the CEC specifies the types of changes in detention conditions (within one institution, by transfer to another institution) and features of documentation and coordination of the implementation of these types of transfer, and therefore changes in detention conditions while serving a life sentence. Part 4 formulates a general exception, which applies to patients with sexually transmitted diseases, the active form of tuberculosis, mental disorders. The change of detention conditions does not apply to these convicts.

However, if we consider the content of the above criminal-executive legal norms as provisions of general importance concerning any person sentenced to life imprisonment, determine the general initial legal status of the convicted person (Article 151 of the CEC) and determine the general provisions for implementing changes serving a sentence of life imprisonment (Article 151-1 of the CEC) – we must recognize that some of them do not meet this criterion. In particular, this applies to those allegations that it is necessary to keep convicts at the beginning of serving two sentences in a cell, the formal and material grounds for granting the right to participate in group events of educational, cultural and physical culture and health (Part 1, 6 Article 151 of the CEC). The ratio of the content and essence of these provisions with the provisions contained in Part 2 and 3 of Art. 151-1 of the CEC (formal and material grounds for transferring men from double to multi-bed premises organised as cells (hereinafter – POC), then to ordinary living quarters; transfer in the order of recovery from ordinary living quarters to POC, maximum security colony) proves that this should apply only to men. Accordingly, the latter also proves that this norm contains both special rules concerning purely men and general ones (as discussed above). Therefore, it does not meet the requirements of systematization of the norms of Chapter 22 of the CEC into general and special on the procedure for applying changes in the execution of punishment.

In our opinion, this state of affairs should be corrected towards a clearer systematization of the relevant criminal-executive provisions into legal norms of general and special significance. The theory of criminal and criminal-executive law proves that clearer codification promotes high-quality law enforcement. And the main factor in the expediency of distinguishing general provisions has always been the strengthening of the importance of the basic principles, which reproduced the features and characteristics of the tasks of a particular legal institution, its essence, form and basis of application. Accordingly, in view of the research study, such an approach requires the

formulation of criminal-executive norms in terms of determining the basic principles of such penitentiary institutions as the initial legal status of a person sentenced to life imprisonment (list and features of rights, legitimate interests, responsibilities), and changes in the detention conditions during the execution and serving of the sentence (essence, tasks, forms, general requirements for the grounds of application, procedural issues of implementation of the progressive system).

Another factor that leads to a more in-depth codification of the legal norms of Chapter 22 of the CEC on the principle of division into general and special is the need to reproduce in criminal-executive provisions psychophysical and socio-demographic differences between convicts sentenced to life imprisonment.

The problem of determining the appropriate relationship between the nature and degree of public danger of the act, the characteristics of the individual who committed it and the amount of state coercion is constant. To date, the search for the minimum necessary amount of restrictions, order and conditions of punishment execution, treatment of convicts, which can cause only moral suffering and distress, which will contribute to early correction and will not lead to severe mental states (frustration). This increases the importance of seeking legal remedies that can prevent and neutralize the negative consequences of serving the most severe sentence of life imprisonment.

Of particular note is the fact that the essence, purpose (purpose) of the most severe punishment in the form of life imprisonment, the peculiarities of its implementation should be considered against the background of the significant evolution of international legal system of human protection, life, health, dignity, proof not only the need to provide conditions for the convict's life as a human, but also to create a system of preventive criminal-lawful and criminal-executive measures that should neutralize the significant negative impact of indefinite detention on convict's physical and mental condition (Horbaches ka, 2019; On Amendments to Certain Legislative Acts..., 2017; Frolov, 2005; Yatsishin, 2015).

It should be assumed that any punishment is a certain deprivation and restriction, and hence personal discomfort, which has a significant negative impact on physical and mental condition of the convicted. The degree of restriction corresponds to the danger of the act and is reproduced in the severity of punishment. Life imprisonment is the most severe punishment and, accordingly, causes significant personal suffering. However, the criteria for defining treatment and punishment as inhuman as causing suffering are purely subjective, often depending on circumstances: convict's age, state of health, gender. Regarding the last criterion, it is generally accepted that expression degree of feelings of fear, depression, inferiority, perception of certain regime conditions as humiliation depends on gender. There is a different perception by convicted women and men of the procedure and conditions of serving a sentence of imprisonment.

The fact that forced isolation, which is the main

essence of imprisonment for a certain period and life imprisonment, has a more detrimental effect on convicted women, proves the results of many special studies, which deal with the significant interdependence between psychophysiological characteristics of women, their health and nature of its perception of legal regime restrictions; the convict has a high level of psychological stress, accumulation of negative emotions and aggression; faster process of loss of individuality by women and acquisition of degradation signs, psychological disorders, psychopathic manifestations; a greater degree of disintegration of socially useful ties (one and a half times, compared to men), which significantly affects the process of their correction and resocialization (Badyra & Denisova, 2009; Hrytenko, 2015; Merkulova, 2003).

Moreover, all this applies to life imprisonment, given the stricter conditions and procedure for keeping convicts in solitary confinement. And since the result of scientific research is a constant and constant reform of current criminal-executive legislation of Ukraine in the direction of increasing differences in the legal status (in terms of restrictions) of women and men serving a term of imprisonment, such a trend should be extended to the specifics of reform current criminal-executive legislation on execution and serving a sentence of life imprisonment.

We are prompted to such a conclusion by the appeal results to certain statistical data, the peculiarities of the coverage of this issue in the doctrine of law, and mainly by the results of appeal to the system-comparative analysis of current criminal-executive legislation.

Thus, if during the entire period of imprisonment in Ukraine the court decided to apply it to approximately two thousand people, for women this type of punishment was applied only 24 times. As of January 1, 2020, 23 convicted women were kept in the Kachanivska correctional colony of the minimum level of security with general conditions of detention No. 54 (Kharkiv region) in the sector of the average level of security (Buhaychuk & Isakov, 2015; Criminal-executive system of Ukraine, 2019). Against the background of the total number of persons sentenced to life imprisonment, this is a rather small percentage (1.5%).

It is on this basis and taking into account that most particularly serious acts are committed by women in response to violence against them, and the practice of life imprisonment will require quite significant reform in 2015 and 2019, bills were initiated to abolish life imprisonment for women (Korotayev, 2020). According to some, Ukraine is the only post-Soviet country where life imprisonment is still applied to women (Lazebna, 2019). Adherence to the principle of equality and legality in criminal justice calls into question the appropriateness of such a decision. However, it is these principles that determine the need to respect the natural rights and interests of women, their sexual, social and psychophysical characteristics during the execution of the most severe punishment.

We must also pay attention to certain features of the

doctrine in terms of analysis of these issues. In the first comments to the criminal-executive legislation since the entry into force of the practice of life imprisonment (2001-2005), scientific publications of the same time or no emphasis at all on the peculiarities of execution (serving) of this punishment for women, or analyzed by laws. In particular, it was stated that according to the Rules of Procedure of penitentiary institutions, handcuffs and a dog handler with a service dog were not used against women in case of removal from the cells and their escort, unlike men (Bogatyrev, 2008).

Some researches only made superficial remarks that neither the Chapter 21, which deals with the specifics of serving a sentence of imprisonment for women, nor Chapter 22, which regulates the execution of life imprisonment, contains any specific provisions on the specifics of implementation of life imprisonment for such a special category of convicts as women. Accordingly, it was concluded that the criminal-executive legislation is deprived of certain stimulating properties for them (Buhaychuk & Isakov, 2015; Sevostyanov, 2006).

In others, rather strict proposals were made on options for a gradual change in detention conditions of women sentenced to life imprisonment. In particular, it was proposed to keep them at the initial stage in cell-type premises in medium security correctional facility, and after being in isolation for at least three years to apply transfer to ordinary living quarters of this correctional colony (Skokov, 2005).

We should single out another group of studies in which proposals for changes during the execution (serving) of life imprisonment were considered regardless of gender. This means that the author did not specify whether the proposals apply to all convicts or only men.

Thus, in a special scientific research on peculiarities of implementation of life imprisonment L.O. Mostepanyuk suggested that the fact of positive results of correction and serving at least 15 and 20 years of imprisonment, respectively, be considered as material and formal grounds for transferring convicts from premises organised as cells to ordinary living quarters of the maximum security colony and to the medium security colony; the fact of serving 23 years of imprisonment should be considered as a formal basis for transferring convicts to a social adaptation unit. According to the author, serving 25 years of imprisonment gives the right to apply parole with the establishment of a 10-year probationary period, during which the validity of ultrasound will be checked (Mostepanyuk, 2005).

While in terms of the basis and forms of the first two stages of improving the conditions of isolation, scientists' positions mostly coincided, the views of scientists differed significantly on the vision of the final stages of the progressive system of execution and serving a life imprisonment sentence. So I.G. Bogatyrev proposed after 25 years of imprisonment to replace life imprisonment with a term of 3 to 5 years with the subsequent application of parole (Bogatyrev, 2008).

Although these proposals do not single out gender,

their content suggests that changes within the maximum security colony and by transferring from the maximum security colony to the medium security colony can only apply to men. Whereas the final stages of improving the legal status (transfer to the section of social adaptation, parole) are already of general importance.

Discussion

It should be noted that as a mandatory element of the progressive system (its final stage), the vast majority of authors consider the possibility of applying to persons sentenced to life imprisonment, parole. In view of the research subject, namely the emphasis on the positive and negative results of long-term reform of criminal law in Ukraine in this area – we do not intend to dwell on this issue.

However, it should be noted that the experience of some foreign countries has the practice of applying to persons sentenced to life imprisonment, parole, which could be implemented in our domestic legislation. In particular, we propose to analyze the procedure for applying parole in Austria, England, Spain, Poland, Germany, Switzerland, the Republic of Latvia, the Republic of Latvia, and Estonia.

The criminal laws of the countries in which this release mechanism is integrated into the legal system deal differently with the issue of minimum term of imprisonment and the conditions of such release. Thus, according to the current version of the relevant articles of the Criminal Code of Poland, a convict may be released from life imprisonment after serving 25 years (§3 of Article 78 of the Criminal Code of Poland), provided that he/she has achieved their correction and will not commit new crimes in the future. Article 77 of the Criminal Code of Poland) (Skokov, 2002). Except the general minimum term of 25 years, in § 2 of Art. 78 of the Criminal Code of Poland it is provided the possibility of increasing the minimum term by a court decision in particularly justified cases. At the same time, the law does not disclose the meaning of the term «especially justified cases», nor does it define the maximum allowable limits of such an increase, and therefore in practice it may be equal to 30, 35 or even 40 years. After the release of the «life-long prison sentence convicted» in accordance with the current version of § 3 of Art. 80 of the Criminal Code of Poland, a probationary period of 10 years begins to emerge, during which the probation service monitors his/her behavior. In case of non-compliance with the conditions of release, the court decision is revoked, the convict returns to life imprisonment and can apply for re-release only after 5 years (Article 81 of the Criminal Code of Poland). At the same time, according to the changes provided for in the law of 13 June 2019, from January 2020 the probation period for a person released from life imprisonment may last for life (§ 3 of Article 80 of the Law on Amendments to the Criminal Code of Poland of 13 June 2019)) (Shutko, 2015).

The Criminal Justice Act of 2003 of England provides for differentiated minimum terms of parole from life imprisonment - 30, 25 or 15 years. These terms are set by the legislator for crimes committed in certain circumstances, which is provided for in Annex 21 to this law (Chovgan, 2017).

Spain, which for a long time did not provide for life imprisonment in the national system of punishments, revived this type of punishment in 2015 (Article 35 of the Criminal Code of Spain) (Pokalchuk, 2011). According to Art. 92 of the Spanish Criminal Code, early release of a «lifer» may take place after serving 25 years of the sentence, and in the case of conviction for a set of crimes, this period may be 30 years (Article 78 of the Spanish Criminal Code) (Merkulova, 2003). The court makes a decision, taking into account the convict's identity, the crime circumstances, his/her behavior during the sentence, marital status, recidivism risks, reports of administration of execution, experts' conclusions on a favorable prognosis of social reintegration. Convicted of terrorist crimes to be released from further life imprisonment must demonstrate an unequivocal renunciation of the purposes and means of terrorist activity, active cooperation with authorities to prevent the commission of other crimes by a terrorist organization, and so on. If a positive decision is made, a probationary period of 5 to 10 years is set, the favorable expiration of which depends on the dismissal of the dismissed and compliance with the established prohibitions (parts 2, 3 of Article 92 of the Spanish Criminal Code).

In Germany, a convicted person receives the prospect of parole after serving 15 years. According to § 57a of the Criminal Code of Germany, the conditions for such release from further serving of the sentence, in addition to the expiration of a certain period, are to ensure the interests of public safety and convict's consent. In addition, the mandatory condition of release is the experts' conclusions, which certify the correction of convict and the absence of risks of committing new crimes after release (Lazebna, 2019). Release from life imprisonment is conditional, because after release the probationary period begins, during which the probation service monitors the behavior of the released and performance of his/her duties determined by the court. In case of non-compliance with the conditions of release, the court decision is revoked (§ 56e of the Criminal Code of Germany).

Under Austrian criminal law, a person sentenced to life imprisonment may be released from further serving of this sentence if he/she has served at least 15 years and has reason to believe that he/she will not commit new crimes in the future (Part 6 § 46 of the Austrian Criminal Code). Such release is conditional, and the probationary period is 10 years, after which the person is finally released from life imprisonment (Part 1 of § 48 of the Criminal Code of Austria) (Djuzha et al., 2010).

Swiss criminal law provides for the possibility of releasing a life sentence from serving a sentence after serving 15 years, and for exceptional cases – after 10 years (Part 5

of Article 86 of the Swiss Criminal Code) (Bogatyrev, 2008). Exceptional circumstances include: old age, serious illness or other circumstances that indicate that person no longer poses a threat to society (Article 64c of the Swiss Criminal Code). The decision on early release is based on the forecast of convict's future behavior, taking into account his identity and other factual circumstances. A five-year probationary period is set for a person released from life imprisonment, during which the probation service monitors his / her behavior. (Article 86 of the Criminal Code of Switzerland).

Amendments were made to Art 51 of the Criminal Code of Lithuania (Law of the Republic of Lithuania No. XIII-2005 of March 21, 2019 (Kolomiets, 2018), according to which release from life imprisonment now belongs to the court powers, which may apply it at the request of the penitentiary in case of grounds for such release in the form of a set of objective and subjective circumstances specified in Art 51 of the Criminal Code of Lithuania (Abrhám et al., 2018).

According to objective factors, early release of prisoners for life is possible only after they have actually served twenty years of the sentence (Part 1 of Article 51 of the Criminal Code). In this case, if the convict commits a new intentional crime during these twenty years, the period of this term is interrupted and begins to expire again from the moment of committing a new intentional crime (Part 4 of Article 51 of the Criminal Code of Lithuania). At the same time, the term defined in Part 1 of Art. 51 of the Criminal Code of Lithuania for a period of twenty years does not indicate the automatic release of lifers from further imprisonment. To do this, the court must establish the existence of a subjective component for such release, namely to ensure the expediency and necessity of termination of punishment given the degree of probability of committing new crimes by the convict, his behavior while serving his sentence, eliminating or compensating a significant part of the damage, the efforts he makes to ensure full compensation for the damage, etc. (Part 2 of Article 51 of the Criminal Code of Lithuania). If these bases exist, the unserved part of the sentence of life imprisonment shall be replaced by imprisonment for a term of five to ten years. In this case, the term of the new milder sentence begins to expire from the moment the court decision enters into force.

The powers of the court to release from life imprisonment are determined by Art. 60, 61 of the Criminal Code of the Republic of Latvia (Korotayev, 2020) (hereinafter - the Criminal Code of Latvia), which provide several independent grounds for such dismissal. One of them is enshrined in Art. 60 of the Criminal Code and is associated with the existence of exceptional circumstances, which consist in facilitating the convict's disclosure of a crime committed by another person. The requirement for such assistance is that the crime committed by another person must be of the same gravity or more serious than the crime for which the convict is serving his / her sentence. If there are such grounds, the court replaces the imposed life im-

prisonment with imprisonment for a term of twenty years. At the same time, the Criminal Code does not contain any requirements regarding the amount of the sentence imposed by the convict for such a replacement to take place. Thus, in this case, the replacement of life imprisonment with temporary imprisonment does not depend on the convict serving a certain part of the sentence and may take place even immediately after the sentence enters into force. The peculiarity of the application of this type of release from life imprisonment is that it is unconditional, because its finality is not determined by the further behavior of the convict.

In Estonia, persons sentenced to life imprisonment may be released from serving their sentence after the expiry of a twenty-five-year term. Such dismissal belongs to the discretion of the court and may be applied if there are grounds under Part 4 of Art. 76 of the Estonian Criminal Code, namely when making such a decision, the court must take into account the crime circumstances, perpetrator's identity, behavior of the convict before and during the sentence, as well as his /her living conditions and consequences for them after release (Duyunova, 2014).

Thus, the analysis of foreign experience shows the existence of a mechanism that ensures the realization of convict's right to be released from further imprisonment on the parole basis, which should be introduced as a basis for reforming domestic legislation.

In addition, it should also be noted that issues related to the possibility of applying to persons sentenced to life imprisonment, parole, are actively discussed in special studies.

Practically every research of criminal and criminal-executive nature on life imprisonment does not avoid the question of analysis of the criteria that determine the appropriateness (or, conversely, inexpediency) of parole to persons sentenced to life imprisonment, basis and procedure for implementing this interdisciplinary institute.

The problem of legislative definition in criminal law of such possibility, formulation of formal and material basis for its application, determination of potential legal consequences of substitution by way of pardon of life imprisonment for imprisonment for at least 25 years and correlation of these consequences with parole, etc. discussions since the entry into force of the Criminal Code in 2001. Most scientists (T.I. Gorbachevska (2019), O.P. Gorpynyuk, O.M. Kabanov, V. Korotayev, N.V. Kolomiets, A.V. Lazebna, Yu.A. Ponomarenko) is focused on a positive solution to this issue (Horbaches ka, 2019; Horpynyuk, 2020; Kabanov, 2018; Korotayev, 2020; Kolomiets, 2018).

Therefore, only on the comparison basis of these doctrinal provisions can we conclude that there is a significant difference in scholars' views on appropriate system of changes in life imprisonment conditions, in general, for convicted women in particular. On the one hand, it is positive that from the first years of implementation of the new type of punishment in doctrine of criminal executive law the issue of changes in the legal status of convicts sen-

tenced to life imprisonment, the will, the nature and features of which had to be related to term of stay in isolation and positive changes in behavior (Hel, 2014).

The author's vision on expedient formal and material bases of application of detention's improved conditions, character and certain sequence of such changes was given. The importance of such research has increased, considering that even in the presence of a certain legal definition of changes in detention conditions, these changes were practically not applied in practice (Antoniuk et al., 2018). There were only a few cases, given the significant number of gaps and contradictions of legal nature, imperfection of penitentiary regulation and conceptual apparatus, absence of clear material bases for translation.

However, on the other hand, the doctrine proves that from the first years of the entry into force of criminal law provisions on introduction of a new type of punishment – life imprisonment, scientists focused mainly on the nature of changes in detention conditions for men, as it was mostly spoken on maximum security institutions for this punishment execution. In some cases, the procedure for transfer from one type of POC and another, further transfer to ordinary living quarters was analyzed in relation to convicted women, which was contrary to current legislation.

This situation in the doctrine of criminal and criminal-executive law was due to a significant number of negative factors that indicated the imperfection of criminal-executive legislation in terms of regulating the specifics of execution and serving a sentence of life imprisonment for convicted women: lack of systemic legal relationship between provisions criminal-executive norms contained in Chapter 22 and other structural parts of the CEC, vagueness and insufficient completeness of the relevant legal definitions.

If the peculiarities of execution and serving of life imprisonment concerning males were in the area of legislator's attention since the entry into force of the CEC in 2004 and were regulated directly by the provisions of Art. 150 and 151 of the Criminal Procedure Code, the relevant problems concerning convicted females, as at that time, required a rather complex analysis of the whole set of criminal-executive provisions on imprisonment as such (Criminal Executive Code of Ukraine, 2021). So only in Art. 18 of the Criminal Procedure Code "Correctional colonies" stated that women sentenced to life imprisonment, whose death penalty or life imprisonment was replaced by a term of imprisonment by pardon or amnesty, should serve their sentences in medium-security penal colonies. A common interpretation of Art. 92 of the Criminal Procedure Code "Separate Detention of Prisoners in Correctional and Correctional Institutions" provided grounds to believe that all three categories of convicted women should be kept separate and isolated from each other. Again, a common interpretation of Art. 94 of the CEC «Structural sections of correctional and educational colonies» testified in favor of the fact that within the institution of medium level of security females should

be distributed in accordance with the requirements of Art. 95-97, 99 CEC on quarantine sites, diagnostics and distribution; resocialization; enhanced control (detention in POC); social rehabilitation, as the law did not contain any exceptions to life imprisonment.

However, such a widespread approach to the interpretation of penitentiary norms, which directly regulated the peculiarities of execution and serving of a sentence of imprisonment for a certain term for convicted women, was hardly justified. The fact that at the time of the CEC's enforced in 2004 a significant number of unanswered questions about the specifics of life imprisonment for women had a significant impact on the status and quality of law enforcement. Therefore, it is natural that one of the main directions of reforming the legislation was to define these features in Chapter 22 of the CEC.

As already mentioned, the criminal-executive legislation has changed many times. And these changes, among other things, were reproduced in the formulation of a new criminal-executive norm contained in Art. 151-2 of the CEC «Peculiarities of execution and serving of punishment by women sentenced to life imprisonment» (Criminal Executive Code of Ukraine, 2019). Therefore, at first glance, the legislator eliminated the main shortcomings in terms of influencing the state of regulation of the area of demographic and criminal-executive characteristics of those sentenced to life imprisonment. However, this is not entirely true.

No less questions arise when interpreting the content of Part 2 of Art. 151-2 of the CEC, which only emphasizes that a regime is established for women to keep convicts in a medium-security correctional colony. At first glance, this is logical, given which institutions and sectors women are in. However, for men, such a thesis does not exist at all, as the main guideline is the level of security of the institution (maximum). Consequently, everything that is not prohibited by law applies to both persons sentenced to imprisonment for a certain term and those sentenced to life imprisonment. Therefore, the legislator's clarification of the type of regime for convicted women only reinforces the importance and necessity of determining the peculiarities of the of a progressive system of implementation execution and serving sentences for the considered category of women, bases and procedure for changing their conditions, given the regime of medium security. However, these issues were generally ignored by the legislator.

We believe that the extension to women of the requirements for their initial detention in double POC (since Part 1 of Article 151 does not single out the categories of convicts) is hardly appropriate. Keeping women in ordinary living quarters of the medium security sector in compliance with the general restrictions established by Art. 151 of the CEC for persons sentenced to life imprisonment will correspond to the peculiarities of their psychophysical condition. However, the penitentiary provisions need to be clarified in terms of determining the features of the initial legal status of convicted women, given the essential regime differences between the average level of security

and the maximum level of security; formulation of formal and material grounds for changing the conditions of detention, taking into account the current system of procedures and grounds for transfer from one station to another within the average level of security, etc.

Finally, several considerations regarding the appropriate interpretation of the current content of Art. Art. 150, 151, 151-1 of Chapter 22 of the CEC as such, which should relate to the peculiarities of the execution and serving life imprisonment sentence by men. Provisions relating to these features are contained in various articles of a particular chapter. In particular: in Part 1 of Art. 150 of the CEC states that men sentenced to life imprisonment serve their sentences in the maximum security sectors of the medium security penal colonies and the maximum security penal colonies; Part 2 of this article deals with the formal grounds (serving 10 years) for transfer from POC (it is not specified which type) to ordinary residential premises of the maximum level of security. Thus, in terms of content, this norm mainly applies to men, as it emphasizes a certain level of security of the institution (except for one sentence, which refers to the place of detention of women).

The requirement to place convicts in double POC and wear special clothes is in part 1 of Art. 151 of the CEC; the requirements on the material (conscientious treatment) and formal (serving 5 years) grounds for granting the right to participate in group activities of educational, cultural and physical culture and health are in Part 6 of pointed article. However, the place where these activities can take place is not specified. At first glance, this norm determines the procedure and conditions of execution and serving a sentence of life imprisonment for all convicts, regardless of gender. However, the comparison of this norm with the following article refutes this assumption.

After all, Part 2 of Art. 151-1 deals only with the formal grounds for changing the conditions of detention of convicted men within the maximum security colony: from double POC to multi-seat POC (with permission to participate in group events) - after serving at least five years of imprisonment; from multi-bed POC to ordinary living quarters - after serving at least five years of imprisonment in this type of POC, Part 3 defines the material bases (malicious violation of the order of serving) for the deterioration of the conditions of detention of the convict - transfer from ordinary residential premises to the penitentiary of the maximum security colony (however, to which type - is not specified).

So, if Parts 1, 6 of Art. 151 of the Criminal Executive Code apply to all convicts, so why in the following articles are procedural issues specific only to men who are in a maximum security institution? If our assumption is not true, then these provisions can not be contained in the norm of general importance, but require coordination with other special provisions that determine the specific procedure for implementation and serving of life imprisonment for men. The urgency of coordination is enhanced by the presence of certain contradictions,

vagueness, in some cases, the identity of the above criminal-executive legislative provisions, if they are considered purely in relation to a certain category of convicts (in particular, men). It is desirable to concentrate all these provisions in one norm, as such an approach will allow to determine more clearly the peculiarities of the legal status of convicts both at the first stage of serving the sentence and later during the application of changes in the most severe type of punishment.

Conclusions

Summarizing the above, we must emphasize the following. On the one hand, the penitentiary legislation, as amended several times, has significantly eased the conditions and procedure for the detention of lifers in accordance with the principle of humanism and international legal standards. However, on the other hand, the CEC did not acquire clarity and systemic legal balance both between the norms contained in Chapter 22 «Procedure and conditions of execution and serving a sentence of life imprisonment» and in relation to the criminal-executive provisions that regulated the procedure and conditions of execution and serving a sentence of imprisonment for a certain period. Further improvement should take place in two areas: a more in-depth systematization of criminal enforcement provisions and clarification (specification) of their content.

Recommendations

Clarity, completeness and system-legal balance will be facilitated by the formal reproduction in the law of the classification of all criminal executive norms of Chapter 22 of the CEC (on the basis of a certain criterion) into norms of general and special significance, which in turn should be divided into the following subtypes.

General penitentiary provisions, which determine the initial legal status of persons sentenced to life imprisonment, provide a list and features of the rights, legitimate interests, responsibilities of convicts, ways (mechanism) to comply with safe conditions of detention, etc. General penitentiary provisions, which define the basic principles for the implementation of changes in detention conditions during execution and serving a sentence (essence, tasks, forms, general requirements for material grounds for application, procedural issues of progressive system implementation, definition of disciplinary system).

Two subtypes of special penitentiary provisions, which provide a procedure definition and conditions of execution and serving a sentence in the form of life imprisonment, the progressive system's specifics (bases and forms of changing the custody conditions of within one penitentiary institution and by transfer to another institution) for men and women. Particular attention to specific gender characteristics is determined, among other things, by

the different levels of security of the institutions where the punishment takes place, and accordingly by the different procedures and detention conditions, the legal status of convicts.

If we are guided by the understanding that changes in the custody conditions of convicts, depending on compliance with the regime requirements, the degree of correction and the sentence are the essence of a progressive system of execution and serving a sentence of imprisonment, it is appropriate to project the current problems of criminal law execution and serving of life imprisonment. And such problems today are: clarification of convict's legal status at each stage of the person's isolation; determination of criteria for establishing the minimum necessary limits of the initial (strictest) stage of stay in the institution; compliance with the ratio of the scope of legal restrictions with the socio-demographic and psychophysical characteristics of convicted; proper reproduction of committed act gravity, antisocial guidance of the person in the requirements for formal grounds for acquiring the right to transfer to more favorable conditions of detention in the institution; taking into account the peculiarities of execution regime of punishment in the form of life imprisonment in terms of formulating requirements for the conduct and degree of correction of the convicted person as a material basis.

As a component of these problems there is a question of expediency (inexpediency) of determination of the bases and application conditions of replacement of punishment on other softer ones, conditional early release as the last final stages of progressive system of execution and serving of punishment in the form of life imprisonment. In our opinion, this problem is quite complex and multifaceted, it needs more in-depth study and solution at the criminal law level. However, the basis for further reform of criminal law should be the concept of developing tools to achieve the correction and re-socialization of convicts who are in the most severe isolation.

References

- Abrahám, J., Britchenko, I., Jankovic, M., & Garškaite-Milvydiene, K. (2018). Energy security issues in contemporary Europe. *Journal of Security and Sustainability Issues*, 7(3), 387-398. doi:10.9770/jssi.2018.7.3(1)
- Antoniuk, L., Britchenko, I., Polishchuk, Y., Rudyk, N., Sybirińska, Y., & Machashchik, P. (2018). Code of ethics for SMEs: Substantiating the necessity and willingness to implement in Ukraine. *Problems and Perspectives in Management*, 16(3), 150-162. doi:10.21511/ppm.16(3).2018.12
- Badyra, V.A., & Denisova, T.A. (2009). *Legal bases of correction and resocialization of women sentenced to imprisonment*. Zaporozhye. 168.
- Bogatyrev, I.G. (2008). *Criminal Executive Law of Ukraine*. Kyiv: Vseukrayinska asotsiatsiya vydavtsiv "Pravova yednist".
- Buhaychuk, I.A., & Isakov, P.M. (2015). Problems of detention of women sentenced to life imprisonment in the Kachanivska correctional custody of the Department of the State Penitentiary Service of Ukraine in the Kharkiv region No. 54. *Criminal and executive policy of Ukraine and the European Union: development and integration: materials. science.- konf.* Kyiv. 118-121.
- Chovgan, V. (2017). How to stop the new death penalty or a moratorium on life imprisonment. *Mirror of the week*, 37(333), 4.
- Criminal Executive Code of Ukraine. (2021). *Information of the Verkhovna Rada of Ukraine*. Kyiv: Parlament vydavnytstvo.
- Criminal Executive Code of Ukraine. Rules of internal procedure of penitentiary institutions: current legislation with changes and additions. (2019). Kyiv: Alerta.
- Criminal-executive system of Ukraine (2019). Statistical review. Retrieved from: <https://ukrprison.org.ua/articles/15813-23348>
- Djuzha, . . ., Bogatyrev, I.G. & Kolb, O.G. (2010). *Criminal-executive law of Ukraine*: Kyiv: Attica.
- Duyunova, T.V. (2014). The purposes of punishment in the form of life imprisonment and possibility of achieving them in practice. *Modern science - penitentiary practice: materials of the I International scientific-practical conference*. Kyiv. 110-113.
- Frolov, O.I. (2005). Comparative analysis of the problem of life imprisonment. *Problems Of Jurisprudence And Law Enforcement*, 1, 209-219.
- Gorbachevska, T.I. (2019). Life imprisonment in the national legal system of Ukraine and its compliance with international principles of human rights protection. *The Journal of Eastern European Law*, 69, 222-229.
- Hel', A.P. (2014) Changing of the detention conditions of men sentenced to life imprisonment: reality or declaration? In *Modern science - penitentiary practice: materials of the I International scientific-practical conference*. Kyiv. 44-48.
- Horpynyuk, O.P. (2020). Life imprisonment as an «irreducible life sentence» under the criminal law of Ukraine. *Molodyy vchenyy*, 1(77), 207-211.
- Hrytenko, O.A. (2015). *Disciplinary practice in women's criminal-executive institutions of the minimum level of security with general conditions of detention: theoretical and socio-legal aspects: monograph*. Odesa: ODUVS.
- Kabanov, O.M. (2018). Actual problems of social- psychological work with persons serving life imprisonment. *Collection of scientific works of Kharkiv National Pedagogical University named after G. Skovoroda «Law»*, 29, 117-126.
- Kolomiets, N.V. (2018). Regarding the application of parole to persons sentenced to life imprisonment. *Legal Bulletin*, 3 (48), 177-183.
- Korotayev, V. (2020). Legal nature of life imprisonment. *Criminal law*, 12. 197 – 201.
- Lazebna, A.V. (2019). Life imprisonment: the problem of prospects for parole. *A Young Scientist*, 5(69), 477-482.
- Merkulova, V.O. (2003). *Woman as a subject of criminal liability*. Odesa: NDRVV OYUI NUVS.
- Mostepanyuk, L.O. (2005). *Life imprisonment as a type of criminal punishment*. Extended abstract of candidate's thesis. Kyiv: NAVSU.
- On Amendments to Certain Legislative Acts of Ukraine Concerning the Adaptation of the Procedure for Applying Certain Institutions of Criminal Law to European Standards: Draft Law of Ukraine No. 6344 (2017). Retrieved from: http://http://w1.c1.rada.gov.ua/pls/zweb2/webproc4_1?pf3511=61586 (access date 30.08.2021)
- On the penitentiary system: Draft Law of Ukraine No. 7337. (2017). Retrieved from: http://wl.c1.rada.gov.ua/pls/zweb2/webproc4_1?pf3511=62965

- Pokalchuk, O. (2011). Thirst for blood. *Mirror of the week*, 41.
- Ponomarenko, Yu.A. (2009). *Types of punishments under the Criminal law of Ukraine*. Kharkiv: FYNN.
- Reznik, O., Getmanets, O., Kovalchuk, A., Nastyuk, V., & Andriichenko, N. (2020). Financial security of the state. *Journal of Security and Sustainability Issues*, 9(3), 843-852.
- Sevostyanov, V.P. (2006). Life imprisonment: problems of legal regulation and practice of execution. In *Fighting crime and ensuring public order: problems of theory and practice*, 166-174.
- Shutko, L. (2015). Review of the sentences of illegally convicted: legislative initiatives. *Mirror of the week*, 35, 15.
- Skokov, S.I. (2002). On some features of the personality of those sentenced to life imprisonment. *Aspect: Newsletter*, 2(7), 3-5.
- Skokov, S.I. (2005). Execution of punishments in the form of life imprisonment: legal and social aspects. *Problems of penitentiary theory and practice: Annual byuletyn*, 348-356.
- Stepanyuk, A.H., Yakovets, I.S. (2005). *Criminal-executive code of Ukraine: Scientific and practical commentary*. Kharkiv: LLC «Odyssey».
- Yatsishin, M.M. (2015). Institute of the Death Penalty in Ukraine: International Legal Aspect. In *Criminal-executive policy of Ukraine and the European Union: development and integration: materials of the International scientific-practical conference*. Kyiv: Institute of Penitentiary Service. 80-83.

A review of the psychosocial and criminological factors underlying COVID-19 conspiracy theories

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OPEN ACCESS

Double blind peer review

How to cite this article: Groicher M.J. et alii (2022). A review of the psychosocial and criminological factors underlying covid-19 conspiracy theories. *Rassegna Italiana di Criminologia*, XVI, 3, 189-200. <https://doi.org/10.7347/RIC-032022-p189>

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Received: 07.03.2022

Accepted: 05.09.2022

Published: 22.12.2022

Pensa MultiMedia
ISSN 1121-1717 (print)
ISSN 2240-8053 (on line)
[doi10.7347/RIC-032022-p189](https://doi.org/10.7347/RIC-032022-p189)

Abstract

Conspiracy theories and misinformation are becoming increasingly pervasive in recent years and have been spreading at an astounding rate during the COVID-19 pandemic, leading to a range of problems, including non-adherence to safety protocols, refusal to be vaccinated and disregard for public safety. The uncontrollable spread of dubious information has been dubbed an infodemic and is facilitated by social media and the internet. The belief in, and diffusion of conspiracy theories is linked to various factors familiar to the psychological and criminological fields. Key among these factors is a trait known as conspiratorial thinking. In order to combat this phenomenon, it is essential that we understand how and why conspiracy theories spread and what makes people prone to believing in them. This literature review aims to highlight the principal research into the identifying characteristics of conspiracy theories, as well as the psycho-social and criminological factors that sustain them. It also explores the effects that conspiracy belief can have on people and groups. It then delves into the role of social media in the diffusion of conspiracy theories during the pandemic. Finally, it illustrates the main strategies that have been used to counter misinformation and conspiracy theories and suggests some areas where further research is required.

Keywords: Conspiracy theories, conspiratorial thinking, COVID-19, infodemic, misinformation

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A review of the psychosocial and criminological factors underlying COVID-19 conspiracy theories

1. Introduction

During the COVID-19 pandemic, conspiracy theories have spread at an alarming rate. These theories include that pharmaceutical companies are encouraging the spread of COVID-19 for profit (Levinsson, Miconi, Li, Frounfelker, & Rousseau, 2021), that 5G cell towers somehow cause COVID-19 (Jolley & Paterson, 2020), or that the virus is actually a laboratory-created bioweapon (McCarthy, Murphy, Sargeant, & Williamson, 2021). As the disease spreads across the globe, it has been stated that we face not one, but two pandemics: the coronavirus pandemic itself, and an infodemic; the “overabundance of information – some accurate, some not – that spreads alongside a disease outbreak” (WHO, 2021). The abuse of technology to spread false or deliberately misleading information is creating new forms of “collective violence” and “collective victimization” (Laera, et al., 2022). Nearly 6,000 people were hospitalized and approximately 800 died at the beginning of 2020 due to COVID-19 misinformation (Islam, et al., 2020). Furthermore, belief in conspiracy theories and misinformation has led to consequences such as vaccine hesitancy and refusal, refusal to adhere to government mandated safety precautions, protests, discrimination and stigma, consumption of harmful substances, and even the burning of cell towers (McCarthy, Murphy, Sargeant, & Williamson, 2021). To add to the confusion, both American and European intelligence reports have found evidence that foreign governments, Russia and China in particular, purposefully spread disinformation regarding COVID-19 (Grimes D. R., 2021). Research indicates that those who believe in COVID-19 conspiracy theories are up to four times less likely to intend to be vaccinated against the disease than those who disbelieved in these theories, as well as being less supportive of policies aimed at reducing the spread (Earnshaw, et al., 2020). Since much of the hope for an end to the current pandemic depends on a successful and widespread vaccination program, this is a potentially disastrous effect of conspiracy theories, as belief in them could impede the administration of vaccines. These findings make it abundantly clear that the spread of misinformation and conspiracy theories is not a victimless phenomenon, and that strategies to help prevent this spread are increasingly necessary. In order to do this, it is vital that we understand how and why these theories form as well as how they spread. Consequently, the objectives of this article are as follows: (1) to present a broad perspective on the topic of COVID-19 conspiracy theories, their formation and spread, and their consequences; (2) to provide an overview of the

principal research into the psychosocial and criminological mechanisms that sustain conspiratorial thinking; (3) to present a summary of the prominent strategies for addressing the problem posed by conspiracy theories. It is the hope of the researchers that this overview can provide insight into this phenomenon and stimulate discussion and thought on the subject.

2. Materials and Methods

A review of the literature was conducted, following the framework outlined by Green et al. (2006) of narrative reviews, based on the questions: “What does existing research indicate as the principal psychosocial and criminological factors associated with the formation and spread of conspiracy theories concerning COVID-19? What impact do conspiracy theories have on behaviour and compliance with health recommendations? What is the role of social media in the spread of conspiracy theories? What are the principal strategies indicated by the existing literature for managing the effects of conspiracy theories?”.

2.2 Search Strategy and Sources

The Discovery Service for the University of Bari was the principal database searched, beginning on 11 May 2021, and ending 19 May 2021. The following keywords were used: (conspiratorial thinking) AND (covid-19 OR coronavirus) AND (psychological factors OR causes OR influences). The papers were identified by searching the titles, abstracts and keywords. Only papers written in English were considered. Other criteria included full papers only, as well as those more recent than 2000. Additional research articles were acquired by examining the reference lists of the relevant papers. Papers were excluded if they didn't focus on psychological and/or criminological factors related to COVID-19 and conspiratorial thinking. Finally, duplicate articles, editorials, reports and journalistic news articles were also excluded. After the first round of revisions, and in order to update the references used, a further search was performed using the same database. However, additional search terms were included, and the temporal range was extended to include more recent publications (2022).

Topic	References
Sources used to provide a definition of conspiracy theories	<ul style="list-style-type: none"> European Commission. (2021). Identifying Conspiracy Theories. Taken from European Commission: https://ec.europa.eu/info/identifying-conspiracy-theories_en. Last accessed on 11/05/2021. Lewandowsky, S. & Cook, J. (2020). The Conspiracy Theory Handbook. George Mason University Center for Climate Change Communication.
Articles on psychological factors and conspiratorial thinking	<ul style="list-style-type: none"> Brashier, N. M. & Schacter, D. L. (2020). Aging in an era of fake news. <i>Current Directions in Psychological Science</i>, 29(3): 316–323. Douglas, K. M., Sutton, R. M. & Cichočka, A. (2017). The Psychology of Conspiracy Theories. <i>Current Directions in Psychological Science</i>, 26(6): 538-542. Earnshaw, A. V., Eaton, L. A., Kalichman, S. C., Brousseau, N. M., Hill, E. C. & Fox, A. B. (2020). COVID-19 conspiracy beliefs, health behaviors, and policy support. <i>Translational Behavioral Medicine</i>, 10(4): 850-856, doi: 10.1093/tbm/ibaa090. Einstein, K. & Glick, D. (2015). Do I think BLS data are BS? The consequences of conspiracy theories. <i>Political Behavior</i>, 37(3): 679–701. Fazio, L. K., Brashier, N. M., Payne, B. K. & March, E. J. (2015). Knowledge Does Not Protect Against Illusory Truth. <i>Journal of Experimental Psychology: General</i>, 144 (5): 993–1002. Grzesiak-Feldman, M. (2013). The effect of high-anxiety situations on conspiracy thinking. <i>Current Psychology</i>, 32(1): 100-118. Hetlich, N., Beutel, M., Ernst, M., Schliessler, C., Kampling, H., Kruse, J. & Braehler, E. (2022). Conspiracy endorsement and its associations with personality functioning, anxiety, loneliness, and sociodemographic characteristics during the COVID-19 pandemic in a representative sample of the German population. <i>PLoS ONE</i>, 17(1), 1-15. 10.1371/journal.pone.0263301. Kim, S. & Kim, S. (2021). Searching for General Model of Conspiracy Theories and Its Implication for Public Health Policy: Analysis of the Impacts of Political, Psychological, Structural Factors on Conspiracy Beliefs about the COVID-19 Pandemic. <i>International Journal of Environmental Research & Public Health</i>, 18(1), 266-294. https://doi.org/10.3390/ijerph18010266. Klein, O. & Nera, K. (2020). Social Psychology of Conspiracy Theories. In M. B. Knight, <i>Routledge Handbook of Conspiracy Theories</i> (p. 121-134). London: Routledge, Taylor & Francis Group. Lantian, A., Wood, M. & Gjoneska, B. (2020). Personality traits, cognitive styles and worldviews associated with beliefs in conspiracy theories. In M. Butter & P. Knight, <i>Routledge Handbook of Conspiracy Theories</i> (p. 155-167). London: Routledge, Taylor & Francis Group. Lewandowsky, S., Oberauer, K. & Gignac, G. E. (2013). NASA faked the moon landing - Therefore, (climate) science is a hoax: An anatomy of the motivated rejection of science. <i>Psychological Science</i>, 24(5): 622-633. Norris, P. & Epstein, S. (2011). An experiential thinking style: its facets and relations with objective and subjective criterion measures. <i>Journal of Personality</i>, 79(5), 1043–1080. Nurse, M., Ross, R., Isler, O. & Rooy, D. (2022). Analytic thinking predicts accuracy ratings and willingness to share COVID-19 misinformation in Australia. <i>Memory & Cognition</i>, 50(2): 425-434. doi: 10.3758/s13421-021-01219-5. Scherer, L. D. & Pennycook, G. (2020). Who Is Susceptible to Online Health Misinformation? <i>AJPH Perspectives</i>, 110 (S3), Available at https://doi.org/10.2105/AJPH.2020.305908.
Articles on criminological factors and conspiratorial thinking	<ul style="list-style-type: none"> Brashier, N. M. & Schacter, D. L. (2020). Aging in an era of fake news. <i>Current Directions in Psychological Science</i>, 29(3): 316–323. Douglas, K. M. (2021). Are conspiracy theories harmless? <i>The Spanish Journal of Psychology</i>, 24 (13): 1-7. Grimes, D. R. (2021). Medical disinformation and the unviable nature of COVID-19 conspiracy theories. <i>PLoS ONE</i>, 16(3): e0245900. https://doi.org/10.1371/journal.pone.0245900. Jolley, D., Meleady, R. & Douglas, K. M. (2020). Exposure to intergroup conspiracy theories promotes prejudice which spreads across groups. <i>British Journal of Psychology</i>, 111(1): 17-35. doi: 10.1111/bjop.12385. Laera D, Colucci M, Bottalico M, Franco T, Grattagliano I, Violante M, Volpe G, Taurino A (2022). Who believes Fake News? Psychological and criminological aspects of the protagonists of the post-truth era. <i>Rassegna Italiana di Criminologia</i>, 16(1), 12-23. https://doi.org/10.7347/RIC-012022-p12 Levinson, A., Miconi, D., Li, Z., Frounfelker, R. & Rousseau, C. (2021). Conspiracy Theories, Psychological Distress, and Sympathy for Violent Radicalization in Young Adults during the COVID-19 Pandemic: A Cross-Sectional Study. <i>International Journal of Environmental Research and Public Health</i>, 18(15): 7846. https://doi.org/10.3390/ijerph18157846. McCarthy, M., Murphy, K., Sargeant, E. & Williamson, H. (2021). Examining the relationship between conspiracy theories and COVID-19 vaccine hesitancy: A mediating role for perceived health threats, trust, and anomie? <i>Analyses of Social Issues and Public Policy</i>, 22(1): 106–129. DOI: 10.1111/asap.12291. Šrol, J., Čavojská, V. & Mikušková, E. (2022). Finding Someone to Blame: The Link Between COVID-19 Conspiracy Beliefs, Prejudice, Support for Violence, and Other Negative Social Outcomes. <i>Frontiers in Psychology</i>, 12: 726076. DOI: 10.3389/fpsyg.2021.726076.

<p>Articles on psychosocial factors and conspiratorial thinking</p>	<ul style="list-style-type: none"> • Brashier, N. M. & Schacter, D. L. (2020). Aging in an era of fake news. <i>Current Directions in Psychological Science</i>, 29(3), 316–323. • Grimes, D. R. (2020). Health disinformation & social media: The crucial role of information hygiene in mitigating conspiracy theory and infodemics. <i>EMBO Reports</i>, 21(11): DOI: 10.15252/embr.202051819. • Hughes, J., Efstratiou, A., Komer, S., Baxter, L., Vasiljevic, M. & Leite, A. (2022). The impact of risk perceptions and belief in conspiracy theories on COVID-19 pandemic-related behaviors. <i>PLoS One</i>, 17(2), e0263716. https://doi.org/10.1371/journal.pone.0263716. • Islam, M. S., Sarkar, T., Khan, S. H., Mostofa Kamal, A., Hasan, S. M., Kabir, A., Yeasmin, D., Islam, M. A., Chowdhury, K. I., Anwar, K. S., Chughtai, A. A. & Seale, H. (2020). COVID-19–Related Infodemic and Its Impact on Public Health: A Global Social Media Analysis. <i>The American Journal of Tropical Medicine and Hygiene</i>, 103(4), 1621-1629. • Jolley, D. & Douglas, K. M. (2014). The social consequences of conspiracism: Exposure to conspiracy theories decreases the intention to engage in politics and to reduce one's carbon footprint. <i>British Journal of Psychology</i>, 105(1): 35-56. doi: 10.1111/bjop.12018. • Jolley, D. & Paterson, J. (2020). Pylons ablaze: Examining the role of 5G COVID-19 conspiracy beliefs and support for violence. <i>British Journal of Social Psychology</i>, 59(3): 628–640. DOI:10.1111/bjso.12394 • Kahan, D. M., Braman, D., Cohen, G. L., Gastil, J. & Slovic, P. (2010). Who Fears the HPV Vaccine, Who Doesn't, and Why? An Experimental Study of the Mechanisms of Cultural Cognition. <i>Law and Human Behavior</i>, 34(6): 501–516. • McCarthy, M., Murphy, K., Sargeant, E. & Williamson, H. (2021). Examining the relationship between conspiracy theories and COVID-19 vaccine hesitancy: A mediating role for perceived health threats, trust, and anomie? <i>Analyses of Social Issues and Public Policy</i>, 22(1): 106–129. DOI: 10.1111/asap.12291. • Oleksy, T., Wnuk, A., Maison, D. & Łyś, A. (2020). Content matters. Different predictors and social consequences of general and government-related conspiracy theories on COVID-19. <i>Personality and Individual Differences</i>, 168, https://doi.org/10.1016/j.paid.2020.110289. • Pennycook, G. & Rand, D. G. (2019). Lazy, not biased: susceptibility to partisan fake news is better explained by lack of reasoning than by motivated reasoning. <i>Cognition</i>, 188, 39–50. doi: 10.1016/j.cognition.2018.06.011. • Uscinski JE, Enders AM, Klofstad C, Seelig M, Funchion J, Everett C, Wutchy S, Premaratne K & Murthi M (2020). Why do people believe COVID-19 conspiracy theories? Harvard Kennedy School (HKS) Misinformation Review. DOI: https://doi.org/10.37016/mr-2020-015. • Uscinski, J., & Parent, J. (2014). <i>American Conspiracy Theories</i>. Oxford: Oxford University Press • Van Prooijen, J., Klein, O. & Đorđević, J. M. (2020). Social-cognitive processes underlying belief in conspiracy theories. In M. B. Knight, <i>Routledge Handbook of Conspiracy Theories</i> (p. 168-180). London: Routledge, Taylor & Francis Group. • Van Prooijen, J. & Acker, M. (2015). The influence of control on belief in conspiracy theories: Conceptual and applied extensions. <i>Applied Cognitive Psychology</i>, 29(5): 753–761. https://doi.org/10.1002/acp.3161. • Van Prooijen, J. & Van Vugt, M. (2018). Conspiracy theories: evolved functions and psychological mechanisms. <i>Perspectives on Psychological Science</i>, 13(6), 770–88.
<p>Articles on techniques and strategies for dealing with conspiracy theories and misinformation</p>	<ul style="list-style-type: none"> • Jolley, D. & Douglas, K. M. (2017). Prevention is better than cure: Addressing anti-vaccine conspiracy theories. <i>Journal of Applied Social Psychology</i>, 47, 459–469. DOI: 10.1111/jasp.12453. • Pennycook, G., McPhetres, J., Zhang, Y., Lu, J. G. & Rand, D. G. (2020). Fighting COVID-19 misinformation on social media: experimental evidence for a scalable accuracy-nudge intervention. <i>Psychological Science</i>, 31(7), 770–780. • Potter, W. J. (2013). Review of Literature on Media Literacy. <i>Sociology Compass</i>, 7(6): 417–435. DOI: 10.1111/soc4.12041. • Van der Linden, S., Leiserowitz, A., Rosenthal, S. & Maibach, E. (2017). Inoculating the public against misinformation about climate change. <i>Global Challenges</i>, 1(2): 1600008. https://doi.org/10.1002/gch2.201600008
<p>Articles on covid-19 conspiracy theories and social media</p>	<ul style="list-style-type: none"> • Ahmed, W., Vidal-Alaball, J., Downing, J. & López Seguí, F. (2020). COVID-19 and the 5G Conspiracy Theory: Social Network Analysis of Twitter Data. <i>Journal of medical Internet research</i>, 22(5): 1438-8871. • Brashier, N. M. & Schacter, D. L. (2020). Aging in an era of fake news. <i>Current Directions in Psychological Science</i>, 29(3): 316–323. • Caballero, E. G. (2020). Social network analysis, social big data and conspiracy theories. In Taylor & Routledge, <i>Routledge Handbook of Conspiracy Theories</i> (p. 135-148). London: Butter, M. & Knight, P. • Del Vittorio, M., Bessi, A., Zollo, F., Petroni, F., Scala, A., Caldarelli, G., Stanley, H. & Quattrociocci, W. (2016). The spreading of misinformation online. <i>Proceedings of the National Academy of Sciences of the United States of America</i>, 113(3): 554-559. • Groicher, M. & Maglie, R. B. (Forthcoming). COVID-19: Exploring linguistic indicators of conspiratorial thinking in the media. • Innes, H. & Innes, M. (2021). De-platforming disinformation: conspiracy theories and their control. <i>Information, Communication and Society</i>, DOI: 10.1080/1369118X.2021.1994631.

	<ul style="list-style-type: none"> • Joseph A, Fernandez V, Kritzman S, Eaddy I, Cook O, Lambros S, Jara Silva CE, Arguelles D, Abraham C, Dorgham N, Gilbert ZA, Chacko L, Hirpara RJ, Mayi BS, Jacobs R (2022). COVID-19 Misinformation on Social Media: A Scoping Review. <i>Cureus</i>, 14(4), e24601. DOI 10.7759/cureus.24601. • Leal, H. (2020). Networked Disinformation and the Lifecycle of Online Conspiracy Theories. In M. Butter & P. Knight, <i>Routledge Handbook of Conspiracy Theories</i> (p. 518-532). London: Routledge, Taylor & Francis Group. • PEW Research Center. (2019, October 2). Americans Are Wary of the Role Social Media Sites Play in Delivering the News. Taken from PEW Research Center: https://www.journalism.org/2019/10/02/americans-are-wary-of-the-role-social-media-sites-play-in-delivering-the-news/ . Last accessed on 11/05/2021. • Quinn, E. K., Fazel, S. S. & Peters, C. E. (2020). The Instagram Infodemic: Cobranding of Conspiracy Theories, Coronavirus Disease 2019 and Authority-Questioning Beliefs. <i>Cyberpsychology, Behavior, and Social Networking</i>, 24(8): 573-577. DOI: 10.1089/cyber.2020.0663. • Roozenbeek, J. & van der Linden, S. (2019). Fake news game confers psychological resistance against online misinformation. <i>Palgrave Communications</i>, 5(12), 1–10. • WHO (2021). Fighting misinformation in the time of COVID-19, one click at a time. Taken from World Health Organization: https://www.who.int/news-room/feature-stories/detail/fighting-misinformation-in-the-time-of-covid-19-one-click-at-a-time. Last accessed on 11/05/2021. • Yüce, M., Adalı, E. & Kanmaz, B. (2021). An analysis of YouTube videos as educational resources for dental practitioners to prevent the spread of COVID-19. <i>Irish Journal of Medical Science</i>, 190(1): 19–26. doi: 10.1007/s11845-020-02312-5.
Sources providing a description of vaccine hesitancy	<ul style="list-style-type: none"> • WHO (2019). Ten threats to global health in 2019. Taken from World Health Organization: https://www.who.int/news-room/spotlight/ten-threats-to-global-health-in-2019. Last accessed on 11/05/2021.
Methodological reference	<ul style="list-style-type: none"> • Green, B., Johnson, C. & Adams, A. (2006). Writing narrative literature reviews for peer-reviewed journals: secrets of the trade. <i>Journal of Chiropractic Medicine</i>, 3(5): 101-117.

Table 1. Literature tracking sheet.

2.3 Presentation of Results

The narrative overview was carried out by breaking down the review questions into the following concepts: (1) conspiracy theories and conspiratorial thinking during the COVID-19 pandemic; (2) factors contributing to conspiratorial thinking; (3) consequences of conspiratorial thinking; (4) the role of social media; (5) strategies to counter conspiracy theories.

3. Discussion of Findings

3.1 Conspiracy theories and Conspiratorial thinking

The European Commission (2021) defines a conspiracy theory as “the belief that certain events or situations are secretly manipulated behind the scenes by powerful forces with negative intent.” While real conspiracies do exist, such as the Watergate scandal, or the unlawful collection of data by the National Security Agency (NSA) in the United States, later revealed by whistleblower Edward Snowden, many of the so-called conspiracies people believe in fall under the category of conspiracy theories. Whereas true conspiracies are based in fact and tend to be revealed by investigations, whistleblowers, or internal documents, conspiracy theories are not typically supported by evidence that can withstand a thorough investigation. In fact, a key feature of conspiracy theories is that they tend to spread despite not having solid evidence to support them (Lewandowsky & Cook, 2020). Conspiracy theories have several factors in common: an alleged secret

plot, a group of conspirators, ‘evidence’ that seems to support the theory, they falsely suggest that there are no coincidences and that everything is connected, they divide the world into good and bad, and they tend to scapegoat people and groups (European Commission, 2021).

A key factor that has been found to predict COVID-19 conspiracy beliefs is conspiratorial thinking, or the tendency to accept conspiratorial explanations for major events (Lantian, Wood, & Gjoneska, 2020). This characteristic, also referred to as conspiracy mentality (McCarthy, Murphy, Sargeant, & Williamson, 2021), has been the object of psychological research for decades and its existence is supported empirically. While it is seen as a single variable, individual differences can contribute to inter-individual variance of this factor. In other words, people tend to believe in conspiracy theories in varying degrees based on their level of conspiratorial thinking (Lantian, Wood, & Gjoneska, 2020). This is supported by research showing that people who believe in one conspiracy theory have a strong tendency to believe others are true, even when those theories are not directly related (Klein & Nera, 2020).

This type of thinking is characterised by certain traits, which have been outlined by Stephan Lewandowsky and John Cook (2020), and can be summarised in the acronym CONSPIR. Conspiracy theorists can believe in multiple Contradictory ideas at the same time, due to their intense commitment to disbelieving the official account, regardless of whether or not their belief system is incoherent. In the context of Covid-19, research has proven this characteristic, indicating strong intercorrelations between contradictory conspiracy beliefs (McCarthy,

Murphy, Sargeant, & Williamson, 2021). They also maintain Overriding Suspicion and skepticism towards the official account of events. This suspicion causes them to disregard and deny any ideas that go against their beliefs, considering them a part of the conspiracy. They tend to believe that there is Nefarious Intent behind the motivations of presumed conspirators, and to hold onto the idea that Something Must Be Wrong even when their more specific theories become untenable. Conspiracy theorists often present themselves as Persecuted Victims as well as courageous heroes, both targeted by, and fighting against the perpetrators of the conspiracy. Immunity to Evidence is the sixth characteristic, and conspiratorial thinkers tend to believe that all contradictory evidence must be part of the conspiracy. Stronger evidence against the perceived conspiracy merely indicates a stronger desire to remain undiscovered by the imagined perpetrators. Finally, they tend to Re-interpret Random events as being connected to the conspiracy. These characteristics help make the conspiracy theory extremely resilient to disproving, as any evidence to the contrary is seen as further evidence that the conspiracy exists, while the conspiratorial thinker interprets unrelated events in a way that supports their beliefs (Lewandowsky & Cook, 2020).

3.1.1 Factors that contribute to conspiratorial thinking

Various criminological and psychosocial factors interact at several levels to contribute to, and exacerbate conspiratorial thinking as well as the spread of conspiracy theories. Conspiracy beliefs have been shown to be linked to extremist and radicalized groups, as they provide reinforcement of existing ideologies and promote extremist intentions, especially in people with low self-control and weaker morality. These groups tend to feel powerless or marginalized, unable to exert sociopolitical control through normal means, and therefore turn to violent political actions, physical attacks, and destruction of property to reassert a form of political control (Šrol, Čavojová, & Mikušková, 2022). The Covid-19 pandemic has created a situation that further increases support for this type of violent radicalization by accentuating systemic racism and socio-economic disparities (Levinsson, Miconi, Li, Frounfelker, & Rousseau, 2021). This support for violent action is evident in events such as the attacks on 5G phone masts carried out by believers in conspiracy theories linking 5G to Coronavirus, and illegal and violent protests against Covid-19 regulations and vaccines (Douglas K., 2021). But this instrumentalization of conspiracy theories goes further than radical groups looking to exert political control. In fact, it has been shown that governments and political leaders from various nations have taken advantage of the viral nature of conspiratorial thinking to promote their own agendas (Levinsson, Miconi, Li, Frounfelker, & Rousseau, 2021).

Conspiracy theories have also been associated with a mental state known as anomie. This perception that the

social fabric of society is deteriorating, and moral standards are eroding has been shown to increase self-interested or antisocial behavior and decrease altruistic behavior and trust in others. In addition, it has proven to predict conspiracy beliefs and to be exacerbated by those beliefs in turn (McCarthy, Murphy, Sargeant, & Williamson, 2021). This antisocial behavior has been found to assume a wide range of forms, from a willingness to conspire, to prejudicial views of other groups, to intentions to engage in violent acts (Douglas K., 2021).

Douglas et al. (2017) identify three key psychological motives that may cause people to be drawn to conspiracy theories: epistemic, existential, and social motives. Epistemic motives refer to the desire to causally explain events, in order to understand the world around us. These motives can include curiosity when there is a lack of information, reducing uncertainty, or giving some sort of meaning to seemingly random events, as well as defending beliefs from disconfirmation. Conspiracy theories are particularly effective in this last motive, as even the most irrefutable evidence that goes against conspiracy theorists' beliefs can simply be considered part of the conspiracy, allowing people to hold onto their worldview (Lewandowsky, Oberauer, & Gignac, 2013). Interestingly, research indicates that persuasive cases for conspiracy theories may actually increase uncertainty in some cases (Jolley & Douglas, 2014). Van Prooijen, Klein, & Đorđević (2020), however, suggest an important distinction between anxious uncertainty (uncertainty as an anxious emotional experience) and cognitive uncertainty (uncertainty due to a lack of information). Anxious uncertainty is usually generated following threatening and consequential events, and has been found to be an important driver of conspiracy beliefs, whereas cognitive uncertainty does not have the same effect (Van Prooijen, Klein, & Đorđević, 2020). Furthermore, anxiety itself is highly predictive of conspiratorial thinking (Hettich, et al., 2022). It seems fair to say, then, that the COVID-19 pandemic has created an ideal environment for the spread of conspiracy theories.

Existential motives represent the need to feel safe, secure, and able to exert control over one's environment. People have been found to be more likely to turn to conspiracy theories when they are anxious (Grzesiak-Feldman, 2013) or when they feel like they lack control (Van Prooijen & Acker, 2015; Olesky, Wnuk, Maison, & Łyś, 2020). Conspiratorial 'explanations' offer believers a false sense of control and agency and are especially likely in situations of crisis and uncertainty, such as the COVID-19 pandemic (European Commission, 2021). Interestingly, it appears that conspiratorial thinking may not eliminate the perception of risk entirely, rather those who believe in conspiracy theories seem to perceive the risk to health as lower than the risks the pandemic poses to the economy and freedom (Hughes, et al., 2022).

Social motives, such as the desire to belong and to maintain a positive image of the self and in-group, can also influence conspiracy beliefs. When this positive image

is threatened, conspiracy theories may assist people in defending it by identifying a menacing out-group that is to blame for current problems (Douglas, Sutton, & Cichocka, 2017). This creates a simpler, more concrete target for the conspiracy theorists to combat. This effect is evident in a study by Olesky et al. (2020) which found that the belief that hidden groups use pandemics for their own purposes was related to increased acceptance of xenophobic policies.

The way people evaluate information is considered another factor that influences belief in conspiracy theories. The term cognitive style refers to relatively stable ways in which people obtain and process information. These styles can include biases, heuristics, attitudes, motives, and other beliefs. One of the primary distinctions in cognitive styles is intuitive (or System 1) versus analytical (or System 2) thought processes (Lantian, Wood, & Gjoneska, 2020). Whereas analytical thinking is relatively slow and requires conscious effort and a focus on details, intuitive thinking is quick, effortless, and considers information from a more general perspective (Norris & Epstein, 2011). While we all use both styles based on the situation, certain people tend to rely on one style more than the other. An intuitive thinking style has been found to predict belief in various topics, including pseudoscience and conspiracy theories, while analytic thinking is negatively associated with belief in conspiracy theories. This may be because analytical thinkers tend to consider the details which may make conspiracy theories seem less plausible, details which are often overlooked by more intuitive thinkers (Lantian, Wood, & Gjoneska, 2020). For example, Pennycook and Rand (2019) found that people with a more analytical cognitive style were better at distinguishing between factual and false news content than those with a more intuitive style. More importantly, this effect occurred even when the news headlines were consistent with the participants' political ideology. It would seem, therefore, that a predisposition to rational thinking may render people less susceptible to misinformation, even when this information corresponds with their existing belief structure. More recently, an analytical cognitive style assisted participants in recognizing COVID-19 misinformation (Pennycook et al., 2020), and was found to have a negative impact on conspiratorial beliefs (Kim & Kim, 2021) as well as the sharing of COVID-19 misinformation (Nurse et al., 2022).

Heuristics, or 'mental shortcuts', are a prominent feature of intuitive thinking that people use when evaluating risk and uncertainty. They provide rough estimates based on the most relevant (or seemingly relevant) information (Lantian, Wood, & Gjoneska, 2020). Since surprising or shocking information is generally easier to recall, people with a tendency towards a more intuitive thinking style may be more easily influenced by this type of information, without critically examining the information or its source (Bangertner, Wagner-Egger, & Delouée, 2020).

A second mechanism that may affect the belief in conspiratorial theories and misinformation is the illusory truth

effect. In this phenomenon, people tend to rate statements they have encountered frequently as more truthful. The repetition of statements makes them easier to process and comprehend, which leads people to the sometimes-erroneous conclusion that the information is more truthful. Interestingly, this effect may be present even when people have prior knowledge of the truth, causing them to evaluate as truthful statements they know to be false (Fazio, Brashier, Payne, & March, 2015).

People tend to assimilate information in a way that is biased towards confirming their preexisting beliefs (Scherer & Pennycook, 2020). Therefore, when presented with balanced arguments, people of different belief systems tend to polarize, not converge, as they assimilate only the information that corresponds to their worldviews (Kahan, Braman, Cohen, Gastil, & Slovic, 2010). This results in the same information being perceived in different ways. By only considering and processing information that confirms their views, conspiracy theorists remain cemented in their positions.

The source of the information is also relevant. When people are presented with conflicting points of view, they will generally consider information that originates from a source within a group they consider themselves part of as more reliable (Benegal & Scruggs, 2018). Since the internet has made it much easier to form large groups of people with similar points of view, conspiratorial thinkers can more easily access sources of information that correspond with their outlooks.

Other traits of conspiratorial thinkers indicated by the existing literature include illusory pattern perception, or the tendency to perceive causal relationships that do not truly exist, and an overactive sense of agency perception, which is the tendency to perceive others' actions as intentional and purposeful when they are not (Van Prooijen, Klein, & Đorđević, 2020). Through these mechanisms, conspiratorial thinkers may be more susceptible to inferring connections between random, unrelated events, as well as assuming that random or accidental actions were in fact planned by individuals with nefarious intentions. Consequently, the likelihood of perceiving a conspiracy where one does not exist increases.

Given that the mechanisms discussed are characteristic of intuitive, emotional thinking, how is it, then, that many conspiracy theories are so elaborately organized? It has been proposed that many of these theories may begin as an intuitive reaction to distressing, confusing events, which people then attempt to justify using motivated analytic thinking, embracing evidence that supports their view and dismissing evidence to the contrary. This type of motivated reasoning applies analytical thinking to support the conspiracy theory, which was originally formed through intuitive processes. Believers may make incorrect inferences based on correct scientific facts, or carefully select only the parts of these facts that seem to support their beliefs. This, accompanied by in-group communication with similar-minded individuals, allows for the formation of an elaborate theory that can seem well-grounded in ev-

idence. To explain in simpler terms, “when assessing conspiracy theories, people often do not act like independent scientists or judges, but as lawyers motivated to defend their case” (Van Prooijen, Klein, & Đorđević, 2020).

3.2 Consequences of conspiratorial thinking and misinformation

It has been suggested that our tendency to believe in conspiracy theories may have evolved as a defense mechanism against hostile groups with malicious intentions, allowing our ancestors to recognize potential threats based on intuitive feelings towards those groups (Van Prooijen & Van Vugt, 2018). By this logic, the formation of a conspiracy theory based on instinctive reactions is not inherently wrong. This is how true conspiracies are uncovered, and those who instinctually disbelieve every conspiracy theory may be making the same error in logic as those who believe all of them, falling prey to motivated reasoning to justify their disbelief. The true danger of conspiratorial thinking occurs when we do not impartially and objectively evaluate all the evidence that proves – or disproves – a particular theory (Van Prooijen, Klein, & Đorđević, 2020).

Despite its possibly adaptive origins, conspiracy belief has been found to have many negative effects, such as increased feelings of powerlessness, disillusionment, mistrust, and anomie (Jolley & Douglas, 2014). It has also been shown to increase political apathy (Uscinski & Parent, 2014) and reduce trust in government institutions, including those not connected to conspiratorial accusations (Einstein & Glick, 2015; McCarthy, Murphy, Sargeant, & Williamson, 2021), as well as increasing the likelihood of engaging in counter-normative behavior (Jolley, Meleady, & Douglas, 2020) and decreasing the probability of engaging in protective health behaviors including those related to Covid-19 (McCarthy, Murphy, Sargeant, & Williamson, 2021). Furthermore, conspiracy theories can cause intergroup difficulties and increase stigma towards certain groups of people, stigma which can then spread to other outgroups, including those unrelated to the original theory (Jolley, Meleady, & Douglas, 2020). It has even been shown that conspiracy theories can accelerate the process of radicalization by strengthening the “othering” of outgroups (Bartlett & Miller, 2010). The danger of conspiracy theories for intergroup relations is evidenced by the alarming increase in hate crimes and violence against individuals who identify as Asian due to the association of the virus with China (Levinsson, Miconi, Li, Frounfelker, & Rousseau, 2021).

In the medical field, belief in conspiracy theories and misinformation has led to a “dark renaissance” of vaccine-preventable illness, caused by erroneous beliefs that the diseases do not truly exist, or that vaccines are dangerous. This is evidenced, for example, by the fact that in 2000, Measles was declared eradicated in the United States, while 2020 saw record outbreaks across the country. Meanwhile, Europe, which only recorded 5,273 cases of

Measles in 2016, saw 84,462 cases in 2018 (Grimes D., 2020). This is an unacceptable increase in an era where such diseases are preventable. The World Health Organization (WHO) itself listed Vaccine Hesitancy as one of the top ten health risks that faced the world in 2019 (WHO, 2019). This hesitancy has of course come to the forefront during the COVID-19 pandemic, which has seen large-scale protests against vaccines, as well as the emergence of various conspiracy theories.

3.3 The Role of Social Media

Social media and the internet have played an important role in the spread of information – and disinformation – during the COVID-19 pandemic. The most commonly (ab)used platforms include Twitter, YouTube, and Facebook (Yüce, Adalı, & Kanmaz, 2021). In fact, in the last quarter of 2020, Facebook was forced to adapt its policies to confront an explosion in accounts publishing information that was deemed a risk for public safety. More than 100 networks were removed from the site due to their engagement in what has been called “coordinated inauthentic behavior designed to manipulate public opinion”, and other networks have adopted similar policies (Innes & Innes, 2021). One study evaluating videos on YouTube that expressed information on reducing Covid-19 spread in dental offices found that less than 4% of these were of high quality, while 25% contained non-factual or misleading information (Yüce, Adalı, & Kanmaz, 2021).

Current mass media, such as Facebook, Twitter, and Instagram present users with the opportunity to access a wide variety of opinions and information, but they can also provide a platform that amplifies rumors and other misinformation, including conspiracy theories (Del Vittorio, et al., 2016). Social media places users directly in contact with information producers in a context that is not intermediated by any reliable authority, which increases the risk of spreading misinformation (Caballero, 2020). Although many people consider themselves aware of the potential for poor quality news on social media sites, many continue to obtain news from such sites, with over half of Americans reporting they get news from social media (PEW Research Center, 2019). Studies have shown that those who trust information from social media tend to also believe in conspiracy theories (Earnshaw, et al., 2020). It has also been found that people who are driven by self-promotion and entertainment, as well as those with deficient self-regulative abilities are more likely to then share information of dubious origin (Joseph, et al., 2022). Research into the presentation of COVID-19 on social media has shown that it is frequently associated with general attitudes of mistrust and beliefs that question authority, potentially contributing to the mistrust of the government and mainstream media (Quinn, Fazel, & Peters, 2020). These conspiratorial beliefs in turn were associated with reduced engagement in health-protective behaviors (Joseph, et al., 2022).

The mechanisms of social media can be especially effective in spreading conspiracy theories when the previously discussed heuristic mechanisms and intuitive thinking are considered. A common sight on social media is polarized communication networks, which form a sort of closed system in which interaction occurs between users with similar points of view. Consequently, most of the information shared reinforces the preexisting ideologies inside these networks (Leal, 2020). Therefore, people who support conspiracy theories frequently find themselves in a sort of echo chamber, where the same information is repeated often and presented in an emotionally activating manner that makes it easier to recall by sources that seem to share similar points of view to those of the readers.

One of the principal problems presented by social media is the pervasiveness of the messages. In fact, even when messages regarding COVID-19 conspiracies are posted with the intention of rejecting or condemning these conspiracies, the messages seem to have the opposite of the desired effect, causing the information to spread even further (Ahmed, Vidal-Alaball, Downing, & López Seguí, 2020). The more attention is drawn towards these messages, the faster they spread, recalling the adage, “any publicity is good publicity”. Even the complete disabling of accounts associated with the dissemination of harmful or false information appears to be ineffective in the long run, as the perceived violation of free speech may actually serve to strengthen the follower base of the removed thought leaders. These leaders can then find ways to either continue their activities on the same platform by using false accounts, or by simply shifting to other platforms that may lack the same level of content control (Innes & Innes, 2021).

People’s susceptibility to misinformation, especially online misinformation, can be affected by diverse factors. One such factor, particularly relevant to this field, is explained by the so-called deficit hypothesis, which sustains that people who believe misinformation lack the knowledge or literacy necessary to discriminate between fact and fiction (Scherer & Pennycook, 2020). For instance, older adults tend to share misinformation more frequently than younger adults because they have lower media literacy, making them less able to identify reliable online sources (Brashier & Schacter, 2020). In this day and age, it is clear that media and digital education is vital to assist people in determining what constitutes a reliable source of information.

Media literacy is a concept that has become increasingly important in recent years, one that, however, has yet to receive a widely accepted definition. What most authors seem to agree upon is that a media literate person has the necessary skills and competencies to evaluate and assign meaning to media messages. Media literacy effectively allows an individual to transition from a passive consumer of media to an active one who can use the media as a tool to achieve their own goals while avoiding potentially negative consequences. It is a skill set that must be developed constantly, as the format of media and their

messages is constantly evolving (Potter, 2013). In the context of the COVID-19 pandemic, attempts have been made to increase social media users’ ability to evaluate messages by tagging misinformation as contrary to advice of public health officials, or by providing a message that gives users an “accuracy nudge” by reminding them that some information may be misleading (Pennycook et al., 2020; Joseph, et al., 2022).

3.4 Combatting conspiracy theories

In the ongoing battle against the spread of misinformation and conspiracy theories, three main categories of techniques have been identified. The first of these categories, prebunking techniques, aims to intervene before conspiracy theories can take root. Jolley and Douglas (2017) found that exposure to accurate information made people less likely to be influenced by conspiracy theories presented to them successively, while the presentation of this information after exposure to conspiracy theories did not have the same effect. They refer to this method as a sort of “inoculation”, similar to the functioning of a vaccine against an illness, that provides people with a defense against conspiracy theories. The central idea is to warn people beforehand that the things they read may contain misinformation, encouraging them to think critically about it. This method was found to be more effective than simply providing people with correct facts, without informing them about potential misinformation (Van der Linden et al., 2017). An example of this type of strategy is the online game, *Bad News*, created by van der Linden (Roozenbeek & van der Linden, 2019), which allows people to simulate the use of misinformation techniques to build followers on an imaginary website. This game was found to effectively inoculate players to common misinformation techniques. Pennycook et al. (2020) also found that a simple reminder to consider the accuracy of information was enough to cause a significant increase in truth discernment, as well as decreasing the likelihood of sharing misinformation. Additionally, by making readers aware of common characteristics of conspiratorial messages, it may be possible to put them on guard when these traits are recognized (Groicher & Maglie, Forthcoming).

Instead of targeting the types of misinformation that lead people to believe in conspiracy theories, the second category of techniques, preventative strategies, focuses on reducing the motives that drive conspiratorial thinking (Uscinski, et al., 2020). There appears to be a lack of research, however, into what exactly these types of strategies might look like. Epistemic motives that push us to seek causal explanations for events are particularly potent in large-scale situations where there is a lack of available information (Douglas, Sutton, & Cichocka, 2017). It stands to reason that strategies aimed at maintaining transparency and keeping people informed could have positive effects on this motive. Existential motives, which respond to people’s need to feel safe, secure, and in control of their envi-

ronment, are particularly prevalent in groups where people feel powerless and anxious (Douglas, Sutton, & Cichocka, 2017). Consequently, strategies that empower people and groups may serve to make those people less vulnerable to conspiracy theories. Finally, social motives such as belonging to and maintaining a positive image of an in-group are especially relevant in groups with low social status or those who feel threatened (Douglas, Sutton, & Cichocka, 2017). In this case, strategies that improve the group image and favor relations between groups could decrease the appeal of conspiracy theories as a defensive reaction against the disadvantaged position a group may find itself in. In summary, by reducing uncertainty, increasing perceived control, and promoting a positive group- and self-image, the effects of a predisposition towards conspiratorial thinking could be mitigated.

Corrective strategies, also known as “debunking” techniques, intervene after a conspiracy theory has already taken root, with the goal of correcting erroneous beliefs. They have been found to be less effective than the other types of strategies, and while exposure to anti-conspiracy arguments may be able to decrease belief in those theories, they appear to have limited effects on people’s actual behavior (Jolley & Douglas, 2017). Corrective strategies are also hindered by the characteristics of conspiratorial thinking which cause believers to deny any information provided by authority figures that goes counter to their worldview (Uscinski, et al., 2020). However, it has been hypothesized that corrective messages may be able to bypass this resistance to contradictory information if they originate from sources that are part of the conspiracy theorist’s ingroup or political party (Benegal & Scruggs, 2018). A potential strategy, therefore, could be to seek out party leaders and media personalities with whom the target population identifies who can transmit corrective information. Another possibility could be to make anti-conspiratorial arguments more interesting, including more details as opposed to merely presenting the facts that refute the conspiracy theory. This may allow them to better compete with the novel, controversial nature of conspiracy theories that makes them so attractive (Jolley & Douglas, 2017). It has been suggested that social media may be able to help in this effort, rather than only being part of the problem, since it can provide a platform for the dissemination of correct information. In the case of COVID-19, this could be information regarding vaccines, for example. It is vital that this type of message be understandable, balanced so as to address the concerns of the target audience, and delivered by trusted health providers (McCarthy, Murphy, Sargeant, & Williamson, 2021).

4. Conclusions

In this literature review we have presented the prevalent literature on conspiracy theories and their role in the COVID-19 pandemic, as well as the factors that predis-

pose people to be vulnerable to them, and the adverse consequences they can have on society. The uncertainty and fear generated by the pandemic has created an ideal environment for the spread of conspiracy theories and it is abundantly clear that, in order to better protect the population from occurrences such as this, it is necessary for people to have correct information and to cooperate. Conspiracy theories and misinformation make it difficult to distinguish between reliable and unreliable information and cause some people to distrust those who are trying to mitigate the effects of the pandemic. We have also discussed the role of social media in the spread of conspiracy theories, having become the principal setting in which we share ideas and information. This incredible resource, however, carries with it the risk of putting users in contact with too much information without the necessary tools to effectively use it. Finally, we have indicated three broad categories of strategies that are being used to combat conspiracy theories and misinformation, in the hope that more techniques can be identified. It is vital that effective interventions are implemented to slow the spread of conspiracy theories and assist people to more ably navigate the massive quantities of information that are now available without falling prey to misinformation.

References

- Ahmed, W., Vidal-Alaball, J., Downing, J. & López Seguí, F. (2020). COVID-19 and the 5G Conspiracy Theory: Social Network Analysis of Twitter Data. *Journal of medical Internet research*, 22(5), 1438-8871.
- Bangerter, A., Wagner-Egger, P. & Delouvée, S. (2020). How conspiracy theories spread. In M. Butter, & P. Knight, *Routledge Handbook of Conspiracy Theories* (p. 206-218). London: Routledge.
- Bartlett, J. & Miller, C. (2010). *The power of unreason: conspiracy theories, extremism and counter-terrorism*. London: Demos.
- Benegal, S. D. & Scruggs, L. A. (2018). Correcting misinformation about climate change: the impact of partisanship in an experimental setting. *Climatic change*, 148(1), 61-80. doi:10.1007/s10584-018-2192-4.
- Brashier, N. M. & Schacter, D. L. (2020). Aging in an era of fake news. *Current Directions in Psychological Science*, 29(3), 316-323.
- Caballero, E. G. (2020). Social network analysis, social big data and conspiracy theories. In Taylor & Routledge, *Routledge Handbook of Conspiracy Theories* (p. 135-148). London: Butter, M. & Knight, P.
- Del Vittorio, M., Bessi, A., Zollo, F., Petroni, F., Scala, A., Caldarelli, G., Stanley, H. & Quattrociocchi, W. (2016). The spreading of misinformation online. *Proceedings of the National Academy of Sciences of the United States of America*, 113(3), 554-559.
- Douglas, K. M. (2021). Are conspiracy theories harmless? *The Spanish Journal of Psychology*, 24 (13), 1-7.
- Douglas, K. M., Sutton, R. M. & Cichocka, A. (2017). The Psychology of Conspiracy Theories. *Current Directions in Psychological Science*, 26(6): 538-542.
- Earnshaw, A. V., Eaton, L. A., Kalichman, S. C., Brousseau, N. M., Hill, E. C. & Fox, A. B. (2020). COVID-19 conspiracy beliefs, health behaviors, and policy support. *Translational*

- Behavioral Medicine*, 10(4): 850-856, doi: 10.1093/tbm/ibaa090.
- Einstein, K. & Glick, D. (2015). Do I think BLS data are BS? The consequences of conspiracy theories. *Political Behavior*, 37(3): 679–701.
- European Commission. (2021). Identifying Conspiracy Theories. *Taken from European Commission*: https://ec.europa.eu/info/identifying-conspiracy-theories_en. Last accessed on 11/05/2021.
- Fazio, L. K., Brashier, N. M., Payne, B. K. & March, E. J. (2015). Knowledge Does Not Protect Against Illusory Truth. *Journal of Experimental Psychology: General*, 144 (5), 993–1002.
- Green, B., Johnson, C. & Adams, A. (2006). Writing narrative literature reviews for peer-reviewed journals: secrets of the trade. *Journal of Chiropractic Medicine*, 3(5): 101-117.
- Grimes, D. R. (2020). Health disinformation & social media: The crucial role of information hygiene in mitigating conspiracy theory and infodemics. *EMBO Reports*, 21(11): DOI: 10.15252/embr.202051819.
- Grimes, D. R. (2021). Medical disinformation and the unviable nature of COVID-19 conspiracy theories. *PLoS ONE*, 16(3): e0245900. <https://doi.org/10.1371/journal.pone.0245900>.
- Groicher, M. & Maglie, R. B. (Forthcoming). *COVID-19: Exploring linguistic indicators of conspiratorial thinking in the media*.
- Grzesiak-Feldman, M. (2013). The effect of high-anxiety situations on conspiracy thinking. *Current Psychology*, 32(1): 100-118.
- Hettich, N., Beutel, M., Ernst, M., Schliessler, C., Kampling, H., Kruse, J. & Braehler, E. (2022). Conspiracy endorsement and its associations with personality functioning, anxiety, loneliness, and sociodemographic characteristics during the COVID-19 pandemic in a representative sample of the German population. *PLoS ONE*, 17(1), 1-15. 10.1371/journal.pone.0263301.
- Hughes, J., Efstratiou, A., Komer, S., Baxter, L., Vasiljevic, M. & Leite, A. (2022). The impact of risk perceptions and belief in conspiracy theories on COVID-19 pandemic-related behaviors. *PLoS One*, 17(2), e0263716. <https://doi.org/10.1371/journal.pone.0263716>.
- Innes, H. & Innes, M. (2021). De-platforming disinformation: conspiracy theories and their control. *Information, Communication and Society*, DOI: 10.1080/1369118X-2021.1994631.
- Islam, M. S., Sarkar, T., Khan, S. H., Mostofa Kamal, A., Hasan, S. M., Kabir, A., Yeasmin, D., Islam, M. A., Chowdhury, K. I., Anwar, K. S., Chughtai, A. A. & Seale, H. (2020). COVID-19–Related Infodemic and Its Impact on Public Health: A Global Social Media Analysis. *The American Journal of Tropical Medicine and Hygiene*, 103(4), 1621-1629.
- Jolley, D. & Douglas, K. M. (2014). The social consequences of conspiracism: Exposure to conspiracy theories decreases the intention to engage in politics and to reduce one's carbon footprint. *British Journal of Psychology*, 105(1): 35-56. doi: 10.1111/bjop.12018.
- Jolley, D. & Douglas, K. M. (2017). Prevention is better than cure: Addressing anti-vaccine conspiracy theories. *Journal of Applied Social Psychology*, 47, 459-469. DOI: 10.1111/jasp.12453.
- Jolley, D. & Paterson, J. (2020). Pylons ablaze: Examining the role of 5G COVID-19 conspiracy beliefs and support for violence. *British Journal of Social Psychology*, 59(3): 628-640. DOI:10.1111/bjso.12394.
- Jolley, D., Meleady, R. & Douglas, K. M. (2020). Exposure to intergroup conspiracy theories promotes prejudice which spreads across groups. *British Journal of Psychology*, 111(1): 17-35. doi: 10.1111/bjop.12385.
- Joseph A., Fernandez V., Kritzman S., Eaddy I., Cook O., Lambros S., Jara Silva C.E., Arguelles D., Abraham C., Dorgham N., Gilbert Z.A., Chacko L., Hirpara R.J., Mayi B.S., Jacobs R. (2022). COVID-19 Misinformation on Social Media: A Scoping Review. *Cureus*, 14(4), e24601. DOI 10.7759/cureus.24601.
- Kahan, D. M., Braman, D., Cohen, G. L., Gastil, J. & Slovic, P. (2010). Who Fears the HPV Vaccine, Who Doesn't, and Why? An Experimental Study of the Mechanisms of Cultural Cognition. *Law and Human Behavior*, 34(6): 501–516.
- Kim, S. & Kim, S. (2021). Searching for General Model of Conspiracy Theories and Its Implication for Public Health Policy: Analysis of the Impacts of Political, Psychological, Structural Factors on Conspiracy Beliefs about the COVID-19 Pandemic. *International Journal of Environmental Research & Public Health*, 18(1), 266-294. <https://doi.org/10.3390/ijerph18010266>.
- Klein, O. & Nera, K. (2020). Social Psychology of Conspiracy Theories. In M. B. Knight, *Routledge Handbook of Conspiracy Theories* (p. 121-134). London: Routledge, Taylor & Francis Group.
- Laera D., Colucci M., Bottalico M., Franco T., Grattagliano I., Violante M., Volpe G., Taurino A. (2022). Who believes Fake News? Psychological and criminological aspects of the protagonists of the post-truth era. *Rassegna Italiana di Criminologia*, 16(1), 12-23. <https://doi.org/10.7347/RIC-012022-p12>
- Lantian, A., Wood, M. & Gjoneska, B. (2020). Personality traits, cognitive styles and worldviews associated with beliefs in conspiracy theories. In M. Butter & P. Knight, *Routledge Handbook of Conspiracy Theories* (p. 155-167). London: Routledge, Taylor & Francis Group.
- Leal, H. (2020). Networked Disinformation and the Lifecycle of Online Conspiracy Theories. In M. Butter & P. Knight, *Routledge Handbook of Conspiracy Theories* (p. 518-532). London: Routledge, Taylor & Francis Group.
- Levinson, A., Miconi, D., Li, Z., Frounfelker, R. & Rousseau, C. (2021). Conspiracy Theories, Psychological Distress, and Sympathy for Violent Radicalization in Young Adults during the COVID-19 Pandemic: A Cross-Sectional Study. *International Journal of Environmental Research and Public Health*, 18(15): 7846. <https://doi.org/10.3390/ijerph181-57846>.
- Lewandowsky, S. & Cook, J. (2020). *The Conspiracy Theory Handbook*. George Mason University Center for Climate Change Communication.
- Lewandowsky, S., Oberauer, K. & Gignac, G. E. (2013). NASA faked the moon landing - Therefore, (climate) science is a hoax: An anatomy of the motivated rejection of science. *Psychological Science*, 24(5): 622-633.
- McCarthy, M., Murphy, K., Sargeant, E. & Williamson, H. (2021). Examining the relationship between conspiracy theories and COVID-19 vaccine hesitancy: A mediating role for perceived health threats, trust, and anomie? *Analyses of Social Issues and Public Policy*, 22(1): 106–129. DOI: 10.1111/asap.12291.
- Norris, P. & Epstein, S. (2011). An experiential thinking style: its facets and relations with objective and subjective criterion measures. *Journal of Personality*, 79(5), 1043–1080.
- Nurse, M., Ross, R., Isler, O. & Rooy, D. (2022). Analytic thinking predicts accuracy ratings and willingness to share

- COVID-19 misinformation in Australia. *Memory & Cognition*, 50(2): 425-434. doi: 10.3758/s13421-021-01219-5.
- Oleksy, T., Wnuk, A., Maison, D. & Ły, A. (2020). Content matters. Different predictors and social consequences of general and government-related conspiracy theories on COVID-19. *Personality and Individual Differences*, 168, https://doi.org/10.1016/j.paid.2020.110289.
- Pennycook, G. & Rand, D. G. (2019). Lazy, not biased: susceptibility to partisan fake news is better explained by lack of reasoning than by motivated reasoning. *Cognition*, 188, 39-50. doi: 10.1016/j.cognition.2018.06.011.
- Pennycook, G., McPhetres, J., Zhang, Y., Lu, J. G. & Rand, D. G. (2020). Fighting COVID-19 misinformation on social media: experimental evidence for a scalable accuracy-nudge intervention. *Psychological Science*, 31(7), 770-780.
- PEW Research Center. (2019, October 2). *Americans Are Wary of the Role Social Media Sites Play in Delivering the News*. Taken from PEW Research Center: https://www.journalism.org/2019/10/02/americans-are-wary-of-the-role-social-media-sites-play-in-delivering-the-news/. Last accessed on 11/05/2021.
- Potter, W. J. (2013). Review of Literature on Media Literacy. *Sociology Compass*, 7(6): 417-435. DOI: 10.1111/soc4.12041.
- Quinn, E. K., Fazel, S. S. & Peters, C. E. (2020). The Instagram Infodemic: Cobranding of Conspiracy Theories, Coronavirus Disease 2019 and Authority-Questioning Beliefs. *Cyberpsychology, Behavior, and Social Networking*, 24(8): 573-577. DOI: 10.1089/cyber.2020.0663.
- Roozenbeek, J. & van der Linden, S. (2019). Fake news game confers psychological resistance against online misinformation. *Palgrave Communications*, 5(12), 1-10.
- Scherer, L. D. & Pennycook, G. (2020). Who Is Susceptible to Online Health Misinformation? *AJPH Perspectives*, 110 (S3), Available at https://doi.org/10.2105/AJPH.2020.305908.
- Šrol, J., Čavojská, V. & Mikušková, E. (2022). Finding Someone to Blame: The Link Between COVID-19 Conspiracy Beliefs, Prejudice, Support for Violence, and Other Negative Social Outcomes. *Frontiers in Psychology*, 12: 726076. DOI: 10.3389/fpsyg.2021.726076.
- Uscinski J.E., Enders A.M., Klofstad C., Seelig M., Funchion J., Everett C., Wutchy S., Premaratne K. & Murthi M. (2020). Why do people believe COVID-19 conspiracy theories? *Harvard Kennedy School (HKS) Misinformation Review*. DOI: https://doi.org/10.37016/mr-2020-015.
- Uscinski, J., & Parent, J. (2014). *American Conspiracy Theories*. Oxford: Oxford University Press.
- Van der Linden, S., Leiserowitz, A., Rosenthal, S. & Maibach, E. (2017). Inoculating the public against misinformation about climate change. *Global Challenges*, 1(2): 1600008. https://doi.org/10.1002/gch2.201600008
- Van Prooijen, J., Klein, O. & Đorđević, J. M. (2020). Social-cognitive processes underlying belief in conspiracy theories. In M. B. Knight, *Routledge Handbook of Conspiracy Theories* (p. 168-180). London: Routledge, Taylor & Francis Group.
- Van Prooijen, J. & Acker, M. (2015). The influence of control on belief in conspiracy theories: Conceptual and applied extensions. *Applied Cognitive Psychology*, 29(5): 753-761. https://doi.org/10.1002/acp.3161
- Van Prooijen, J. & Van Vugt, M. (2018). Conspiracy theories: evolved functions and psychological mechanisms. *Perspectives on Psychological Science*, 13(6), 770-88.
- WHO (2019). Ten threats to global health in 2019. *Taken from World Health Organization*: https://www.who.int/news-room/spotlight/ten-threats-to-global-health-in-2019. Last accessed on 11/05/2021.
- WHO (2021). *Fighting misinformation in the time of COVID-19, one click at a time*. Taken from World Health Organization: https://www.who.int/news-room/feature-stories/detail/fighting-misinformation-in-the-time-of-covid-19-one-click-at-a-time. Last accessed on 11/05/2021.
- Yüce, M., Adalı, E. & Kanmaz, B. (2021). An analysis of YouTube videos as educational resources for dental practitioners to prevent the spread of COVID-19. *Irish Journal of Medical Science*, 190(1): 19-26. doi: 10.1007/s11845-020-02312-5.

Revenge porn in the Italian regulatory and social context: new crime or old blackmail?

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OPEN ACCESS

Double blind peer review

How to cite this article: Ricci G. et alii (2022). Revenge porn in the Italian regulatory and social context: new crime or old blackmail? *Rassegna Italiana di Criminologia*, XVI, 3, 201-210. <https://doi.org/10.7347/RIC-032022-p201>

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Received: 21.10.2022

Accepted: 26.05.2022

Published: 22.12.2022

Pensa MultiMedia
ISSN 1121-1717 (print)
ISSN 2240-8053 (on line)
[doi10.7347/RIC-032022-p201](https://doi.org/10.7347/RIC-032022-p201)

Abstract

Revenge porn is the online publication on websites of explicit photographs or videos taken in intimate moments without the person's consent. It is a new form of gender-based violence, as the majority of victims are women. This phenomenon has been growing in recent years due to the increase in popularity and spread of social networks. Since the start of social distancing measures due to the COVID-19 pandemic, the problem has undoubtedly become more serious. The most affected groups are women and adolescents. Phenomena such as revenge porn and cyberbullying are aberrant aspects of online relationships. Although different in their specificity, they have many elements in common, which, unfortunately, in some cases, have led to dramatic outcomes, pushing the victims to suicide. This contribution aims at fully framing the issue from a social point of view and outlining its legal characteristics with reference to the European and Italian legal framework, starting from the analysis of the data presented within the report presented on 24 November 2020 by the Italian Ministry of Justice, containing a statistical analysis of the impact in terms of diffusion of the revenge porn phenomenon one year after the entry into force of the law of 19 July 2019 (the so-called "Codice Rosso"), which introduced the specific crime of unlawful dissemination of sexually explicit images or videos.

Keywords: revenge porn, gender-based violence, cyberbullying, cybercrime.

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Revenge porn in the Italian regulatory and social context: new crime or old blackmail?

1. Introduction

1.1 Framing the phenomenon

ICT and social media forever changed the way we communicate and altered the basis of interpersonal relationships, breaking down the boundaries of time and space. Technology produces social changes, and leisure time begins to be invaded by technologies. These new forms of communication are accused, on the one hand of accelerating the growth of young people and, on the other, of not encouraging them to take on the responsibilities of adulthood.

Since the 1990s, new communication technologies have been the preserve of everyone.

The first obvious consequence has been the impossibility of regulating the Web, with the consequent impracticality of checking and controlling all the contents that pass through it. Surfing, not only through computers but primarily through mobile phones can become quite dangerous. Although the use of these technologies is undoubtedly immense, at the same time several offence categories have developed in connection with them, such as cyberstalking, hate speech and bullying on the net. Although different from each other, these forms of conduct have in common the seriousness of infringing fundamental human rights and, due to the characteristics of the network, often produce irreversible effects. Among the phenomena that have been spreading in recent years is revenge porn. This is a term of Anglo-Saxon origin that associates the word “revenge” with pornography. The notion is now in sadly everyday use, as is the multiplication of revenge porn episodes against countless people, mainly women, who have found their intimate sphere violated and have seen their image spread virally without ever having allowed it or even after having been immortalised without their knowledge (Kitchen, 2015).

Although it has a strong emotional impact, the expression “revenge porn” is considered by many experts to be.

The term revenge porn originates from English law, which first established it as an offence through “*Section 33 of the Criminal Justice and Courts Act 2015*”, imposing a penalty of imprisonment not exceeding two years. The English law represents the legal formula on which the related criminal offences were created by the various foreign legal systems, including the Italian one. And indeed, the prerequisite for the configuration of the offence, i.e., the disclosure of images or videos with sexually explicit content without the consent of the person depicted or to create psychological distress to the victim, is also present in

the corresponding Italian criminal provision, i.e., in Article 612-ter of the Criminal Code. Sexual blackmail is often perpetrated by people who have a romantic relationship with the victim, such as spouses, partners, boyfriends, who act after the end of a relationship to humiliate the ex-partner by using pictures or videos in their possession. These may be selfies taken by the victim and sent to the ex-partner, or videos or photos taken in intimacy with the idea that they should remain private, or shots taken secretly without either party being aware of it.

The sharing of such images can occur online and via e-mail and mobile phones and leads to an aberrant result for the victims: humiliation, damage to their image and dignity, conditioning in social relationships and employment search.

From literature (McGlynn, Rackley, et al., 2017) many victims have reported to psychologists that the impact of disseminating images taken privately can be compared to that of an actual sexual assault.

Criminal behaviour can be said to be an advanced form of cyberbullying, to harm and discredit the victim.

Pornographic material can be taken in different ways:

- By sexting, i.e., sending texts with sexual content.
- By filming intimate images during intercourse with the victim’s consent.
- By filming the victim during intimate moments (sexual intercourse, public toilets, changing rooms, etc.) with hidden cameras (spycam).
- Through the hacking of the victim’s cloud space (iCloud, Gmail, Microsoft Space, etc.) or smartphone device, also by spontaneously handing over the device (e. g. sending a PC or phone for service).

It is increasingly clear how pornography has always been a technological advancement, also in terms of investment, and how many of the new digital tools, indispensable for modern life, have actually been developed to create or enjoy pornography better and more efficiently. The combination of technological advancement and pornography, the omnipresence of the smartphone and the “sexualisation” of culture, makes it quite “normal”, especially among adolescents, to rely on technology to express various aspects of their sexuality.

For our purposes, a few considerations on amateur pornography are also of interest. One only has to think of the success of specialised sites, the most popular of which has reached over 300,000 hits per day.

In part, the high attraction of consumers for these intimate moments removed from a real couple context is due to their veracity and thus to the proliferation of amateur

videos. If pornography was born above all as an exhibition of “reality”, the industrial trend has made it more spectacular in recent years. That original vocation is now taken up by amateur pornography, which attracts all users searching for the real, the homely, the spontaneous, outside the codified schemes of “official” pornography.

1.2 The prevalence of the phenomenon

It should be noted that literature does not abound in scientific-statistical studies on the subject, the size of which must therefore be estimated primarily based on surveys conducted by companies in the sector and associations in defense of women. According to the data of a study carried out in 2013 by the American computer security company McAfee, during 2012, in 10% of couples aged between eighteen and fifty-four years, a threat of revenge porn had occurred. Of these threats, 6 out of 10 had later materialised (Eichorn, 2013).

Research by the Melbourne Institute of Technology (RMIT) established that in 2015, out of 3,000 Australians interviewed between the ages of 18 and 55, one in ten had their images distributed online or sent to others without their consent (Commonwealth of Australia, 2016).

In England, in the first year since the introduction of the 2015 revenge porn law, over 800 criminal complaints were registered, made in 3/4 of the cases by women (Caletti, 2019). Regarding the users of pornographic material derived from revenge porn actions, even in 2010, a website entirely dedicated to revenge porn called “*Is Anyone Up?*” was founded. The site, which had about 300,000 daily visitors, was permanently closed on April 19, 2012.

However, it was not the only existing web portal. According to a survey conducted by “The Economist”, in July 2014, there were over 3,000 sites dedicated to the dissemination of revenge porn content (The Economist, 2014).

Revenge porn content does not necessarily require specialised sites: it often circulates quietly on common social networks like Facebook and Instagram.

The social network of Mark Zuckerberg, for example, can detect through artificial intelligence nude images or videos spread without the consent of the person filmed. It identified and removed about 28 million images in the fourth quarter of 2020 alone, in 98.1% of cases even before someone reported them. Because of these data, from March 8, 2021, on the website of the Italian Guarantor for the protection of personal data is available a form to report cases of non-consensual pornography. Those directly concerned can then report their fear of seeing intimate images being spread on social networks and go viral. The Authority then examines the reports, which confidentially forwards the report to Facebook, which removes the content in question.

2. Data presentation

On 24 November 2020, the Italian Ministry of Justice presented a detailed report illustrating the results of the statistical survey of data collected from judicial offices between 1 August 2019 and 31 July 2020 concerning the offences introduced by Law No. 69 of 19 July 2019 (Italian Ministry of Justice, 2020).

Therefore, the aim of the report was to assess whether the introduction of the “Codice Rosso” into the Italian legal system had enabled the achievement of the intended objective, i.e., to protect victims of domestic and gender-based violence.

In parallel to the analysis mentioned above, the Criminal Analysis Service of the Department of Public Safety of the Ministry of the Interior conducted research aimed at understanding the exact proportions of the revenge porn phenomenon in Italy. The analysis of the data obtained from the databases of law enforcement agencies throughout the country showed that, in the period between 9 August 2019 and 8 August 2020, 718 cases of revenge porn were recorded, with 82% female, 83% over 18 years old and 89% Italian (Italian Ministry of Interior, 2020). The survey also made it possible to record the temporal fluctuations of the reported incidents and their geographical distribution.

An analysis of the ministerial data is proposed in the following paragraphs.

Since this is the first systematic survey aimed at defining the spread of the phenomenon since it was defined as a criminal offence, references and comparisons with earlier periods of time are not possible.

Before the promulgation of the “Codice Rosso”, the offence of revenge porn (which did not exist as such) was covered by other legal offences, such as defamation, extortion, violation of privacy and improper processing of personal data.

Since there is no official data available to delineate the extent of revenge porn alone, in order to ensure methodological rigour it was considered appropriate to avoid providing unofficial data on broader criminal offences, limiting ourselves to the presentation of official ministerial data specifically aimed at studying the crime of revenge porn.

3. Cultural, social and regulatory characterisation of the phenomenon

3.1 Italian data overview

The data recorded, which represent only the tip of the iceberg, not inclusive of all those cases for which no criminal complaints were made, show an evident surge in the months of lockdown imposed by the COVID-19 pandemic, peaking in May 2020 (figure 1).

Indeed, the health emergency-related restrictions on freedom of movement have been a strong impetus for in-

creasing the dissemination of content (including sexually explicit content) via social networks or instant messaging applications. In other words, people have attempted to overcome the inability to maintain relationships through the exchange of digital material, which has often been misused by those who have received it. The increase in online relationships and internet use made people more vulnerable to sexual blackmail. In addition, harassers, unable to perpetrate harassment “in-person” due to restrictions, become increasingly reliant on online forms of abuse.

A similar trend was observed in the United Kingdom: according to data from the UK’s revenge porn helpline, during the lockdown period there was a 98% increase in cases in April 2020 compared to the same month the previous year (UK Safer Internet Centre, 2020).

As regards the distribution of crimes by region, the highest number of offences was recorded in the areas of Lombardy (141), Sicily (82), and Campania (74). In contrast, the lowest was recorded in Basilicata (5) and Aosta Valley (1). It is hardly surprising that the victims were female in 82% of the cases.

As regards the progress of legal proceedings, as can be expected, most of the proceedings initiated were still at the preliminary investigation stage when the Ministry of Justice report was drafted. At the same time, of the remainder, 353 had completed the pre-trial phase (121 with committal for trial, 226 with request for dismissal and 6 with a judgement), and 16 were at the trial stage (with the verdict already issued in 3 cases).

These data allow an initial assessment to be made one year after the introduction of the offence of revenge porn, concluding that it is undoubtedly a positive measure, which has been efficiently integrated into the Italian legal framework but is still insufficient on its own to control a phenomenon which seems to be on the increase.

Women for Security, the Italian Community that brings together the Italian experts of cyber security, conducted in February 2021 an interesting survey having as objective the definition of the exact scope of the phenomenon of revenge porn in Italy (Security Summit Streaming Edition, 2021). The survey was conducted by administering a 14 question-questionnaire to a sample not homogeneous for age groups composed of 86% women. 88% of the interviewed subjects were aware that revenge porn was a crime, but only 75% thought it would be helpful to report the fact to the competent authorities. 14% of respondents said they knew at least one victim of revenge porn, primarily female. 2% of respondents stated that they had been personally involved in an episode of Revenge Porn, but only in half of the cases was a criminal complaint made.

Almost half of those interviewed (47%) considered prevention to be the best tool to help reduce the phenomenon.

Other defence strategies suggested by respondents were awareness campaigns (17%) and the provision of harsher penalties (7%).

The data of the study, presented on March 17, 2021, at the Security Summit Streaming Edition (an event dedicated to cyber security news in Italy), illustrate a scenario consistent with that which emerged from the survey carried out by the Ministry of Justice: the phenomenon of revenge porn is very much alive in Italy, and the introduction of a specific crime seems to be insufficient, on its own, to fight the practice effectively. The information collected through the survey prompted the association Women for Security to prepare awareness actions, including meetings with schools and the distribution of information material to raise awareness on revenge porn.

3.2 Revenge porn legislation: an international overview

Many countries have specific laws to protect victims of revenge porn.

Regarding the European context, France passed a law in 2016 (*Loi pour une République Numérique*, 2016) which, among other provisions, introduces into the French Criminal Code the offence of disseminating any document, recording, written text or image of a sexual nature. The offence is sanctioned by two years of imprisonment and a 60.000 € fine.

In Germany, the topic of revenge porn had received specific attention since 2014, when the German Federal Court of Justice (*Bundesgerichtshof*) upheld an earlier judgment by a regional court in Koblenz, which had ruled that a man was not entitled to keep intimate photographs of his ex-partner just because she had consented to take them (German Federal Court of Justice, 2014).

As regards Spain, in 2015, Article 197 of the Criminal Code (offences relating to the disclosure and dissemination of secrets and computer hacking) was implemented through the introduction of the criminal offence of disseminating personal images when it seriously harms the intimacy of the person whose image has been disseminated.

In the UK in 2015, the Criminal Justice and Courts Act came into force, which introduced the offence of revealing private sexual photos and films to cause distress while not guaranteeing the anonymity of victims.

The maximum penalty for this offence is two years’ imprisonment (Criminal Justice and Courts Act, 2015).

On the non-European side, the first country to legislate on revenge porn was the Republic of the Philippines in 2009. The Anti-Photo and Video Voyeurism Act protects “*the honour, dignity and integrity of the person*” and carries a penalty of three to seven years’ imprisonment (Anti-Photo and Video Voyeurism Act, 2009).

The United States recognises revenge porn as a criminal offence in 38 states plus Washington DC, and the Communications Decency Act also provides for a limitation of intermediaries in the case of the dissemination of content involving women of legal age (Communications Decency Act, 1996).

In Japan, there is a specific law (Act of Prevention of

Damage by Provision of Private Sexual Image Records), which punishes the publication of sexual images that disturb someone's private life without consent with a maximum sentence of 500,000 yen (approximately € 3,800) or three years' imprisonment.

In Australia, a pilot project is being run to offer support to victims of disseminated sexual content, and in some states such as Victoria, New South Wales and South Australia, revenge porn is classified as a criminal offence and punished with financial penalties and imprisonment for two to four years (depending on the state).

3.3 European and Italian legal framework

The right to privacy is firmly based on Article 8 of the Charter of Fundamental Rights of the European Union, which provides for the right of every person to the protection of personal data concerning him or her (Charter of Fundamental Rights of the European Union, 2012).

In particular, through the adoption of EU Regulation 2016/679 (General Data Protection Regulation – GDPR), operational since 25 May 2018, the European Union proposed to reinforce and standardise the European regulatory framework on privacy and personal data protection given the increasing spread of digital media (EU Regulation No 2016/679).

Regulation 2016/679 was thus created with the primary purpose of adapting the previous legislation (Directive 95/46/EC) to the digital age. Article 17 of the GDPR introduces the “right to erasure”, i.e., the right ‘to be forgotten’, to have data previously granted to the controller (intended by the provision as the one who determines the purposes and means of the processing of personal data) deleted. Indeed, the GDPR sets out several circumstances in which the data subject is entitled to obtain the erasure of personal data from the data controller without undue delay. The three main situations in which a request for deletion of data is lawful are the non-necessity of the data (in relation to the purpose for which they were initially collected), the withdrawal of consent to process the data or the illegal use of the data.

Italy implemented the European legislation by issuing Legislative Decree No. 101 of 10 August 2018, “*Provisions for the adaptation of national legislation to the provisions of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016*”, effective from 19 September 2018.

This provision amended and partly repealed the former Italian Privacy Code (Legislative Decree No 196 of 2003). Although they still qualified as criminal offences (regulated by Articles 167 to 172 of the Privacy Code), the characterisation of privacy violations was drastically changed by introducing the provision of damage in addition to profit so as to focus not only on the economic gain of the offender (as was the case under the previous legislation) but also on the damage to the victim's reputation. Article 167 of the Privacy Code as amended based on Leg-

islative Decree no 101 of 10 August 2018 in fact established that the offence of unlawful processing of personal data was configurable not when the offender “proceeds to process personal data” (as provided for in the previous wording), but rather when he “causes harm to the data subject”.

The addition of the concept of ‘damage’ fully represents the declination of the new European legislation, aimed at protecting individuals from the new pitfalls of the digital world, including precisely the damage to the image related to the dissemination of material on the Internet and social media, such as the damage from revenge porn. Although it was virtually possible to bring the crime of revenge porn within the scope of Article 167 of the Privacy Code as amended in accordance with the new European GDPR, several political forces and associations for the protection of human rights fought for the introduction of a specific law, in view of the seriousness of the crime (involving potentially devastating psychological repercussions for the victims) and the proportions of the increasing proportions of the phenomenon. This led to the enactment of Law No. 69 of 19 July 2019, better known as “Codice Rosso”, providing for an acceleration of investigations for crimes of ill-treatment, sexual violence, stalking, and personal injury, the tightening of penalties for offences already provided for in the Penal Code, and the establishment of new crimes, including revenge porn.

The law introduced into the Italian legal system Article 612-ter of the Criminal Code (“*Illicit Dissemination of Sexually Explicit Images or Videos*”): this is the first law specifically aimed at punishing under Criminal Law revenge porn perpetrators¹.

According to the judges of the Supreme Court of Cassation, “sexually explicit content” means any content “... likely to arouse the viewer's erotic urges, and therefore includes not only images depicting intercourse but also naked bodies with genitals on display ...” (Italian Court of Cassation, 2009).

Paragraph 1 considers images and videos “intended to remain private”, disseminated “without the consent of the persons represented”.

1 The text of the law is as follows: “Unless the act constitutes a more serious offence, whoever, after having made or taken them, sends, delivers, assigns, publishes or disseminates images or videos with sexually explicit content intended to remain private without the consent of the persons represented shall be punished by imprisonment of from 1 to 6 years and a fine of between € 5000 and € 15000. The same punishment applies to anyone who, having received or in any case acquired the images or video, sends, transfers, publishes or disseminates them without the consent of the persons represented in order to cause them harm. The penalty is increased if the spouse commits the facts, even if separated or divorced, or by a person who is or has been bound by a relationship of affection to the offended person, or if the facts are committed through computers or telematic systems”.

The two expressions are almost equivalent: they both relate to the psychological attitude, the first to the time preceding and the second to dissemination. The psychological element of the offence is the so-called “general intent”, i.e., it is sufficient that the perpetrator wants the event to occur without any reason for doing so being of any relevance. The second paragraph considers the conduct of a person who, after receiving the images, further “sends, transfers, publishes or disseminates them without the consent of the persons represented in order to cause them harm”. In this case, the person commits the offence only if he acts “in order to cause harm” to the person depicted. So-called “specific intent”, i.e., the precise intention to harm the person depicted, is therefore required. Therefore, according to the law, the offence provided for in the second paragraph will not apply in all cases where the person receiving the material divulges it only for fun or because he considers it interesting. The penalty shall be increased by between a third and a half if the acts are committed to the detriment of a person in a condition of physical or mental inferiority or to the detriment of a pregnant woman.

The offence is punishable upon complaint by the injured party; the time limit for filing a complaint is six months. The dismissal of the complaint can only be procedural, and however, it is prosecuted *ex officio* when the offence relates to another crime that must be prosecuted *ex officio*.

3.4 The cultural changes underlying the phenomenon

A boost to the spread of pornographic content came in 2008, when smartphones, capable of rapidly surfing the Internet and quickly exchanging images and videos, entered the market. It seems undeniable that the increasing ease of dissemination of pornographic content represented a strong drive for a distorted evolution of the representation of the female sexual universe. If the innovations introduced by the sexual revolution of the 1970s saw women acquiring ever greater sexual emancipation, the advent of pornography that is easily accessible to all seems to have represented a natural drift in the phenomenon of female sexual liberalisation.

Pornographic intercourse is a mere mechanical representation of the intimate relationship between man and woman, cleansed of all affective, relational, interactive, and human aspects. It is a strongly asymmetrical relationship, where the woman becomes an instrument of pleasure for the man, who exploits the female figure in a finalist and self-centred way. It is not essential that the woman feels pleasure and derives satisfaction from the relationship, just as the woman doesn't have to reach orgasm. The woman must always and in any case be beautiful, made-up, and free of imperfections, as a valuable instrument for the satisfaction of the male's pleasure. Pornography thus became a vehicle for the stereotype that women are mere objects of male desire, being submissive

in comparison to men, who satisfy their desires through their bodies.

A Swedish research group conducted a survey in 2009 through focus groups and interviews with adolescent consumers of pornography (Löfgren-Mårtensson & Månsson, 2010).

According to the survey, young people were aware of the distorted male-female relationship depicted in pornographic films, in which the man is in a stable position of dominance, sometimes with violent and predatory attitudes. The study also highlighted how the viewing of the films exerted a sort of “pressure” on the adolescents, who tended more or less consciously to emulate the behaviour staged in the movies (the girls practising complete groin hair removal, the boys trying to justify in every way the failure to reach the standards of sexual performance of the porn actors). Not only pressure, but also psychological conditioning: a 2015 Italian study conducted on about 1,500 adolescents found that between 1/5 and 1/4 of males experienced difficulties in becoming aroused in intimacy with their partners, as the stimuli of the intimate relationship did not correspond to the images assimilated through early and prolonged use of pornography (Pizzol, Bertoldo, et al., 2016).

It seems therefore legitimate to consider that this socio-cultural context undoubtedly represented a substratum favouring the proliferation of the phenomenon of revenge porn, a vexatious practice that represents almost an extension and a magnification of the asymmetry of the man-woman relationship told by pornography, with a woman who is the object of the man's pleasure in the scene filmed by the camera and who becomes again an object of pleasure in the hands of the owner of the illicitly disclosed film.

3.5 The propellants of the phenomenon: Telegram and sexting

In recent years, the Russian app Telegram has seen a substantial increase in terms of new registrations, with a conversation rate of around 30,000 messages per day, making it an alternative to the traditional Whatsapp. The guarantee for its users to be able to communicate confidentially, thanks to end-to-end encryption, has been, also for political reasons, one of Telegram's peculiarities, in addition to the possibility of carrying out secret chats that then self-destruct within a short time, at the user's choice. However, the interest in data protection has led Telegram to become, sadly, also a breeding ground for illegal uses, among which revenge porn seems to be the most relevant. At the end of October 2020, about 10,000 users, almost exclusively men, were born on Telegram. It collects and disseminates images, not necessarily intimate or sexually explicit, but also “innocent”, “neutral”, and in any case private, of very young people (girls under 23), primarily minors, stolen from their social accounts. But this is not just about stealing photos. The explicit invitation to those

who join the group is to report “friends” to whom they “want to play a dirty trick” by providing their name, telephone number and other data in their possession, such as their home address, the school they attend, or their workplace and social profiles. This is followed by instructions to the users on where to upload the photos, where to find the contact person and a recommendation for those who decide to contact them not to reveal where the information was taken from. Girls then receive dozens of phone calls without understanding how it was possible; it is a theft of images and data with the intention of hurting someone they know. In the photos, at least in many of them, there is no sex. They are the classic photos in costume, selfies taken in the mirror in the bathroom at home. Still, we are talking about thirteen- and fourteen-year-old girls, exposed with their phone number, the school attended or other private references. This is a severe matter, and the consequences for the victims, who are exposed to harassers and persecutors, can be devastating. Therefore, victims must report to the police and non-profit organisations, which can be contacted for advice or to remove images from large social platforms (Facebook in particular). Through the reports of authorised NGOs, the social networking site ensures that certain materials are deleted and “branded forever” so that they can never be re-uploaded. This operation is called “Stay Down”, and it is a very effective but still little-known procedure, so few use it.

In addition to the growing popularity of the Telegram app, the increasing prevalence of “sexting” has also contributed to the spread of revenge porn.

As mentioned in the introduction, the neologism derives from the fusion of the two terms “sex” and “texting” and was used for the first time in 2005 in an Australian magazine. However, it appeared officially on Merriam/Webster’s Collegiate Dictionary only in 2012. Sexting has been defined by Lenhart as “*the creating, sharing and forwarding of sexually suggestive nude or nearly nude images*” through mobile phones and the Internet (Lenhart, 2009).

Revenge porn and sexting represent different aspects of the same phenomenon, or better, the first one can be considered the degeneration of sexting, which is, thus, its precursor: sexting becomes revenge porn when images and videos are shared with third parties through the Internet without the consent of the protagonist (Barrense-Dias, Berchtold, et al., 2017).

Particularly alarming is the fact that the practice of sexting is particularly prevalent among young people.

According to the European research “Net Children Go Mobile”, 13% of children between 11 and 16 years old experienced sexting, and 29% – in Italy 23% – between 9 and 16 years old received explicit content on their smartphones during the year preceding the research (2013) (Mascheroni & Cuman, 2014).

Quantitative studies on sexting among young people show a percentage of young people involved between 15% and 40% (Ringrose, Gill, et al., 2012).

The percentage oscillation depends on the fact that a good part of the studies adheres to a vast concept of sexting, both concerning the object of the messages and the way they are sent. As for the first aspect, what most endangers the sexual privacy of young people is sending their image, not the transmission of a generic nude image. The latter conduct may, at most, contribute to the non-consensual diffusion of intimate images (thus worsening an already existing damage), provided, of course, that the necessary conditions are met or have repercussions on the sexual “formation” of the young person. Still, it is not relevant from the point of view of the production of new images potentially destined for non-consensual diffusion. It is, therefore, necessary to look at 40% as the total percentage of “teenagers” who, in general, receive and send photographs and videos with sexual content.

From the revenge porn perspective, this is the percentage of potential “second distributors” of images previously posted by another person. The percentage of young people who create their nude image to send it to their partner for sexual arousal, as defined by the definition of sexting in the “strict” sense, should be, instead, close to 15%. This is undoubtedly a worrying picture, highlighting a rapidly increasing phenomenon that will likely affect increasingly significant percentages of the population. It seems particularly revealing the statistics related to sexting. The fatally approximate approach of many studies, which confuse sending one’s images with sending images received from others, leads to analyze the phenomenon from two different points of view. From the first point of view, sexting appears to be a preamble to revenge porn: sending one’s image exposes the person who took the “sext”, that is, the sexually oriented selfie, to a subsequent non-consensual publication. Gathering and cross-referencing the sources examined just now, it is plausible to believe that at least 8% of Italian adolescents use these practices. On the other hand, specific statistics on sexting give an idea of the consistency of the audience in cases of revenge porn, or all those who admit, in surveys, to receive nude images on their smartphones. In this case, it is likely to believe that an image published non-consensually can potentially reach 40% of young people and adults. These numbers are out of control, of which we do not even know the exact relevance, if only because they derive from studies dating back a few years ago. In fact, in the meantime, technologies, instead of hindering the spread, have made the creation and non-consensual distribution of pornographic images even easier, rooting and “normalising” the conduct under consideration.

3.6 Revenge porn and mental health

Due to the potentially psychologically devastating effects of revenge porn, it is sometimes referred to as “cyber rape” to emphasise that the repercussions on the victim are comparable to those of actual physical violence. Frequent hardships suffered by revenge porn victims include de-

pressive and anxiety disorders, difficulty finding a new partner, difficulty maintaining employment or finding a new one (Citron & Franks, 2014).

The first study to specifically investigate the mental disorders suffered by victims of private content dissemination was published in 2017. It is a survey conducted through in-depth qualitative interviews with 18 women victims of revenge porn. The study results showed that most victims had PTSD, a marked lack of self-confidence, depression and suicidal ideation (Bates, 2017).

Regarding post-traumatic stress disorder, in revenge porn victims, it results in behaviours such as obsession to check that sensitive content has not been made public again, attempts to commit suicide, recurrent anxiety often triggered by seeing certain elements that may bring back memories of what happened. Particularly impacting on the quality of life of the subject is the continuous and pervasive fear that the people with whom he or she interacts daily may recognise him or her as the protagonist of the pornographic material disseminated.

This attitude, moreover, often leads the subject to self-isolation, acting as a sounding board for the manifestation of the parade of psychological disorders directly resulting from the violence suffered. Isolation is physical and virtual: victims tend to delete all their accounts on social networks and digital platforms, which often has significant negative repercussions on the social aspect (fewer opportunities to interact with others) and the work aspect (loss of job opportunities). The drop in self-esteem is mainly due to the feeling of loss of control over his or her private dimension that the victim experiences. School-age children drop out of school very often, making it difficult to find a job in adulthood. In a recent study of 27 Nigerian women victims of revenge porn, it was found that they experienced public shame, ridicule, mockery, and harassment. As a result of the dissemination of the intimate images, women were ostracised from their network of friends, exposed to social stigma, and subjected to chastisement and deprivation by family members. This resulted in most cases in the loss of employment or suspension of studies, termination of love relationships and cancellation of social life through voluntary withdrawal and self-isolation (Aborisade, 2021). The results of the study, which confirmed the already known data on the psychological trauma suffered by victims of revenge porn, showed that the psychological damage linked to violence is twofold: on the one hand, the primary injury, related to the actual event, and on the other hand the secondary damage, due to the social consequences of the dissemination of intimate images, which only aggravates the extent of the direct damage. However, it should be emphasised that the exceptionally high extent of this secondary (i.e., social) harm recorded in the study is probably due to the characteristics of Nigerian society, with a sexually conservative culture that is markedly prevaricator of sexual freedoms.

The psychological impact of revenge porn can be particularly devastating for minors, who have been increasingly involved in cyber-bullying crimes in recent years.

Mental, emotional, and behavioural disorders in childhood can easily be the source of long-term distress that may persist into adulthood in a more severe form.

Social support from parents is a well-known and crucial element of support for the psychological rehabilitation of underage victims of bullying and blackmail (Connors-Burrow et al., 2009).

There is now ample evidence that family support can mitigate the impact of stressful life events on children and enhance their growth into adulthood (Bowes, 2010; McGrath, 2009).

Also, not to be underestimated is the emotional rebound effect on parents, who may themselves need psychological assistance, often feeling partly responsible for their child's state of distress (Harcourt et al., 2014).

Brown describes the possibility that a state of "emotional fallout" can affect family harmony as a result of an incident of psychological violence against a child (Brown, 2014; Hong, 2020).

It is precisely in this perspective that the importance of a psychological therapeutic approach involving the whole family must be emphasised.

The therapeutic process must see children and parents interacting synergistically, under the guidance of a professional figure (doctor or psychologist) who takes an active role in educating both of them about the dangers of online surfing and the use of social networks.

One of the most delicate tasks in the hands of paediatricians and developmental psychologists is to warn parents and patients about the dangers of sexual extortion attempts via the web and to instruct them how to recognise the most frequent techniques used by online predators to lure children.

Obviously, this delicate therapeutic phase must be conducted with the support of the victims, showing empathy for the victim and avoiding blaming them, as well as avoiding blaming the parents for their upbringing (Hong, 2020).

Specific therapeutic paths should also be provided for minors who are not victims of sexual blackmail crimes but who do perpetrate them.

In this case, too, it is crucial that the family be involved in an appropriate and cautious way, so that a therapeutic process can be set up to rehabilitate the minor and reconcile him or her with the other family members.

In this context, therapists should try to dissuade parents from carrying out punitive measures, since the child's blackmailing gesture is nothing more than the manifestation of latent emotional distress.

The therapeutic approach should in such cases be complemented by specific digital civic education programmes, which are now widely codified and easy to access.

One technique that has proved particularly effective in this respect is that of indicating socio-emotional themes through roleplay (Wolak, 2018).

Conclusion

The increasing impact of the Internet and social media on human relations that we have witnessed in recent years has disrupted the way we communicate and changed the basis of interpersonal relationships, breaking down the boundaries of time and space. However, computer platforms represent a fertile territory for the emergence of new illegal phenomena, to which national and supranational legislation must necessarily adapt their legal systems. Among these new phenomena is revenge porn, a form of virtual violence consisting in the non-consensual dissemination of files with sexual content for retaliatory purposes, the victims of which are overwhelmingly women. The psychological consequences experienced by victims of revenge porn can be devastating, not much different from those of victims of sexual violence.

The “Codice Rosso”, a reform of the Italian Criminal Code approved in 2019 and introducing into the law for the first time the crime linked to this practice, represented a decisive turning point in the fight against gender-based violence, recognising revenge porn as an actual crime, and as such punishable. The law’s contribution in reducing the phenomenon is undoubted. However, data on criminal proceedings and reports to the police on the crime recorded in the first year after the law came into force show that there is still a long way to go.

The revenge porn phenomenon is on the rise. Although the “Codice Rosso” is undoubtedly an excellent starting point, it needs to be implemented by effective prevention strategies and greater control over the information circulating on IT platforms.

References

- Aborisade, R. A. (2021). Image-Based Sexual Abuse in a Culturally Conservative Nigerian Society: Female Victims’ Narratives of Psychosocial Costs. *Sexuality research and social policy*, 1-13.
- Barrense-Dias, Y., Berchtold, A., Surís, J. C., & Akre, C. (2017). Sexting and the definition issue. *Journal of adolescent health*, 61(5), 544-554.
- Bates, S. (2017). Revenge porn and mental health: A qualitative analysis of the mental health effects of revenge porn on female survivors. *Feminist Criminology*, 12(1), 22-42
- Bowes, L., Maughan, B., Caspi, A., Moffitt, T. E., & Arseneault, L. (2010). Families promote emotional and behavioural resilience to bullying: evidence of an environmental effect. *Journal of child psychology and psychiatry*, 51(7), 809-817.
- Brown, J. R. (2010). *Trajectories of parents’ experiences in discovering, reporting, and living with the aftermath of middle school bullying*. Indiana University.
- Caletti, G. M. (2019). “Revenge porn” e tutela penale. *Diritto Penale Contemporaneo, Rivista Trimestrale* – ISSN 2240-7618, 3/2018, p. 63.
- Citron, D. K., & Franks, M. A. (2014). Criminalizing revenge porn. *Wake Forest L. Rev.*, 49, 345
- Connors Burrow, N. A., Johnson, D. L., Whiteside Mansell, L., McKelvey, L., & Gargus, R. A. (2009). Adults matter: Protecting children from the negative impacts of bullying. *Psychology in the Schools*, 46(7), 593-604.

- Criminal Justice and Courts Act 2015, Section 33
- Eichorn K. *Lovers Beware: Scorned Exes May Share Intimate Data and Images Online*, 4 February 2013, www.mcafee.com/us/about/news/2013.
- European Union, Charter of Fundamental Rights of the European Union, 26 October 2012, 2012/C 326/02
- European Union Regulation No 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46/EC (General Data Protection Regulation)
- German Federal Court of Justice. VI ZR 271/14 (BGH, Urteil vom 13. Oktober 2015 – VI ZR 271/14 – OLG Koblenz)
- Gong, L., & Hoffman, A. (2012). Sexting and slut-shaming: Why prosecution of teen self-sexers harms women. *Geo. J. Gender & L.*, 13, 577.
- Harcourt, S., Jasperse, M., & Green, V. A. (2014). “We were sad and we were angry”: A systematic review of parents’ perspectives on bullying. In *Child & Youth Care Forum* (Vol. 43, 3, pp. 373-391). Springer US.
- Henry, N., & Powell, A. (2015). *Beyond the ‘sext’: Technology-facilitated sexual violence and harassment against adult women*. Australian & New Zealand Journal of Criminology, 48(1), 104-118
- Hong, S., Lu, N., Wu, D., Jimenez, D. E., & Milanaik, R. L. (2020). Digital sextortion: Internet predators and pediatric interventions. *Current opinion in pediatrics*, 32(1), 192-197.
- Italian Ministry of Justice. “Un anno di Codice Rosso”. 24 November 2020
- Italian Ministry of the Interior – Department of Public Security, Central Directorate of Criminal Police - Criminal Analysis Service. “Un anno di Codice Rosso”. October 2020
- Italian Court of Cassation, Section III, 9 December 2009, Judgement no 8285
- Kitchen, A.N. (2015). The need to criminalize revenge porn: How a law protecting victims can avoid running afoul of the first amendment. *Chicago-Kent Law Review*, 90, 247.
- Legal and Constitutional Affairs Committee, Phenomenon Colloquially Referred to as ‘Revenge Porn’ (Commonwealth of Australia, 2016), p. 4.
- Lenhart, A. (2009) ‘Teens and Sexting: How and why minor teens are sending sexually suggestive nude or nearly nude images via text messaging’. *Pew Research Centre Report*. <http://pewresearch.org/assets/pdf/teens-and-sexting.pdf>.
- Löfgren-Mårtenson, L., & Månsson, S. A. (2010). Lust, love, and life: A qualitative study of Swedish adolescents’ perceptions and experiences with pornography. *Journal of sex research*, 47(6), 568-579.
- Loi n° 20161321 du 7 octobre 2016 pour une République numérique
- Mascheroni, G., & Cuman, A. D. (2014). Net Children Go Mobile: Final Report. *Deliverables D6. 4 and D5. 2*.
- McGlynn, C., Rackley, E. & Houghton, R. Beyond ‘Revenge Porn’: The Continuum of Image-Based Sexual Abuse. *Fem Leg Stud* 25, 25–46 (2017). <https://doi.org/10.1007/s10691-017-9343-2>
- McGlynn, C., & Rackley, E. (2017). Image-based sexual abuse. *Oxford Journal of Legal Studies*, 37(3), 534-561
- McGrath, B., Brennan, M. A., Dolan, P., & Barnett, R. (2009). Adolescent well being and supporting contexts: A comparison of adolescents in Ireland and Florida. *Journal of Community & Applied Social Psychology*, 19(4), 299-320.
- Pizzol, D., Bertoldo, A., & Foresta, C. (2016). Adolescents and

- web porn: A new era of sexuality. *International journal of adolescent medicine and health*, 28(2), 169-173.
- Ringrose, J., Gill, R., Livingstone, S., & Harvey, L. (2012). A qualitative study of children, young people and 'sexting': a report prepared for the NSPCC. Security Summit Streaming Edition, 16-18 March 2021 – Women for Security – Sexting and Revenge Porn <https://contents.astreanetwork.net/1.0/pdf/361603528/documents.pdf>
- Semenzin, S., & Bainotti, L. (2020). The use of Telegram for non-consensual dissemination of intimate images: Gendered affordances and the construction of masculinities. *Social Media+ Society*, 6(4), 2056305120984453.
- "Sexting." Merriam-Webster.com Dictionary, Merriam-Webster, <https://www.merriam-webster.com/dictionary/sexting>. Accessed 20 Sep. 2021.
- The Economist. Misery Merchants. Jul 5th, 2014, Edition. <https://www.economist.com/international/2014/07/05/misery-merchants>
- UK Safer Internet Centre. Revenge Porn Pandemic. Rise in reports shows no sign of slowing even as lockdown eases. 17 September 2020. <https://www.saferinternet.org.uk/blog/revenge-porn-pandemic-rise-reports-shows-no-sign-slowing-even-lockdown-eases>
- U.S. Congress 1996. Communications Decency Act.
- Wolak, J., Finkelhor, D., Walsh, W., & Treitman, L. (2018). Sextortion of minors: Characteristics and dynamics. *Journal of Adolescent Health*, 62(1), 72-79.

Psychiatric-forensic evaluations
and artificial intelligence: new possible scenarioValutazioni psichiatriche-forensi
e intelligenza artificiale: nuovi scenari possibili

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OPEN ACCESS

Double blind peer review

How to cite this article: Casale S. et alii (2022). Psychiatric-forensic evaluations and artificial intelligence: new possible scenario. *Rassegna Italiana di Criminologia*, XVI, 3, 211-219. <https://doi.org/10.7347/RIC-032022-p211>

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Received: 12.04.2022

Accepted: 05.09.2022

Published: 22.12.2022

Pensa MultiMedia
ISSN 1121-1717 (print)
ISSN 2240-8053 (on line)
[doi10.7347/RIC-032022-p211](https://doi.org/10.7347/RIC-032022-p211)

Abstract

Cognitive biases are defined as mental processes which can lead to the elaboration of misjudgements. Biases can influence thoughts, opinions, behaviours, and they are inevitably involved in psychiatric-forensic evaluations. The delicate role that the mental health expert plays in the psychiatric examinations makes these mistakes highly relevant. Make sure that such a complex decision-making process is set up with care and attention is fundamental to guarantee the best protection of the individual rights, but also to avoid a mismanagement of government money. In order to avoid the possible use of cognitive biases in psychiatric-forensic assessments, it has been suggested to increase the standardization of evaluation procedures, but scientific literature shows that experts working in this area are often reluctant to question their own work. Recently, the application of Artificial Intelligence (AI) to the forensic field has opened new possibilities, but, on the other hand, it has generated new questions. AI seems to be beneficial for those decision-making processes where greater standardization is required, but attempts to use AI tools in the field of forensic psychiatry have highlighted some critical issues. In this article, after discussing the problems that characterize both human and computational decision-making, we will propose possible solutions.

Keywords: Artificial Intelligence, Psychiatric-forensic evaluations, cognitive bias, heuristic functions, decision making processes.

Riassunto

Si definiscono “*bias cognitivi*” quei processi mentali che possono condurre a elaborare giudizi imprecisi o errati. I *bias* possono influenzare pensieri, opinioni, condotte e sono inevitabilmente implicati anche nelle valutazioni psichiatriche-forensi. Il delicato ruolo che l’esperto in salute mentale riveste all’interno del processo peritale rende questi errori particolarmente rilevanti. Assicurarsi che un processo decisionale così complesso sia messo in atto con la dovuta attenzione e cura risulta di fondamentale importanza per garantire la maggiore tutela possibile del singolo, ma anche per evitare una mala gestione dei soldi dello Stato. Per sfuggire all’eventuale utilizzo di *bias cognitivi* nelle valutazioni psichiatriche-forensi, si è suggerito di standardizzare maggiormente le procedure di valutazione, ma dalla letteratura emerge che gli esperti che operano in quest’ambito sono spesso restii a mettere in discussione il proprio stesso operato. Di recente, l’applicazione dell’Intelligenza Artificiale (IA) al campo forense ha aperto nuove possibilità, ma, d’altro canto, ha generato nuovi interrogativi. L’IA sembra essere vantaggiosa per quei processi decisionali in cui maggiore standardizzazione è richiesta, ma i tentativi di utilizzo di strumenti dotati di IA in campo forense hanno messo in evidenza alcune criticità. In questo articolo, dopo aver discusso i problemi che caratterizzano sia il processo decisionale umano che quello computazionale, proponremo possibili soluzioni.

Parole chiave: Intelligenza Artificiale, Valutazioni psichiatriche-forensi, bias cognitivi, euristiche, processi decisionali.

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Psychiatric-forensic evaluations and artificial intelligence: new possible scenario

Introduzione

Il termine “*bias* cognitivo” indica una varietà di processi che possono portare a giudizi o interpretazioni imprecisi e che possono influenzare la memoria, il ragionamento e il processo decisionale. Il pensiero tende infatti a elaborare scorciatoie cognitive o euristiche al fine di destreggiarsi con maggiore facilità tra una varietà di stimoli complessi (Cooper & Meterko, 2019). I *bias* cognitivi rivestono un ruolo rilevante in tutti gli aspetti della percezione umana e del processo decisionale e, quindi, sono inevitabilmente implicati anche in molti settori della scienza forense e della valutazione forense (Zapf & Dror, 2017). Neal e Grisso (2014) ipotizzano che le euristiche più utilizzate in ambito forense siano l’euristica dell’ancoraggio, della rappresentatività e della disponibilità. Le euristiche, in pratica, aumentano le probabilità che il valutatore tenda a trascurare alcuni elementi che potrebbero essere di fondamentale importanza per la decisione finale, perché assume un atteggiamento poco esplorativo (Skellern, 2015; Zapf & Dror, 2017), divenendo fonte di pregiudizio inconsapevole. L’euristica dell’ancoraggio consiste nel fare una stima partendo da un valore iniziale (ancora) che viene poi aggiustato per ottenere la risposta finale. Il valore iniziale può essere suggerito da come è formulato il problema o può derivare da calcoli incompleti. In entrambi i casi gli aggiustamenti successivi sono tipicamente insufficienti. Punti di partenza diversi ottengono differenti stime finali, che sono distorte dai valori iniziali, che fungono da ancora. L’euristica della disponibilità consiste nella facilità di evocare mentalmente una data situazione: più essa è disponibile per il soggetto, più tende a sembrare probabile. L’euristica della rappresentatività consiste nella tendenza ad associare qualcuno o qualcosa ad una certa classe in base a quanto è rappresentativo di quella classe. Il grado di rappresentatività non dipende da valutazioni statistiche, al contrario, in questo tipo di ragionamento vengono trascurate altre variabili statisticamente rilevanti, come la probabilità di base.

Nel processo decisionale del valutatore, può capitare che un solo elemento rivesta un ruolo così importante da essere in grado di ribaltare il giudizio complessivo, senza considerare l’insieme d’informazioni di cui si dispone (Skellern, 2015), oppure che alcuni elementi che inizialmente apparivano irrilevanti finiscano per assumere un ruolo decisivo (Skellern, 2015; Zapf & Dror, 2017). Il delicato ruolo che l’esperto in salute mentale riveste all’interno del processo peritale rende questi errori particolarmente rilevanti. Nonostante ciò, sembra che la percezione del problema in ambito professionale forense desti scarso interesse, venga sottovalutata e non avvertito

come importante o urgente (Gowensmith & McCallum, 2019; Kukucka et al., 2017). Per esempio, da un’indagine condotta su 403 esperti di medicina legale emergeva una generale riluttanza a riconoscere l’importanza di avvalersi di procedure volte a minimizzare pregiudizi cognitivi e una certa resistenza nel riconoscere la propria suscettibilità ai pregiudizi (Kukucka, et al., 2017). Zapf e Dror (2017) evidenziano che il cervello umano ha una capacità limitata di rappresentare ed elaborare tutti i dati e così privilegia l’utilizzo di tecniche volte a sviluppare in modo efficiente e rapido l’informazione. Gli autori riconoscono che, considerata la natura stessa dell’essere umano, è impossibile eliminare tutti i *bias* e che si può solo cercare di minimizzarli quanto più possibile. Di recente, però, l’applicazione dell’Intelligenza Artificiale (IA) in campo forense ha aperto la possibilità di un processo decisionale privo di *bias*, perché, appunto, non più frutto del ragionamento umano. I primi esperimenti fatti in tal senso hanno portato allo sviluppo di nuovi campi d’indagine e nuove domande (Corbett-Davies & Goel, 2018; Kehl & Kessler, 2017). Di seguito andremo a descrivere alcuni *bias* cognitivi che determinano errori procedurali nelle valutazioni psichiatriche-forensi, le soluzioni che sono state proposte dai ricercatori che si sono interessati al tema e il ruolo che l’IA ha e potrebbe avere in quest’ambito.

I *bias* cognitivi nelle valutazioni psichiatriche-forensi

I *bias* sono delle rappresentazioni distorte di alcuni aspetti della realtà oggettiva (Haselton et al., 2015). Un processo decisionale influenzato dai *bias* può causare ingiustizie (Curley et al., 2022). I *bias* non hanno a che fare con corruzione, malizia o incompetenza dell’esperto (un esperto molto competente può essere comunque vittima di *bias*). Difatti, gli esperti in un certo settore non sono meno soggetti a *bias* rispetto ai non esperti e non basta prendere coscienza dell’esistenza dei *bias* per diventare immuni ad essi (Dror, 2020). A differenza di quello che si crede, inoltre, è stato dimostrato che le decisioni prese non si basano sulla complessa combinazione e ponderazione di un gran numero di variabili, bensì sull’analisi di pochissimi aspetti, anche se ci sono delle eccezioni (Arkes, 1989).

Le cause dei *bias* nelle valutazioni forensi possono essere classificate in tre categorie: fattori legati alla natura stessa dell’essere umano; fattori legati alle caratteristiche individuali dell’esperto; fattori legati al caso specifico che l’esperto viene chiamato a valutare (Dror, 2020).

Fattori legati alla natura stessa dell’essere umano. Il cervello umano si impegna in una varietà di processi per dare un senso al mondo e crea vincoli che non consentono

di elaborare tutte le informazioni che riceve (Dror, 2020). L'Homo Sapiens, infatti, ha una capacità cognitiva limitata e tende a prediligere l'efficienza nel prendere decisioni rispetto all'accuratezza (Curley et al., 2022).

Fattori legati alle caratteristiche individuali dell'esperto. I valori dell'esperto, le sue esperienze di vita, le sue idee politiche, la cultura di appartenenza giocano un ruolo rilevante nelle valutazioni (Zapf & Dror, 2017). Ad esempio, in un caso in cui si dibatte in merito alla pena di morte, il professionista che è contrario a questo tipo di pena può essere condizionato dalla sua idea politica durante il procedimento (Goldyne, 2017).

Fattori legati al caso specifico che l'esperto viene chiamato a valutare. Una prima possibile causa di errori nelle valutazioni forensi è proprio la scelta dell'esperto che viene chiamato ad esprimersi in merito al caso in esame. Skellern (2015) definisce questo fenomeno "effetto selezione", riferendosi al fatto che viene scelto un certo esperto piuttosto che un altro perché lo si reputa più adeguato a sostenere le proprie convinzioni rispetto al caso in esame. Questo effetto sarebbe strettamente connesso all'"effetto fedeltà" ovvero alla perdita di oggettività che si verifica quando la valutazione dell'esperto è commissionata da una parte (Gowensmith & McCallum, 2019; Skellern, 2015).

Nominato il professionista, sarà suo compito esaminare la documentazione disponibile. In questa fase, i dati che devono essere analizzati possono essere mal interpretati oppure l'esperto può essere condizionato dal parere di altri nella valutazione di essi (Arkes, 1989; Skellern, 2015).

Per decidere come procedere ai fini della valutazione, inoltre, l'esperto potrebbe essere condizionato da quelle informazioni che vengono definite "contestuali". Si pensi, ad esempio, ad un caso in cui viene richiesta un'autopsia ad un medico legale con un'informazione contestuale relativa al fatto che il defunto aveva una storia pregressa di consumo di eroina. Questa informazione può influenzare la scelta dei test a cui il medico legale sottoporrà il defunto, tralasciando test standard che, se non avesse ricevuto quella informazione contestuale, avrebbe utilizzato (Dror, 2020). Il professionista potrebbe anche tralasciare delle informazioni fondamentali per un processo decisionale corretto. Un aspetto che dovrebbe considerare, ad esempio, è quello dei "tassi di riferimento" cioè la prevalenza di una certa caratteristica nella popolazione di riferimento. Infatti, bisognerebbe considerare quanto, sulla base delle statistiche, quell'ipotesi o quel dato di cui disponiamo nel caso in esame risulti essere credibile. Questa informazione, invece, troppo spesso appare non rilevante agli occhi dell'esperto perché non risulta immediata la relazione causale tra l'evento in questione e i tassi di riferimento (Arkes, 1989). D'altra parte, più comunemente gli esperti si rifanno alla propria esperienza personale nel valutare il caso in esame (Dror, 2020). Quindi se, ad esempio, nella loro esperienza personale, la maggior parte delle volte in cui la persona era incapace di intendere e di volere aveva subito violenze in passato allora tendono ad affidarsi a questo

schema, piuttosto che a dati statisticamente rilevanti. Ad inficiare il processo decisionale è anche la memoria, per esempio si tende a ricordare più facilmente le informazioni che confermano la propria opinione (Arkes, 1989). Altro errore è legato al rapporto di causalità che l'esperto "percepisce" tra alcuni fattori relativi al caso in esame, senza di fatto esplorare tutte le possibilità. Questo spesso avviene, perché si tende a dare molto peso alle prime impressioni e a cercare aspetti che le confermino, piuttosto che il contrario (Arkes, 1989).

Sattar et al. (2002) fanno presente il ruolo centrale che può avere il controtransfert anche nelle valutazioni psichiatriche-forensi e la difficoltà a controllare questo fenomeno soprattutto tra i valutatori più giovani e inesperti. Everson e Sandoval (2011) rappresentano che, in generale, i professionisti più giovani o di sesso femminile tendono a sopravvalutare la possibilità che una denuncia di abuso sessuale sia verosimile, mentre i più anziani tendono a sottovalutare questa possibilità. Questi diversi atteggiamenti verso i casi di abuso sessuale in genere aumentano il rischio che il processo decisionale del caso specifico non sia oggettivo e che gli esperti vadano alla ricerca degli elementi che confermano la loro teoria di base.

Quelli finora descritti sono gli errori che Arkes (1989) definisce "freddi" e che distingue dagli errori "caldi", ovvero quegli errori che sono motivati da differenze di razza, genere e livello socioculturale. Mikton e Grounds (2007) trovarono che gli psichiatri forensi, nel Regno Unito, tendevano a sovrastimare la presenza di un disturbo di personalità antisociale tra i caucasici e a sottostimarli tra i non caucasici, mentre non si verificava la stessa cosa per il disturbo borderline. Notarono, inoltre, che i valutatori di altre etnie avevano interiorizzato gli "standard caucasici" e le loro diagnosi non erano diverse in modo significativo da quelle degli altri colleghi. Da vari studi è emerso che i valutatori, per lo più caucasici, tendono a fare diagnosi di disturbo antisociale e paranoide agli afroamericani, di disturbo schizoide agli asiatici e di disturbo schizotipico agli americani indiani, mentre gli altri disturbi di personalità vengono più frequentemente attribuiti ai caucasici. Ricerche dimostrano anche che di solito gli esperti sovrastimano la possibilità che un afroamericano sia stato violento, mentre per i caucasici questa possibilità è sottostimata (Hicks, 2004). Vari studi, inoltre, evidenziano che gli afroamericani ricevono più spesso diagnosi di disturbo psicotico (Blow et al. 2004; Neighbors et al. 1999; Strakowski et al. 2003). Perry et al. (2013) avevano ipotizzato che la tendenza a diagnosticare più facilmente il disturbo psicotico agli afroamericani, poteva agevolarsi durante il procedimento penale perché chi riceve questo tipo di diagnosi più frequentemente viene reputato incapace di intendere e di volere. Gli autori analizzarono 129 perizie psichiatriche e verificarono il ruolo che diverse variabili giocavano sulla decisione finale. Trovarono che, qualora l'imputato avesse ricevuto una diagnosi di disturbo psicotico, era più facile che venisse reputato incapace d'intendere e di volere. I caucasici avevano

il 78% in meno di probabilità di ricevere una diagnosi di disturbo psicotico e, al di là dell'etnia, più erano alti i livelli di educazione e minore era la probabilità che questa diagnosi venisse fatta. Conclusero che livello socioculturale e razza erano elementi centrali per la diagnosi di disturbo psicotico. Gowensmith e McCallum (2019) fanno presente che il livello socioculturale può giocare un ruolo centrale nelle valutazioni forensi anche perché chi è più povero ha una minore disponibilità economica e, quindi, più difficilmente riuscirà a procurarsi un buon difensore. Gli autori sottolineano, inoltre, come spesso i più svantaggiati economicamente siano proprio gli stranieri. Un ulteriore aspetto da considerare è che quando un soggetto che appartiene ad una minoranza viene sottoposto a valutazione può partire dal presupposto che sarà vittima di pregiudizio e, quindi, mettere in atto dei comportamenti che, paradossalmente, favoriscono i *bias* razziali (Hicks, 2004). Altri pregiudizi sono quelli legati alle differenze tra uomo e donna. L'uomo, comunemente, viene considerato più propenso alla violenza rispetto alla donna e, per questo motivo, è più frequente che una donna violenta venga valutata affetta da una grave malattia mentale e quindi non imputabile (Yourstone et al., 2008; Mandarelli et al., 2019). Sygel et al. (2015) ipotizzarono che questo *bias* di genere fosse presente anche in Svezia, ma non ottennero gli stessi risultati. Dal loro studio, infatti, emerse che non c'erano differenze significative legate al genere dell'imputato né tanto meno al genere del valutatore. Gli stessi autori ammisero come limite dell'esperimento la bassa numerosità del campione, ma ipotizzarono che, qualora i risultati fossero stati confermati da altri studi, il motivo di questi esiti sarebbe potuto dipendere dal fatto che, in Svezia, il *National Board of Forensic Medicine* ha il monopolio sulle valutazioni psichiatriche forensi, garantendo una buona qualità procedurale. La Svezia, inoltre, si è sempre dimostrata più evoluta di altre nazioni per quanto riguarda la parità di genere.

Infine, terminato il lavoro dell'esperto sarà suo compito comunicare l'esito del suo processo decisionale. In questa fase, il livello di sicurezza con cui l'esperto esprime il suo parere conduce a reputare il suo lavoro più o meno accurato. Erroneamente, quindi, si giudica il livello di accuratezza di un processo decisionale sulla base del livello di sicurezza dell'esperto. In realtà, però, non c'è alcuna relazione tra questi due aspetti, ma, credere che ci sia può condurre a sua volta chi ascolta ad essere vittima di *bias* (Arkes, 1989).

Varie proposte sono state avanzate al fine di migliorare le valutazioni psichiatriche-forensi e mitigare gli errori sopraelencati. La maggior parte degli autori propone una standardizzazione della procedura in modo da evitare che l'esperto trascuri aspetti importanti del caso (Nicholson & Norwood, 2000; Skellern, 2015; Zapf & Dror, 2017; Gowensmith & McCallum, 2019).

D'altra parte, il problema principale è che l'esperto tende spesso a sottovalutare la possibilità che egli stesso operi un processo decisionale imperfetto ed è, quindi, restio a correggersi o a prestare particolare attenzione al

proprio operato. Gowensmith e McCallum definiscono "*bias blind-spot*" le difficoltà che si incontrano nel riconoscere i propri errori rispetto a quelli che commettono gli altri e ipotizzano che gli esperti siano così restii a riconoscere i propri sbagli a differenza di quelli altrui, perché quando si valutano sono più introspettivi e tendono a giustificarsi. Questi limiti rendono l'utilizzo di strumenti dotati di IA una delle strade più interessanti e promettenti al momento al fine di mitigare i problemi sino ad ora elencati, quali ad esempio i *bias* cognitivi, tentando allo stesso tempo di rendere le procedure valutative più standardizzate.

Una soluzione innovativa: l'Intelligenza Artificiale (IA)

Il termine Intelligenza Artificiale indica i sistemi che mostrano un comportamento intelligente analizzando il proprio ambiente e compiendo azioni, con un certo grado di autonomia, per raggiungere specifici obiettivi [Comunicazione del 2018 elaborata dalla Commissione europea, intitolata "*Artificial Intelligence for Europe*"]. Il *Machine Learning* (ML) (o apprendimento automatico) è l'insieme dei metodi di apprendimento che permettono alla macchina dotata di IA di riuscire a comprendere e a risolvere specifiche istanze senza essere stata preventivamente programmata (Mitchell, 1997). La validità di un processo di apprendimento automatico è determinata dall'abilità di generalizzare, ovvero dalla capacità di riuscire a risolvere anche problemi mai esaminati precedentemente sulla base dell'esperienza acquisita (Tortora et al., 2020). Affinché lo strumento dotato di IA diventi accurato è necessaria una fase di addestramento che permetta di acquisire competenze per la risoluzione di specifici problemi.

Sistemi di IA sono stati progettati per riuscire a svolgere in maniera indipendente anche valutazioni psichiatriche-forensi, al fine di ridurre i *bias* cognitivi e rendere le procedure valutative più standardizzate. Particolare interesse ha riscosso l'uso dell'IA al fine di rendere più oggettive le valutazioni relative alla pericolosità dell'imputato (*risk assessment*) (Tortora et al., 2020). Questi sistemi predittivi presuppongono la previa individuazione di una serie di fattori di rischio (o predittori) direttamente coinvolti nel comportamento criminoso. Una volta individuati i fattori che, sulla base della letteratura scientifica più accreditata, aumentano il rischio che l'imputato sia pericoloso, l'IA se ne avvale per risolvere il caso specifico. I dati relativi all'imputato che sembrano giocare un ruolo statisticamente più significativo per la predizione della pericolosità sono: l'età, il sesso, l'origine etnica, il livello di scolarizzazione, la situazione familiare e lavorativa, la posizione sociale, i precedenti penali, le precedenti esperienze carcerarie, i precedenti episodi di violenza agita, le pregresse ospedalizzazioni, il pensiero pro-criminale, alcune variabili contestuali (quali, ad esempio, la mancanza di sostegno familiare e sociale), il consumo di sostanze stupefacenti o alcoliche, la psicopatologia (Basile, 2019). Lo strumento dotato di IA, quindi, prima apprende il ruolo che questi

fattori di rischio giocano sulla valutazione della pericolosità e, sulla base del modello appreso, dovrebbe riuscire a generalizzare la conoscenza acquisita e a risolvere in modo autonomo nuovi casi mai visti prima. Con questi strumenti si aspira ad una riduzione di quegli errori procedurali causati da *bias* cognitivi che sono stati elencati nei paragrafi precedenti, a favore di una maggiore standardizzazione procedurale. Queste valutazioni, infatti, si basano su risultati di analisi statistiche.

Negli Stati Uniti d'America, è già molto comune l'utilizzo dell'IA per le valutazioni forensi relative alla pericolosità dell'imputato (Angwin et al., 2016). L'analisi di questi strumenti e la loro applicazione all'interno del processo ha sollevato alcune critiche e ha obbligato i professionisti del settore a riflettere sulle implicazioni che l'utilizzo di questi strumenti può comportare in un contesto forense (Basile, 2019).

In primo luogo, si è dibattuto sul fatto che qualsiasi algoritmo non ha una struttura neutra e lo sviluppatore, in fase di architettura, fa delle scelte che, necessariamente, influenzano il risultato dell'operazione computazionale, ovvero influenzano l'esito del processo decisionale dell'IA. Ad esempio, in fase di progettazione, gli esperti scelgono quali sono gli aspetti che l'IA dovrà prendere in considerazione per risolvere il problema che gli viene posto. Questo fa sì che lo strumento non possa essere considerato privo di *bias*. Inoltre, nonostante algoritmi di predizione del rischio di recidiva del crimine siano percepiti come mezzi per superare i *bias* umani, essi stessi non sono esenti dal pregiudizio e dal *bias* istituzionale. Difatti, tali algoritmi vengono generalmente sottoposti ad un training di validazione su dati che possono essi stessi riflettere dei *bias* (Tortora et al., 2020). Nel momento in cui, poi, l'algoritmo alla base del processo decisionale è protetto da diritti di proprietà intellettuale, ovvero è impedita la divulgazione di informazioni relative al suo metodo di funzionamento, esso sarà sottratto alla possibilità di controllo, verifica e confutazione rendendo di fatto impossibile l'individuazione di eventuali *bias* (Basile, 2019).

La fase della raccolta e della selezione delle variabili da prendere in considerazione per le valutazioni psichiatriche-forensi, inoltre, è particolarmente delicata, soprattutto per valutazioni complesse come quelle relative alla capacità di intendere e di volere dell'autore di reato. In questo caso, al perito viene richiesta una valutazione retrospettiva dello stato di mente dell'imputato al momento del crimine al fine di accertare la presenza di una infermità di mente tale da incidere concretamente sulla capacità di intendere e di volere, escludendola o scemandola grandemente, e a condizione che sussista un nesso eziologico con la specifica condotta criminosa per effetto del quale il fatto reato sia ritenuto causalmente determinato dal disturbo mentale. Il concetto di infermità di mente non è sovrapponibile a quello di malattia mentale e, di conseguenza, la semplice applicazione delle categorie diagnostiche può essere fonte di rischi e fraintendimenti (Gulotta, 2011). Al fine di definire le variabili che l'esperto dovrebbe prendere in considerazione, esistono degli strumenti specifici

che guidano e supportano il professionista che è chiamato a rispondere a determinati quesiti posti dal giudice. Rispetto alle valutazioni psichiatriche-forensi relative allo stato di mente dell'imputato al momento del crimine, ad esempio, ricordiamo la Defendant's Insanity Assessment Support Scale (DIASS) (Parmigiani et al., 2019). La DIASS è uno strumento di guida e supporto per lo psichiatra forense chiamato a valutare l'infermità di mente dell'autore di reato al momento del fatto, sviluppato col fine di migliorare l'affidabilità e la coerenza di tali valutazioni. È composto da otto items a cui l'esperto, dopo aver esaminato la documentazione disponibile in merito al caso ed effettuato il colloquio psichiatrico-forense, dovrebbe rispondere per fare una valutazione più accurata dell'imputato in esame (Parmigiani et al., 2019; Parmigiani et al., 2022). Strumenti come questo possono essere sicuramente di ispirazione e di riferimento nella fase di selezione delle variabili che il *tool* dotato di IA dovrebbe prendere in considerazione.

Un secondo aspetto, collegato al precedente, riguarda gli algoritmi *black box*. La espressione "*black box*" sta ad indicare quegli algoritmi che producono un processo decisionale che non è pienamente comprensibile né per le persone coinvolte né per gli esperti di informatica. In pratica, in questi casi è possibile conoscere solo l'esito del processo decisionale mentre alcuni aspetti che hanno determinato quell'esito restano sconosciuti (Hannah-Mofat, 2015).

Nel caso in cui l'algoritmo è *black box* e/o protetto dal segreto professionale viene violato il principio di esplicabilità secondo il quale i processi decisionali dei sistemi di IA devono essere trasparenti, le capacità e lo scopo dei sistemi apertamente comunicati, le decisioni comprensibili a coloro che sono direttamente e indirettamente interessati (Brewka, 1996). Nell'ambito giuridico italiano, il concetto di esplicabilità diventa di particolare rilevanza, considerando che principio fondamentale del processo civile, tributario, penale e amministrativo è il principio del contraddittorio. Esso indica una garanzia di giustizia secondo la quale nessuno può subire gli effetti di una sentenza senza avere avuto la possibilità di essere parte del processo da cui la stessa proviene, ossia senza aver avuto la possibilità di un'effettiva partecipazione alla formazione del provvedimento giurisdizionale. È un principio che implica, quindi, un confronto argomentativo tra posizioni o opinioni diverse, in condizioni di "par condicio". Di conseguenza, l'utilizzo, durante il processo, di un'IA priva di esplicabilità si pone automaticamente in contrasto con il principio del contraddittorio. Sarebbe auspicabile, quindi, che il *software* dotato di IA non fosse protetto dal segreto industriale e fosse in grado, non soltanto di fornire informazioni rispetto al rischio di recidiva del soggetto criminale, ma anche di "spiegare" in che modo è giunto a quella determinata conclusione. Conoscere il processo decisionale dal quale è scaturito quel certo risultato permetterebbe a tutti i protagonisti del processo di poter valutare le ragioni sottostanti a quella decisione e, eventualmente, contristarle.

Un altro punto oggetto di dibattito è stato quello relativo ai così detti “algoritmi discriminatori”. Da alcune analisi, infatti, era emerso che certi strumenti di IA stabilivano se gli imputati erano o meno a rischio di recidiva basandosi principalmente sulla razza e il genere degli imputati stessi (Angwin et al., 2016; Kehl & Kessler, 2017; Washington, 2018). A questo proposito, alcuni esperti hanno evidenziato che il genere e la razza sono variabili che statisticamente favoriscono una valutazione maggiormente accurata del rischio di recidiva e, in quanto tali, non hanno una valenza discriminatoria, perché, nel momento in cui due gruppi vengono trattati diversamente per ragioni scientifiche, questa non può essere definita discriminazione (Corbett-Davies & Goel, 2018). Altri, invece, hanno sostenuto che affermare che aspetti come genere e razza rendono la valutazione più accurata non è una giustificazione abbastanza forte per poterli effettivamente utilizzare nel processo, perché discriminatorio (Kehl & Kessler, 2017). Molti sviluppatori hanno poi deciso di eliminare le variabili genere, livello socioculturale e razza dell'imputato dal processo decisionale degli strumenti dotati di IA usati in ambito forense. D'altra parte, come Corbett-Davies e Goel (2018) hanno fatto notare, non tenere in considerazione differenze tra gruppi che sono statisticamente significative è tutt'altro che equo. Per esempio, è stato dimostrato che le donne sono meno propense a commettere altri crimini in futuro rispetto agli uomini. Come risultato, nel momento in cui l'algoritmo deve valutare gli imputati senza tener conto del genere, sovrastimerà il rischio di recidiva di una donna (Corbett-Davies & Goel, 2018). Gli stessi autori fanno notare che la legge non considera discriminatorie tutte le differenze tra i gruppi, ma solo quelle che conducono ad una disparità ingiustificata. A questo proposito, citano la sentenza *Griggs vs. Duke Power Co.* con la quale la Corte Suprema aveva chiarito che si viene accusati di avere agito in modo discriminatorio qualora la differenziazione tra gruppi non sia giustificata e non abbia fondamenta razionali. Barabas et al. (2018), invece, all'interno di questa discussione, si pongono ad un altro livello e suggeriscono di non utilizzare l'IA per valutare il rischio di recidiva, ma per individuare le covariate che, in un modello causale, facilitano la comprensione dei fattori sociali, strutturali e psicologici legati ai crimini commessi. Questo tipo di analisi permetterebbe di capire quali sono i fattori sottostanti, per esempio, alle differenze di razza e livello socioculturale che, da un punto di vista statistico, rendono alcuni gruppi di persone più propensi a reiterare il crimine rispetto ad altri. Individuare le covariate e impostare i trattamenti di cura sulla base di esse potrebbe rappresentare un cambiamento sociale e, con il tempo, ridurre le differenze statistiche tra gruppi.

Applicazione dell'IA al campo forense: punti critici e possibili soluzioni

Le valutazioni psichiatriche-forensi sono molto delicate e spesso hanno un ruolo determinante sulle sorti dell'imputato. Assicurarsi che un processo decisionale così complesso sia messo in atto con la dovuta attenzione e cura risulta di fondamentale importanza per garantire la maggiore tutela possibile del singolo, ma anche per evitare una mala gestione dei soldi dello Stato. Per assicurarsi che errori procedurali non si verifichino, la maggior parte degli autori è concorde nel dire che è necessario standardizzare maggiormente le procedure di valutazione (Goldyne, 2007; Gowensmith e McCallum, 2019; Zapf & Dror, 2017), ma gli esperti sono spesso restii a mettere in discussione il proprio operato e sottovalutano quanto esso possa essere determinato da *bias* cognitivi (Gowensmith & McCallum, 2019; Kukucka et al., 2017).

L'IA rappresenta al momento una soluzione innovativa per quanto non priva di problematiche che devono essere affrontate. L'esperto potrebbe avvalersi dello strumento dotato di IA per avere un parere “altro” sul caso in esame. Affinché questo strumento aiuti il professionista a ragionare senza ricorrere ad euristiche, non dovrebbe essere coperto dal segreto industriale e dovrebbe essere progettato in modo da “spiegare” anche il processo decisionale che ha determinato il parere conclusivo (Brewka, 1996; Kehl & Kessler, 2017). Questa caratteristica appare fondamentale per garantire il contraddittorio e per consentire al professionista che si avvale dell'IA di valutare criticamente la decisione emessa e decidere se fare proprio o meno quel ragionamento. In quest'ottica, l'IA rappresenterebbe uno strumento che obbliga l'esperto a operare un ragionamento di tipo controfattuale. Il professionista, dovendo analizzare il processo decisionale della macchina, si troverebbe a confrontarlo con il proprio. Il confronto obbligherebbe di fatto l'esperto a revisionare il proprio ragionamento e a domandarsi se ha approfondito tutti i punti che l'IA ha reputato importanti per la decisione presa o, al contrario, ha dato peso ad altri fattori che avrebbero dovuto essere meno determinati. L'esperto resterebbe comunque libero di dissentire dal parere dell'IA, ma esplicitando i motivi che lo hanno condotto a prendere una decisione differente. Questo passaggio sarebbe fondamentale, perché renderebbe più trasparente non solo il processo decisionale dell'IA ma anche quello dell'esperto stesso. In definitiva, si tratterebbe di un sistema di supporto decisionale dotato di IA.

Ulteriore attenzione merita il momento di selezione delle variabili (fattori di rischio) nella fase di progettazione. Esse sono importanti affinché lo strumento dotato di IA riesca a mettere in atto un buon processo decisionale (Corbett-Davies & Goel, 2018). A nostro avviso, l'IA non dovrebbe essere protetta da diritti di proprietà intellettuale in modo da consentire il controllo, la verifica e la confutazione dell'algoritmo. Inoltre, riteniamo che in fase di progettazione bisognerebbe tenere conto anche delle variabili che fanno riferimento a genere, razza e liv-

ello socioculturale qualora dati statistici ne dimostrino la rilevanza ai fini della decisione. La figura dell'esperto, però, rimarrebbe fondamentale. L'IA sarebbe in grado di produrre un output basandosi "soltanto" sulle variabili che solitamente sono importanti, perdendo, però, tutti quegli aspetti peculiari del caso in esame che spetterà al valutatore identificare. Lo strumento potrebbe snellire il lavoro del perito e del consulente, assicurare una maggiore standardizzazione della procedura, obbligare l'esperto a mettere in discussione il proprio giudizio.

In parallelo, strumenti di IA dovrebbero essere sviluppati al fine di agire ad un livello più profondo, favorendo l'individuazione delle covariate del comportamento criminale e aiutando a programmare l'intervento migliore per i soggetti maggiormente a rischio di commettere atti criminali (Barabas et al., 2018). Significherebbe agire su quei fattori che rendono alcune categorie più propense di altre a commettere crimini, ovvero intervenire su quelle variabili che determinano le sistematiche differenze di razza, genere e livello socioculturale e, a lungo termine, non renderle più discriminanti per le decisioni dell'IA.

Inoltre, un altro aspetto che, a nostro avviso, varrebbe la pena considerare sono le differenze culturali. Ogni struttura giuridica, infatti, è imbevuta della cultura del suo popolo e, per questa ragione, l'IA dovrebbe essere costruita tenendo conto della popolazione specifica sulla quale andrà poi applicata e delle leggi che caratterizzano quella nazione (Kehl & Kessler, 2017).

Applicazione dell'IA agli altri campi della medicina: riflessioni e proposte

I tentativi di applicazione dell'IA alla psichiatria forense sono ancora pochi e poco soddisfacenti. Sembra che sia ancora molta la strada da fare affinché questi strumenti possano garantire un processo decisionale realmente privo di *bias*. Dall'altro lato, osservando il potenziamento degli strumenti dotati di IA nell'area della medicina in generale possiamo ben sperare che lo stesso avvenga anche nel campo della psichiatria forense. Le linee guida redatte dalla Commissione Europea, infatti, incentivano l'utilizzo dell'IA in ambito medico e lo considerano uno dei settori in cui si possono ottenere risultati più interessanti e rivoluzionari (AI, 2019). Studiare gli strumenti di IA che vengono usati in questo contesto ci può aiutare a proporre nuove soluzioni volte a migliorare l'applicazione di questi strumenti al campo forense. In campo medico, ad esempio, esistono già casi di sistemi di supporto decisionale dotati di IA che permettono al medico di operare un processo decisionale più trasparente e di assicurarsi di aver preso in considerazione tutti gli aspetti importanti ai fini della decisione (Cruz Rivera et al., 2020; Keller et al., 2020). Sono stati anche sviluppati strumenti che consentono sperimentazioni cliniche eseguite mediante simulazioni al computer (i cosiddetti *in silico clinical trials*, cfr. ad es. Avicenna, 2016; European Medicines Agency [EMA], 2018; Food and Drug Administration [FDA],

2018; Maggioli et al., 2020; Pappalardo et al., 2019) di modelli matematici della fisiologia umana di interesse (cfr. ad es., Hester et al., 2011), della cinetica e della dinamica dei farmaci (cfr. ad es., Lippert et al., 2019) su una popolazione di *pazienti virtuali* (Sinisi et al., 2020a). Tali popolazioni possono essere usate per generare gemelli virtuali (*digital twin*, cfr. Sinisi et al., 2020b) dei pazienti umani da trattare. Questo abilita l'impiego di tecniche di IA per supportare il clinico nella scelta di trattamenti specificatamente *individualizzati* su (ed *ottimizzati* per) il singolo paziente, ovvero che, in base alle peculiarità di quest'ultimo, massimizzano l'efficacia del trattamento, mantengano basso il rischio di effetti avversi e garantiscano il rispetto delle linee guida. I trattamenti così calcolati non sono frutto di *bias* cognitivi (come spesso avviene con i processi decisionali umani) né di statistiche apprese considerando *insiemi* di pazienti (come avviene quando si utilizzano approcci di IA basati esclusivamente su ML). Questi trattamenti vengono testati sul *singolo* paziente in esame in modo oggettivo, mediante simulazioni sul suo gemello virtuale (compatibilmente con il grado di confidenza raggiunto su quest'ultimo), anche tenendo conto della possibile incertezza nelle misure cliniche effettuate e della probabilità di eventi esogeni incontrollabili, come avviene tipicamente nelle scienze fisiche e nell'ingegneria (cfr., ad es., Mancini et al., 2018; Mancini et al., 2021). Sebbene ancora allo stato iniziale, tali approcci alla medicina di precisione basati su modelli fisiologici individualizzati sono già stati applicati con successo. Ad esempio, questo è avvenuto nel campo dell'endocrinologia riproduttiva (Fischer et al., 2021), un'area che vede la presenza di molti fattori difficili da tenere simultaneamente in debita considerazione (Hengartner et al., 2017; Leeners et al., 2017; Leeners et al., 2019; Leeners et al., 2021). Chiaramente l'applicazione di tali metodi al supporto decisionale in ambito forense non è affatto immediata; tuttavia, essi possono essere d'ispirazione e rappresentare un buon punto di partenza. Potremmo aspirare allo sviluppo di modelli comportamentali qualitativi e di alto livello che non si occupino di generare previsioni ma che indirizzino l'esperto forense nella sua pratica aiutandolo a non prendere quelle decisioni che si rivelino (anche indirettamente) in contrasto con conoscenze consolidate.

In conclusione, individuati i problemi che hanno contraddistinto i tentativi di applicazione dell'IA al campo forense fino ad ora, sarebbe opportuno iniziare ad esplorare nuove strade per implementare sistemi di supporto decisionale che siano più esplicabili e trasparenti possibile. Osservare l'evoluzione che l'IA sta avendo negli altri campi della medicina potrebbe rappresentare un buon punto di partenza per perfezionarne l'applicazione anche in un contesto forense.

Riferimenti bibliografici

- AI, H. (2019). High-level expert group on artificial intelligence. *Ethics guidelines for trustworthy AI*. DOI: 10.2759/346720

- Angwin, J., Larson, J., Mattu, S., & Kirchner, L. (2016). Machine bias: There's software used across the country to predict future criminals. And it's biased against blacks. *Pro-Publica*. Retrieved December 23, 2016.
- Arkes, H. R. (1989). Principles in judgment/decision making research pertinent to legal proceedings. *Behavioral Sciences & the Law*, 7(4), 429-456. <https://doi.org/10.1002/bsl.2370070403>
- Avicenna (2016). *In silico clinical trials*. Ottenuto da avicenna-isct.org
- Barabas, C., Virza, M., Dinakar, K., Ito, J., & Zittrain, J. (2018, January). Interventions over predictions: Reframing the ethical debate for actuarial risk assessment. In *Conference on Fairness, Accountability and Transparency* (pp. 62-76). PMLR. <https://doi.org/10.48550/arXiv.1712.08238>
- Basile, F. (2019). *Intelligenza artificiale e diritto penale: quattro possibili percorsi di indagine*. DOI: 10.1007/s13347-019-00345-yp)
- Blow, F. C., Zeber, J. E., McCarthy, J. F., Valenstein, M., Gillon, L., & Bingham, C. R. (2004). Ethnicity and diagnostic patterns in veterans with psychoses. *Social Psychiatry and Psychiatric Epidemiology*, 39, 841-851. DOI:10.1007/s00127-004-0824-7
- Brewka, G. (1996). Artificial intelligence—a modern approach by Stuart Russell and Peter Norvig, Prentice Hall. Series in Artificial Intelligence, Englewood Cliffs, NJ. *The Knowledge Engineering Review*, 11(1), 78-79) DOI: <https://doi.org/10.1017/S0269888900007724>
- Cooper, G. S., & Meterko, V. (2019). Cognitive bias research in forensic science: a systematic review. *Forensic science international*, 297, 35-46. DOI: 10.1016/j.forsciint.2019.01.016
- Corbett-Corbett-Davies, S., & Goel, S. (2018). The measure and mismeasure of fairness: A critical review of fair machine learning. *arXiv preprint arXiv:1808.00023*. <https://doi.org/10.48550/arXiv.1808.00023>
- Cruz Rivera, S., Liu, X., Chan, A. W., Denniston, A. K., & Calvert, M. J. (2020). Guidelines for clinical trial protocols for interventions involving artificial intelligence: the SPIRIT-AI extension. *Nature medicine*, 26(9), 1351-1363. DOI: 10.1016/S2589-7500(20)30219-3
- Curley, L. J., Munro, J., & Dror, I. E. (2022). Cognitive and human factors in legal layperson decision making: Sources of bias in juror decision making. *Medicine, Science and the Law*, 00258024221080655. DOI: 10.1177/0025802-4221080655
- Dror, I. E. (2020). Cognitive and human factors in expert decision making: six fallacies and the eight sources of bias. *Analytical Chemistry*, 92(12), 7998-8004. DOI: 10.1021/acs.analchem.0c00704
- EMA. (2018). Guideline on the reporting of physiologically based pharmacokinetic (PBPK) modelling and simulation.
- Everson, M. D., & Sandoval, J. M. (2011). Forensic child sexual abuse evaluations: Assessing subjectivity and bias in professional judgements. *Child Abuse & Neglect*, 35(4), 287-298. <https://doi.org/10.1016/j.chiabu.2011.01.001>
- FDA, U. (2018). Physiologically based pharmacokinetic analyses: format and content, guidance for industry.
- Fischer, S., Ehrig, R., Schäfer, S., Tronci, E., Mancini, T., Egli, M., ... & Röblitz, S. (2021). Mathematical modeling and simulation provides evidence for new strategies of ovarian stimulation. *Frontiers in endocrinology*, 12, 117. DOI: 10.3389/fendo.2021.613048
- Goldyne, A. J. (2007). Minimizing the influence of unconscious bias in evaluations: A practical guide. *Journal-American Academy Of Psychiatry And The Law*, 35(1), 60.
- Gowensmith, W. N., & McCallum, K. E. (2019). Mirror, mirror on the wall, who's the least biased of them all? Dangers and potential solutions regarding bias in forensic psychological evaluations. *South African journal of psychology*, 49(2), 165-176. <https://doi.org/10.1177/0081246-319835117>
- Gulotta, G. (2011). *Compendio di psicologia giuridico-forense, criminale e investigativa* (Vol. 53). Giuffrè Editore.
- Hannah-Moffat, K. (2015). The uncertainties of risk assessment: Partiality, transparency, and just decisions. *Federal Sentencing Reporter*, 27(4), 244-247. <https://doi.org/10.1525/fsr.2-015.27.4.244>
- Haselton, M. G., Nettle, D., & Murray, D. R. (2015). The evolution of cognitive bias. *The handbook of evolutionary psychology*, 1-20. <https://doi.org/10.1002/9781119125-563.evpsych241>
- Hengartner, M. P., Geraedts, K., Tronci, E., Mancini, T., Ille, F., ... & Leeners, B. (2017). Negative affect is unrelated to fluctuations in hormone levels across the menstrual cycle: Evidence from a multisite observational study across two successive cycles. *Journal of psychosomatic research*, 99, 21-27. DOI: 10.1016/j.jpsychores.2017.05.018
- Hester, R., Brown, A., Husband, L., Iliescu, R., Pruett, W. A., Summers, R. L., & Coleman, T. (2011). HumMod: a modeling environment for the simulation of integrative human physiology. *Frontiers in physiology*, 2, 12. DOI: 10.3389/fphys.2011.00012
- Hicks, J. W. (2004). Ethnicity, race, and forensic psychiatry: are we color-blind?. *Journal of the American Academy of Psychiatry and the Law Online*, 32(1), 21-33.
- Kehl, D. L., & Kessler, S. A. (2017). *Algorithms in the criminal justice system: Assessing the use of risk assessments in sentencing*.
- Keller, N., Jenny, M. A., Spies, C. A., & Herzog, S. M. (2020, November). Augmenting Decision Competence in Healthcare Using AI-based Cognitive Models. In *2020 IEEE International Conference on Healthcare Informatics (ICHI)* (pp. 1-4). IEEE. DOI: 10.1109/ICHI48887.2020.9374376
- Kukucka, J., Kassin, S. M., Zapf, P. A., & Dror, I. E. (2017). Cognitive bias and blindness: a global survey of forensic science examiners. *Journal of Applied Research in Memory and Cognition*, 6(4), 452-459. <https://doi.org/10.1016/j.jar-mac.2017.09.001>
- Leeners, B., Kruger, T. H., Geraedts, K., Tronci, E., Mancini, T., Ille, F., ... & Hengartner, M. P. (2017). Lack of associations between female hormone levels and visuospatial working memory, divided attention and cognitive bias across two consecutive menstrual cycles. *Frontiers in behavioral neuroscience*, 120. DOI: 10.3389/fnbeh.2017.00120.
- Leeners, B., Krüger, T. H., Geraedts, K., Tronci, E., Mancini, T., Egli, M., ... & Ille, F. (2019). Associations between natural physiological and supraphysiological estradiol levels and stress perception. *Frontiers in Psychology*, 10, 1296. DOI: 10.3389/fpsyg.2019.01296.
- Leeners, B., Krüger, T., Geraedts, K., Tronci, E., Mancini, T., Ille, F., ... & Hengartner, M. P. (2021). Cognitive function in association with high estradiol levels resulting from fertility treatment. *Hormones and behavior*, 130, 104951. DOI: 10.1016/j.yhbeh.2021.104951.
- Lippert, J., Burghaus, R., Edginton, A., Frechen, S., Karlsson, M., Kovar, A., ... & Teutonic, D. (2019). Open systems pharmacology community—an open access, open source, open science approach to modeling and simulation in pharmaceutical sciences. *CPT: pharmacometrics & systems pharmacology*, 8(12), 878. DOI: 10.1002/psp4.12473
- Maggioli, F., Mancini, T., & Tronci, E. (2020). SBML2Modelica: integrating biochemical models within open-standard simulation ecosystems. *Bioinformatics*, 36(7), 2165-2172. DOI: 10.1093/bioinformatics/btz860

- Mancini, T., Mari, F., Melatti, I., Salvo, I., Tronci, E., Gruber, J. K., ... & Elmegaard, L. (2018, October). Parallel statistical model checking for safety verification in smart grids. In *2018 IEEE International Conference on Communications, Control, and Computing Technologies for Smart Grids (SmartGridComm)* (pp. 1-6). IEEE.. DOI: 10.1109/SmartGridComm.2018.8587416
- Mancini, T., Melatti, I., & Tronci, E. (2021). Any-horizon uniform random sampling and enumeration of constrained scenarios for simulation-based formal verification. *IEEE Transactions on Software Engineering*. DOI: 10.1109/TSE.2021.3109842
- Mandarelli G., Carabellese F., Felthous A.R., et al. (2019). The factors associated with forensic psychiatrists' decisions in criminal responsibility and social dangerousness evaluations. *Int J Law Psychiatry*, 66, 101503. Doi:10.1016/j.ijlp.-2019.101503
- Mikton, C., & Grounds, A. (2007). Cross-cultural clinical judgment bias in personality disorder diagnosis by forensic psychiatrists in the UK: A case-vignette study. *Journal of personality disorders*, 21(4), 400-417. <https://doi.org/10.1521/pedi.2007.21.4.400>
- Mitchell, T. M. (1997). *Machine learning*. Burr Ridge, IL: McGraw Hill
- Neal, T., & Grisso, T. (2014). The cognitive underpinnings of bias in forensic mental health evaluations. *Psychology, Public Policy, and Law*, 202, 200–211. DOI:10.1037/a0035824
- Neighbors, H. W., Trierweiler, S. J., Munday, C., Thompson, E. E., Jackson, J. S., Binion, V. J., et al. (1999). Psychiatric diagnosis of African Americans: Diagnostic divergence in clinician-structured and semistructured interviewing conditions. *Journal of the National Medical Association*, 91, 601–612.
- Nicholson, R. A., & Norwood, S. (2000). The quality of forensic psychological assessments, reports, and testimony: Acknowledging the gap between promise and practice. *Law and human Behavior*, 24(1), 9-44. DOI: 10.1023/A:100-5422702678
- Pappalardo, F., Russo, G., Tshinanu, F. M., & Viceconti, M. (2019). In silico clinical trials: concepts and early adoptions. *Briefings in bioinformatics*, 20(5), 1699-1708. DOI: 10.1093/bib/bby043.
- Parmigiani G., Mandarelli G., Meynen G., Carabellese F., Ferracuti S. (2019). Translating clinical findings to the legal norm: the Defendant's Insanity Assessment Support Scale (DIASS). *Transl Psychiatry*, 9(1), 278. Published 2019 Nov 7. doi:10.1038/s41398-019-0628-x
- Parmigiani G., Mandarelli G., Roma P., Ferracuti S. (2022). Validation of a new instrument to guide and support insanity evaluations: the defendant's insanity assessment support scale (DIASS). *Transl Psychiatry*, 12(1), 115. Published 2022 Mar 22. doi:10.1038/s41398-022-01871-8.
- Perry, B. L., Neltner, M., & Allen, T. (2013). A paradox of bias: Racial differences in forensic psychiatric diagnosis and determinations of criminal responsibility. *Race and social problems*, 5(4), 239-249. DOI: 10.1007/s12552-013-9100-3
- Sattar, S. P., Pinals, D. A., & Gutheil, T. (2002). Countering countertransference: a forensic trainee's dilemma. *Journal of the American Academy of Psychiatry and the Law Online*, 30(1), 65-69.
- Sinisi, S., Alimguzhin, V., Mancini, T., Tronci, E., & Leeners, B. (2020a). Complete populations of virtual patients for in silico clinical trials. *Bioinformatics*, 36(22-23), 5465-5472. <https://doi.org/10.1093/bioinformatics/btaa1026>
- Sinisi, S., Alimguzhin, V., Mancini, T., Tronci, E., Mari, F., & Leeners, B. (2020b). Optimal personalised treatment computation through in silico clinical trials on patient digital twins. *Fundamenta Informaticae*, 174(3-4), 283-310. DOI: 10.3233/FI-2020-1943
- Skellern, C. (2015). Minimising bias in the forensic evaluation of suspicious paediatric injury. *Journal of forensic and legal medicine*, 34, 11-16. <https://doi.org/10.1016/j.jflm.2015.05.002>
- Stracciari, A., Caucasic, A., & Sartori, G. (2010). *Neuropsicologia forense*. Il mulino.
- Strakowski, S. M., Keck, P. E, Jr, Arnold, L. M., Collins, J., Wilson, R. M., Fleck, D. E., et al. (2003). Ethnicity and diagnosis in patients with affective disorders. *Journal of Clinical Psychiatry*, 64(7), 747–754 DOI: 10.4088/JC-Pv64n0702
- Sygel, K., Sturup, J., Fors, U., Edberg, H., Gavazzeni, J., Howner, K., ... & Kristiansson, M. (2017). The effect of gender on the outcome of forensic psychiatric assessment in Sweden: A case vignette study. *Criminal behaviour and mental health*, 27(2), 124-135. DOI: 10.1002/cbm.1987
- Tortora L, Meynen G, Bijlsma J, Tronci E, Ferracuti S. Neuro-prediction and A.I. in Forensic Psychiatry and Criminal Justice: A Neurolaw Perspective. *Front Psychol*. 2020 Mar 17;11:220. DOI: 10.3389/fpsyg.2020.00220. PMID: 32256422; PMCID: PMC7090235.
- Washington, A. L. (2018). How to argue with an algorithm: Lessons from the COMPAS-ProPublica debate. *Colo. Tech. LJ*, 17, 131.
- Yourstone, Lindholm, Grann M e Svenson, 2008) Evidence of gender bias in legal insanity evaluations: a case vignette study of clinicians, judges and students. *Nordic Journal of Psychiatry* 62: 273–278. DOI:10.1080/08039480801963135
- Zapf, P. A., & Dror, I. E. (2017). Understanding and mitigating bias in forensic evaluation: lessons from forensic science. *International Journal of Forensic Mental Health*, 16(3), 227-238. <https://doi.org/10.1080/14999013.2017.1317302>

Rorschach test in legally sane murderers: a comparison between the comprehensive system (CS) and the Scuola Romana Rorschach (SRR) methods

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OPEN ACCESS

Double blind peer review

How to cite this article: Zizolfi S. et alii (2022). Rorschach test in legally sane murderers: a comparison between the comprehensive system (CS) and the Scuola Romana Rorschach (SRR) methods. *Rassegna Italiana di Criminologia*, XVI, 3, 220-232. <https://doi.org/10.7347/RIC-032022-p220>

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Received: 11.03.2022

Accepted: 16.08.2022

Published: 22.12.2022

Pensa MultiMedia
ISSN 1121-1717 (print)
ISSN 2240-8053 (on line)
[doi10.7347/RIC-032022-p220](https://doi.org/10.7347/RIC-032022-p220)

Abstract

Up to date, in Italy, the Comprehensive System (CS) and the Scuola Romana Rorschach (SRR) are two widely Rorschach systems used in clinical and forensic fields. The present study has the purpose of comparing the results obtained by means of CS and SRR methods in the psychodiagnostic assessment of homicides in a forensic setting. The Rorschach records of 30 murderers with no psychiatric history and without any psychiatric disease according to DSM-5 diagnostic criteria, tested according to the SRR in a forensic setting, and judged as 'fully responsible' (i.e. legally sane), were rescored according to CS. Both methods' results highlighted a mild impairment of cognitive processing as well as marked difficulties in interpersonal relationship with both Rorschach methods. Strong correlations were found (Pearson's r , $p < 0.001$) between CS and SRR variables related to 'cognitive mediation' (CS: XA%, WDA%, X-%, X+%, Xu%; SRR: R+%, F+%, V, O) and interpersonal perception (CS: Human Content, Pure H, Isolation Index; SRR: H, H%, Hd, H+Hd, H%+Hd%).

Keywords: Murder, Rorschach test, Forensic Psychodiagnostics, Imputability, Ability to understand and want.

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Rorschach test in legally sane murderers: a comparison between the comprehensive system (CS) and the Scuola Romana Rorschach (SRR) methods

1. Introduction

Psychodiagnostic assessment in forensic field requires a completely different approach compared to that applied in clinical settings. Forensic experts continuously face difficulties in establishing the credibility of what is reported, so that they are forced to devote the greatest attention to what could be source of distortions. So, the issue of truthfulness becomes of paramount relevance (Catanesi & Martino, 2006; Pacente & Grattagliano, 200; Bianchi, 2008). This is even more important and true in the case of the forensic psychodiagnostic assessment of murderers, who are more prone to manipulate clinical and testing data (Martino et al, 2013a; 2013b; Martino et al, 2016). In these cases, self-administered personality questionnaires (MMPI-2, MCMI, PAI and so on), despite the presence of 'control scales' (Cassano & Grattagliano, 2019), are more likely to be altered by subjects who either consciously or unconsciously, for different reasons, tend to either under-report and/or over-report and/or malingering, resulting in unreliable, false or fictitious data (feigning) (Abbate & Storace, 2004; De Fidio & Grattagliano, 2007; Gacono & Evans, 2008; Convertini et al, 2020).

In these conditions, according to EBMPA (Evidence Based Multimethod Psychological Assessment) (Erard & Evans, 2017; Giromini & Zennaro, 2019), the Rorschach test proves to be very useful in circumventing the defences as well as the manipulating and feigning behaviors of the subjects under examination (Giromini & Zennaro, 2019). The availability of psychometrically valid and well standardized methods, will certainly contribute to the increase of the Rorschach diffusion in the field of EBMPA, the Evidence Based Multimethod Psychological Assessment, both for clinical and forensic purposes (Erard & Evans, 2017; Giromini & Zennaro, 2019).

Until 2013, the Rorschach test has stably occupied the third place, immediately after the MMPI and WAIS, among the most widely psychological tests used in forensic psychologic and psychiatric practice (Archer, Buffington-Vollum, Vauter Stredny, & Handel, 2006; Archer & Wheeler, 2013; Hinselroth & Strycker, 2004). More than one third of professionals made systematic use of the Rorschach when assessing criminal subjects' mental status in order to determine whether they are of sound mind and admissible to undergo trial (Archer & Wheeler, 2013). More recent data from an international survey are less favorable, but still the Rorschach ranks ninth for what concerns global forensic assessment, and respectively fourth in child protection, fifth in child custody and seventh in insanity evaluation (Neal & Grisso, 2014). Most

recent data from an Italian sample of 110 psychologists show that the Rorschach ranks fifth in malingering assessment (Giromini et al., 2022).

In 2021, the Rorschach test has blown out its first hundred candles since the publication of Psychodiagnostic (1921, 1942, 1981), the masterpiece of Herman Rorschach (1884-1922), confirming itself as the longest-lived and one of the most used psychodiagnostic tests.

In 2013, the outstanding metanalysis by Mihura, Meyer, Dumitrascu & Bombel, completed the work of re-foundation of the psychometric bases of the Rorschach, convincing the most bitter opponents of the first hour (Wood, Garb, Nezworski, Lilienfeld & Duke, 2015) and almost putting an end to the so called 'Rorschach controversy' (Zizolfi, 2016). Despite some recent criticism (Areh et al. 2021), the Rorschach test is not challenged at unusually high rates, when compared to other psychological tests, in the United States and selected European courts (Viglione, et al., 2022).

Up to date, the Italian Rorschach expert can use three different well standardized and psychometrically valid Rorschach methods (Zizolfi, 2016): that by Scuola Romana Rorschach (SRR), the most ancient Rorschach institution in the world, founded in 1938 by Carlo Rizzo (Cicioni, 2016; Rizzo, Parisi, & Pes, 1980); the Comprehensive System (CS) (Abbate & Porcelli, 2017; Exner, 1969, 1974, 1978, 1986, 1991, 1993, 1997, 2003; Exner & Erdberg, 2005; Exner, Porcelli, & Appoggetti, 2001; Lis, Zennaro, Salcuni, Parolin, & Mazzeschi, 2007), and the Rorschach Performance Assessment System (R-PAS), an evolution of CS (Meyer & Viglione, 2011; Meyer, Viglione, Mihura, Erard, & Erdberg, 2013, 2015; Mihura & Meyer, 2018).

The psychological and psychiatric assessment of authors of homicide is of paramount relevance in the forensic practice, so that our group has performed a series of investigations in this field.

Zizolfi, Catanesi, Grattagliano and Zizolfi (2017) examined 20 murderers with no psychiatric history and without any psychiatric disease according to DSM-5 diagnostic criteria, tested according to the SRR in a forensic setting, and judged as 'fully responsible' (i.e. legally sane). The group showed no statistically significant difference from normative SRR control group (Cicioni, 2016; Giambelluca, Parisi & Pes, 1995; Parisi & Pes, 1990a) as regards cognitive functions and reality control (R, R+, R+% , F+% , Reality Index). Major statistically significant differences (Student two tailed t test; level of significance: $p < 0.05$) resulted as regards affective functions, with H (Human) response per cent much lower (mean: 7.75, SD: 1.7; 0.0% in 6/20, < 8.0% in 5/20, < 15.0% in 5/20; normal values:

10-20 in males, 20-30 in females) and Impulsivity Index much higher (mean: 0.79, SD: 0.1; > 1.00 in 6/20, > 0.75 in 4/20; > 0.60 in 4/20; normal value: 0.35), suggesting compromised interpersonal relationships and marked impulsivity. No difference was found between 9 'non impetus crime' and 11 'crime of impetus', the latter characterized by lack of programming and/or peculiar brutality as well as cruelty of the crime.

Grattagliano, Zizolfi, Zizolfi, Valerio, Zecca & Catanesi (2019a) focused on Rorschach variables associated with the judgement of imputability in murderers examined during the trial. According to a retrospective design, they rescored, according to the SRR, the Rorschach of 49 murderers stored in the database of the Criminology and Forensic Psychiatric Hospital Section of Bari University: 43 males and 6 females; 17-67 years old; 24 single, 21 married and 4 separated; 8 without any psychiatric history, 41 with different psychiatric diagnoses (13 schizophrenia, 1 delusional disorder, 1 bipolar disorder, 5 depression, 4 psychorganic syndrome, 13 personality disorder, 4 mild mental disability). Following the court expert evaluation, 23 were recognized as 'mentally sane' and thus imputable, 10 as 'partially mental insane' and 16 as 'totally mental insane' at the time of the crime. As 'totally mental insane' and not imputable were judged: 11 out of 13 schizophrenics, 1 out of 5 depressed, 1 out of 4 with mild mental disability and 2 out of 4 patients with psychorganic disorders. In 14 cases, the homicide was considered as premeditated, in 35 as impulsive and not premeditate. In 31 cases, the crime scene was classified as 'organized', in 16 cases as 'disorganized' (no sufficient data in 2 cases). More than 200 SRR Rorschach indexes were evaluated. The results were statistically analyzed with SPSS (Statistical Package for Social Science, Version 15.0), by means of Student two-tailed t test and by means of chi square test. As a whole, the murderers' group, when compared with SRR normative data (Cicioni, 2016; Giambelluca, Parisi & Pes, 1995; Parisi & Pes, 1990a), showed lower total R (mean: 14.6, SD: 5.6; NV: 20-40), slightly lower R+% (mean: 66.4, SD: 19.5; NV: 70-80), slightly lower F+% (mean: 65.7, SD: 19.2; NV: 60-80), much lower H% (mean: 5.9, SD: 7.5; NV: males, 10-20, females: 20-30), slightly lower Affectivity Index (mean: 0.31, SD: 0.12; NV: > 0.35), a much lower Reality Index (mean: 3.8, SD: 1.8; NV: 6-8), as well as Self Control Index (mean: 0.12, SD: 1.99; NV: > 1). As a whole, the murderers' group showed a constricted personality (low R), mild cognitive deficiencies (R+%, F+%), reduced interpersonal relationships (H%, Affectivity Index), marked impulsivity (Self Control Index) and improper reality testing (Reality Index). No statistically significant difference was found in the distribution of the judgement of imputability ('mentally sane', 'partially mentally insane', 'totally mentally insane') as regards gender, age, marital status, years of schooling and premeditation of crime. A diagnosis of schizophrenia ($c2 = 21.4583$, $p < 0.05$) and a disorganized crime scene were more frequent in not imputable murderers ($c2 = 13.2238$, $p < 0.05$). As regards

Rorschach variables, no difference was found between 23 'Totally sane' and 10 'partially mentally insane'. 16 'totally mentally insane' showed higher F- responses when compared with 23 'totally sane' (mean: 4.06 vs 2.52, SD: 2.57 vs 2.33, $p < 0.05$), and with 10 'partially mentally sane' (4.06 vs 2.10, SD: 2.57 vs 2.08, $p < 0.05$). When 16 'totally mentally insane' were compared with the remaining 33 subjects, two Rorschach variables discriminate in a statistically significant measure: R+% (mean: 58.2 vs 70.3, SD: 17.6 vs 19.4; $p < 0.05$) and F- (mean: 4.06 vs 2.39, SD: 2.57 vs 2.23; $p < 0.05$). In addition, R+% (NV = 70-80) and F+% (NV = 70-80) are higher than 70 only in 4 out of 16 'totally mentally insane', in 7 out of 10 'partially mentally insane' and in 21 out of 23 'mentally sane'. No difference between the three groups was found as regards affective Rorschach variables.

Grattagliano, Zizolfi, Zizolfi, Valerio, Zecca & Catanesi (2019b) revisited the same sample of 49 Rorschach records in order to identify Rorschach variables associated with the dichotomy 'organized crime scene' vs 'disorganized crime scene'. More than 200 SRR Rorschach indexes were evaluated. No statistically significant difference was found in the distribution of the type of crime scene (organized vs disorganized) as regards gender, age, marital status, years of schooling and premeditation of the murder. An organized crime scene was more frequent in imputable and partially insane murderers when compared with non imputable ($c2 = 13.2238$, $p < 0.05$), and in normal subjects when compared with those suffering from a psychiatric disorder ($c2 = 11.4505$, $p < 0.05$). Rorschach records of murderers with 'disorganized crime scenes' (N = 13), when compared with those of murderers with 'organized crime scenes' (N = 31) (Student two-tailed t test) (N = 16), showed a higher total R (mean: 16.6 vs 13.2; SD: 4.7 vs 5.0; $p < 0.05$), higher D (mean: 9.44 vs 6.58; SD: 4.30 vs 3.77; $p < 0.05$), higher Dim% (mean: 2.42 vs 0.84; SD: 3.46 vs 1.19; $p < 0.05$), higher F (mean: 13.25 vs 9.61; SD: 3.62 vs 3.39; $p < 0.05$) and, most important, much higher F- (mean: 4.31 vs 2.12; SD: 2.80 vs 1.75; $p < 0.05$). A value of F- more than twice in murderers leaving a disorganized crime scene, certainly signals lower cognitive abilities, rough observation powers, compromised attention and concentration as well as poor cognitive self control in this group of homicides.

Up to date, no investigation has been performed aiming to compare Rorschach data obtained in the same group of subjects by means of two Rorschach methods, widely used in Italy, in clinical and forensic settings, i.e. the CS and the SRR. The present study aims at highlighting the comparability of results obtained by means of CS and SRR methods in the psychodiagnostic assessment of homicides in a forensic setting.

2. Methods

For the purposes of the present study, we re-scored by means of the CS (Abbate & Porcelli, 2017; Meyer, et al.,

2007) the Rorschach records of murderers initially tested in a forensic setting, according to the SRR method.

A consecutive series of 30 Rorschach protocols, administered according to the SRR, was extracted from the database of the Criminology and Forensic Psychiatry Section of Bari University Hospital (N = 22) and from private practice archive in Como (N = 8), satisfying the following inclusion criteria: no psychiatric history, no psychiatric symptom or disease according to DSM-5, forensic judgement of ‘fully responsible’ (i.e. legally sane).

The Rorschach protocols, collected according to SRR method, were included in the study only if two of us, well experienced in CS (G.I and S.Z., Lecce), judged them as suitable for the CS re-scoring.

All the 30 protocols included in the study, originally administered and scored by different experts, were independently and concordantly re-scored by the authors: two for CS (G.I. and S.Z., Lecce), by means of RAP3TM (Exner, 2001), and two for SRR method (D.Z. and S.Z., Como), by means of RORCOMP (Parisi & Pes, 1990b).

The results were statistically analyzed with SPSS (Statistical Package for Social Science, Version 15.0), by means of Student two-tailed ‘t’ and Pearson r.

SRR results were compared with normative SRR control group (Giambelluca, Parisi & Pes, 1995). CS data were compared with those from the international normal control sample (Abbate & Porcelli, 2017; Meyer, et al., 2007), by means of Student two tailed ‘t’ test (level of significance: $p < 0.05$).

The correlations between CS and SRR variables and indexes were investigated by means of Pearson’s product-moment correlation coefficient; only the statistically significant correlations were considered ($p \leq 0.001$).

3. Results

Table 1 shows mean, standard deviation and minimum-maximum values of the principal Rorschach variables and

indexes according to CS in our sample of 30 fully responsible murderers, compared with data from normal controls of the international normative sample. Murderers reported higher values of Lambda (L; mean: 1.57 vs 0.9; $p < 0.001$), Isolation Index (mean: 0.25 vs 0.2; $p < 0.01$), and Distorted Form (X-%; mean: 0.26 vs 0.2; $p < 0.005$). They showed lower values of Experience Stimulation (es; mean: 6.43 vs 9.1; ; $p < 0.005$), Experience Actual (EA; mean: 4.78 vs 6.8; $p < 0.005$), Space (S; mean: 1.57 vs 2.5; $p < 0.05$), Human Content (mean: 4.37 vs 5.8; $p < 0.05$), Pure H (mean: 1.50 vs 2.4; $p < 0.005$), Extended Form Appropriateness (XA%; mean: 0.72 vs 0.8; $p < 0.005$), Form Quality Appropriateness (WDA%; mean: 0.72 vs 0.8; $p < 0.001$), Conventional Form (X+%; mean: 0.44 vs 0.5; $p < 0.005$), Bad Quality Space (S-; mean: 0.50 vs 0.9; $p < 0.001$), Popular (P; mean: 4.23 vs 5.4; $p < 0.001$), Movement Responses (M; mean: 1.90 vs 3.7; $p < 0.001$). As a whole, murderers’ group showed a mild impairment of ‘cognitive mediation’ and ‘ideation’ variables (XA%, WDA%, X-%, X+%, P, M) and of ‘interpersonal perception’ variables (Human Content, Pure H, Isolation Index), but the differences, although statistically significant, are small.

Table 2 shows mean, standard deviation and minimum-maximum values of the principal Rorschach variables and indexes according to SRR in our sample of 30 fully responsible murderers, compared with data from normal controls. No significant difference was found, with the only exception of lower Human Content % (mean: 11.06, SD: 11.09; Normal values: 10-20 in males, 20-40 in females) and higher Impulsivity Index (mean: 0.67, SD: 0.40; normal value: 0.35), suggesting compromised interpersonal relationships and marked impulsivity. These results resemble those obtained by means of CS, and they are quite identical to those of the previous study of our group in a similar sample (Zizolfi, Catanesi, Grattagliano & Zizolfi, 2017).

Table 1 – Rorschach variables and indexes according to CS in a sample of 30 fully responsible murderers

CS Rorschach Variables and Indexes		Murderers (N = 30)			Normal Controls* (N = 5185)		p**
		Mean	SD	Min-Max	Mean	SD	
	R	20.67	8.32	14-51	22.3	7.9	N.S.
	L	1.57	1.60	0.11-8.00	0.9	0.9	< .001
STRESS CONTROL	es	6.43	5.68	0-26	9.1	5.0	< .005
	Adj.es	5.20	4.05	0-17	---	---	---
	EA	4.78	4.15	0-19.50	6.8	3.4	< .005
	D	-0.60	1.16	-4.00-1.00	- 0.7	1.5	N.S.
	Adj.D	-0.20	1.09	-3.00-2.00	- 0.2	1.2	N.S.
AFFECT	FC	1.60	1.63	0-6	1.9	1.7	N.S.
	CF	1.80	2.09	0-9	1.6	1.6	N.S.
	Pure C	0.23	0.50	0-2	0.3	0.7	N.S.
	Afr	0.57	0.26	0.04-1.00	0.5	0.2	N.S.
	S	1.57	1.72	0-7	2.5	2.1	< .05
	SumC'	1.57	2.30	0-10	1.7	1.7	N.S.

INTERPERSONAL PERCEPTION	Human Cont	4.37	3.61	0-15	5.8	3.5	< .05
	Pure H	1.50	1.59	0-7	2.4	1.9	< .005
	Isolation Index	0.25	0.28	0-1.50	0.2	0.1	< .01
SELF PERCEPTION	Egocentricity Index	0.34	0.15	0-0.57	---	---	---
COGNITIVE MEDIATION	XA%	0.72	1.38	0.50-1.00	0.8	0.1	< .005
	WDA%	0.72	0.14	0.50-1.00	0.8	0.1	< .001
	X-%	0.26	0.13	0.00-0.47	0.2	0.1	< .005
	X+%	0.44	0.17	0.14-0.86	0.5	0.1	< .005
	Xu%	0.27	0.12	0.07-0.50	0.3	0.1	N.S.
	S-	0.50	0.82	0.00-4.00	0.9	1.1	< .001
	P	4.23	1.67	0-7	5.4	1.8	< .001
IDEATION	Intellectualization Index	1.83	2.41	0-11	2.4	2.6	N.S.
	Sum6	2.17	1.88	0-7	2.7	2.4	N.S.
	WSum6	5.20	5.66	0-20	7.6	7.7	N.S.
	M	1.90	2.11	0-7	3.7	2.7	< .001
	Lv2/M-/M none	0.77	1.16	0-4	---	---	---
SPECIAL SCORES	PTI	1.33	1.47	0-4	---	---	---
	DEPI	3.17	1.34	1-6	---	---	---
	CDI	3.13	1.33	1-5	---	---	---
	S-CON	4.46	1.83	1-9	---	---	---
	HVI	1.97	0.18	1-2	---	---	---
	OBS	0.00	0.00	0.00	---	---	---

*: International Sample (Abbate & Porcelli, 2017 Meyer, et al., 2007)

** : two-tailed Student 't' test

SRR Rorschach Variables and Indexes		Murderers (N = 30)			Normal Controls* (N = 792)
		Mean	SD	Min-Max	Min-Max
QUALITY	R	22.97	10.36	13-58	20-40
	R+	16.27	7.77	8.50-44.00	//
	R+%	71.48	12.25	47.80-96.90	70-80
	F+	11.65	6.06	4.50-31.00	//
LOCALIZATION	F+ %	68.51	14.69	44.70-100.00	70-80
	G	7.40	2.92	1-13	//
	Gim	0.50	1.01	0-4	//
	D	12.90	7.26	4-37	//
	Dd	0.97	1.75	0-7	//
	Dim	0.70	0.84	0-3	//
	Di	0.17	0.53	0-2	//
	im	1.43	1.69	0-6	//
	G %	33.97	13.55	7.10-64.30	//
	Gim %	1.98	4.32	0.00-19.00	//
	D %	55.52	15.65	19.00-80.00	//
	Dd %	3.06	4.76	0.00-17.60	//
	Dim %	2.91	3.53	0.00-11.80	//
	Di %	0.85	2.94	0.00-14.30	//
	im %	5.78	6.37	0.00-23.80	//
	DETERMINANTS (Primary)	F	17.50	8.22	7-41
M		1.47	1.46	0-5	//
FC		1.90	1.79	0-6	//
CF		1.72	1.71	0-6	//
C		0.30	0.59	0-2	//
FClob + ClobF + Clob		0.30	0.79	0-3	//
F %		75.39	13.39	47.60-100.00	60-70
M %		7.03	7.47	0.00-27.80	//
FC %		8.56	7.95	0.00-28.60	//
CF %		7.14	6.64	0.00-23.10	//

	C %	1.40	2.91	0.00-10.00	//
	FClob % + ClobF % + Clob %	0.92	2.24	0.00-8.80	//
DETERMINANTS (Additional)	ma+m+EF+pM	3.20	3.10	0-13	//
	Fc	0.23	0.68	0-3	//
	F (c)	0.83	1.26	0-5	//
	FC'n+C'nF+C'n	0.57	1.10	0-4	//
CONTENTS	H	2.38	2.15	0.00-7.50	//
	Hd	1.30	1.76	0.00-7.50	//
	H+Hd	3.68	3.02	0.00-10.50	//
	A	8.52	4.67	0.00-20.50	//
	Ad	2.18	2.62	0.00-8.50	//
	A+Ad	10.70	6.22	0.00-29.00	//
	Anat	1.15	1.65	0.00-6.50	//
	Obj	1.80	1.94	0.00-10.00	//
	Sang	0.40	0.80	0-3	//
	Geog	0.80	1.30	0-6	//
	Foc	0.60	0.70	0-2	//
	Cibo	0.45	0.72	0-2	//
	Bot	1.13	1.29	0-5	//
	H %	11.06	11.09	0.00-41.70	M = 10-20 F = 20-30
	Hd %	5.50	6.41	0.00-21.40	//
	H+Hd %	16.60	12.33	0.00-41.70	//
	A %	37.94	15.83	0.00-64.30	30-50
	Ad %	9.11	10.00	0.00-38.10	//
	A+Ad %	46.99	18.95	0.00-87.50	//
	Anat %	4.33	5.66	0.00-20.00	//
	Obj %	7.66	5.75	0.00-19.00	//
	Sang %	1.79	3.90	0.00-15.00	//
	Geog %	3.90	7.21	0.00-35.30	//
	Foc %	2.81	3.61	0.00-14.30	//
	Cibo %	1.77	3.08	0.00-11.10	//
	Bot %	5.21	5.71	0.00-17.80	//
FREQUENCY	V	5.15	1.78	0.00-8.00	5-7
	O	5.35	4.38	0.00-16.00	//
	O+	0.62	1.11	0.00-5.00	//
	O+-	2.05	2.29	0.00-10.00	//
	O-	2.68	2.53	0.00-9.00	//
	V %	25.09	11.97	0.00-53.30	20-25
	O %	21.71	12.83	0.00-44.10	2-20
	O+ %	10.00	20.39	0.00-100.00	70-80
	O+- %	35.97	29.93	0.00-100.00	//
O- %	44.19	33.06	0.00-100.00	//	
INDEXES	I.I.	0.67	0.40	0.17-1.80	//
	I.A.	0.37	0.09	0.18-0.53	> 0.35
	I.R.	4.53	1.83	0.00-8.00	6-8

*: Giambelluca, Parisi & Pes, 1995

Table 3 reports correlations between CS and SRR Rorschach variables in our sample of 30 fully responsible murderers, evaluated by means of Pearson r ; only statistically significant correlations were considered ($r > .530$; $p = < 0.001$).

Relevant, and statistically significant correlations were found between CS and SRR variables and indexes associated to cognitive mediation and processing, as follows:

- between XA (Extended Form Appropriateness) and: R+% ($r = .607$, $p < 0.001$) and F+% ($r = .601$, $p < 0.001$);
- between WDA% (Form Quality Appropriateness) and: R+% ($r = .629$, $p < 0.001$) and F+ % ($r = .622$, $p < 0.001$);
- between X-% (Distorted Form) and: R+% ($r = -.551$, $p < 0.001$) and F+% ($r = -.554$, $p < 0.001$);
- between X+% (Conventional Form) and: R+% ($r = .641$, $p < 0.001$), F+% ($r = .588$, $p < 0.001$), V ($r = .835$, $p < 0.001$), O ($r = -.636$, $p < 0.001$) and O% ($r = -.661$, $p < 0.001$);
- between Xu% (Unusual Form) and: V% ($r = -.593$, $p < 0.001$).

Table 3a – Correlations between CS Variables and indexes and SRR variables (Localizations) in a sample of 30 fully responsible murderers (*) ()**

CS Rorschach Variables and Indexes		SRR Rorschach Variables - Localizations											
		R	R+	R+ %	G	Gim	Gim %	D	Dd	Di m	Di m%	im	im %
	R	.954	.915		.629			.828	.617				
	L												
STRESS CONTROL	es	.658	.722		.601							.757	
	Adj.es	.611	.653		.561							.629	
	EA	.682	.736		.598							.683	
	D												
	Adj.D												
AFFECT	FC												
	CF	.536	.634									.589	
	Pure C												
	Afr												
	S					.668	.555			.555		.885	.772
SumC'	.571	.583		.566							.740		
INTERPERSONAL PERCEPTION	Human Cont	.620	.705										
	Pure H												
	Isolation Index										.606		
SELF PERCEPTION	Egocentricity Index												
COGNITIVE MEDIATION	XA%			.607									
	WDA%			.629									
	X-%			-									
	X+%			.641									
	Xu%										.570		
	S-	.554	.590									.608	
P													
IDEATION	Intellectualization Index	.608	.569									.559	
	Sum6	.595	.585										
	WSum6	.645	.603										
	M	.566	.561		.579								
	Lv2/M-/M none												
SPECIAL SCORES	PTI												
	DEPI									.599		.740	.722
	CDI												
	S-CON												
	HVI					-.655	-.745						
	OBS												

(*): by means of Pearson's r

(**): only statistically significant correlations were reported (p < = 0.001)

Table 3b – Correlations between CS variables and indexes and SRR variables (Determinants) in a sample of 30 fully responsible murderers (*) ()**

CS Rorschach Variables and Indexes		SRR Rorschach Variables - Determinants											
		F	F+	F+ %	M	M %	FC	CF	FClob + ClobF + Clob	FClob % + ClobF % + Clob %	ma+ m+ pM' + EF	F(c)	FC'n + C'Fn + C'n
	R	.890	.893					.614	.569		.571		.644
	L												
STRESS CONTROL	es		.602				-	.727	.579	.669		.636	
	Adj.es		.583					.762	.633	.630		.659	
	EA						.580	.662	.575	.556		.671	
	D												
	Adj.D												
AFFECT	FC						.601						
	CF							.586	.577			.648	
	Pure C						.677		.680			.746	
	Afr												
	S												
INTERPERSONAL PERCEPTION	SumC'								.659			.738	
	Human Cont		.627								.672		
	Pure H				.669	.584				.578			
SELF PERCEPTION	Isolation Index												
	Egocentricity Index				.579								
COGNITIVE MEDIATION	XA%		.601										
	WDA%		.622										
	X-%		-										
	X+%		.554										
	Xu%		.588										
	S-												
	P												
IDEATION	Intellectualization Index												
	Sum6									.776			
	WSum6									.762			
	M				.747	.601				.573			
	Lv2/M-/M none				.697					.596			
SPECIAL SCORES	PTI												
	DEPI												
	CDI												
	S-CON							.564					
	HVI												
	OBS												

(*): by means of Pearson's r

(**): only statistically significant correlations were reported (p < = 0.001)

Table 3c – Correlations between CS variables and indexes and SRR variables (Contents) in a sample of 30 fully responsible murderers (*) ()**

CS Rorschach Variables and Indexes		SRR Rorschach Variables - Contents											
		H	H %	Hd	H + Hd	H% + Hd %	A	A+ Ad	Ana t	Obj	Cib o	Geog	Geog %
	R			.638			.572	.651	.575				
	L												
STRESS CONTROL	es									.596			
	Adj.es												
	EA												
	D												
	Adj.D												
AFFECT	FC												
	CF												
	Pure C									.579			
	Afr												
	S												
	SumC'									.634	.577		
INTERPERSONAL PERCEPTION	Human Cont	.741		.730	.954	.655							
	Pure H	.759	.636		.655	.537							
	Isolation Index										.795	.821	
SELF PERCEPTION	Egocentricity Index	.650	.577		.588	.605							
COGNITIVE MEDIATION	XA%												
	WDA%												
	X-%												
	X+%												
	Xu%												
	S-			.621						.695			
	P												
IDEATION	Intellectualization Index									.566			
	Sum6												
	WSum6	.582											
	M				.795								
	Lv2/M-/M none	.643			.577								
SPECIAL SCORES	PTI												
	DEPI												
	CDI				.564								
	S-CON												
	HVI												
	OBS												

(*): by means of Pearson's r
 (**): only statistically significant correlations were reported (p < = 0.001)

Table 3d – Correlations between CS variables and indexes and SRR variables (Frequency) and indexes in a sample of 30 fully responsible murderers (*) ()**

CS Rorschach Variables and Indexes		SRR Rorschach Variables – Frequency, Indexes							
		V	V %	O	O %	O+	O+-	I.I.	I.A.
	R			.721		.698			.
	L								
STRESS CONTROL	es			.637		.759	.677		
	Adj.es			.653		.691	.686		
	EA			.602		.617			
	D								
	Adj.D								
AFFECT	FC								
	CF								
	Pure C								
	Afr							-.733	.785
	S								
INTERPERSONAL PERCEPTION	SumC'					.695			
	Human Cont								
	Pure H								
SELF PERCEPTION	Isolation Index	.588							
	Egocentricity Index								
COGNITIVE MEDIATION	XA%								
	WDA%								
	X-%								
	X+%		.835	-.636	-.661				
	Xu%		-.593						
	S-								
	P	.779							
IDEATION	Intellectualization Index					.684			
	Sum6			.652			.700		
	WSum6			.671			.687		
	M								
	Lv2/M-/M none			.601			.638		
SPECIAL SCORES	PTI			.600					
	DEPI								
	CDI								
	S-CON								
	HVI								
	OBS								

(*): by means of Pearson's r; (**): only statistically significant correlations were reported (p < 0.001)

Relevant, and statistically significant correlations were found also between CS and SRR variables and indexes associated to interpersonal relationship, as follows:

- between Human Content and: H (r = .741, p < 0.001), Hd (r = .730, p < 0.001), H+Hd (r = .954, p < 0.001), H%+Hd% (r = .655, p < 0.001);
- between Pure H and: H (r = .759, p < 0.001), H% (r = .636, p < 0.001), H+Hd (r = .655, p < 0.001), H%+Hd% (r = .537, p < 0.001);
- Isolation Index and: Dim% (r = .606, p < 0.001), Geog (r = .795, p < 0.001), Geog% (r = .821, p < 0.001), V (r = .588, p < 0.001).

4. Discussion

The CS and the SRR are two widely used Rorschach systems to administer score and interpret the Rorschach, in clinical and forensic settings in Italy.

Up to date, in our knowledge, no investigation has been performed aiming to compare Rorschach data obtained in the same group of protocols and subjects, analyzed by means of both methods.

The two methods are quite different in processing Rorschach data, but, in our opinion, the differences are not so great as regards the way of administration, so that it would not be impossible or basically incorrect to score and process according to CS a Rorschach protocol collected according to SRR, and vice versa.

Furthermore, it is not infrequent, in clinical and forensic settings, the need of scrutinizing a record collected according to CS by a SRR expert, and vice versa.

For these reasons, in the present study, we have rescored, according to CS, a sample of 30 Rorschach records collected according to SRR in a group of 30 murderers with no psychiatric history and without any psychiatric symptoms or disease, which were examined for forensic purposes and judged as legally sane.

The Rorschach protocols, collected according to SRR method, were included in the study only if two of us, well experienced in CS, judged them to be suitable for the scoring according to CS.

The results were statistically analyzed with SPSS (Statistical Package for Social Science, Version 15.0), by means of Student two-tailed 't' and Pearson r.

SRR results were compared with normative SRR control group (Giambelluca, Parisi & Pes, 1995). CS data were compared with those from the international normal control sample (Abbate & Porcelli, 2017; Meyer, et al., 2007), by means of Student two tailed 't' test (level of significance: $p < 0.05$).

The correlations between CS and SRR variables and indexes were investigated by means of Pearson's product-moment correlation coefficient; only the statistically significant correlations were considered ($p < = 0.001$).

The results highlighted a similar psychodiagnostic picture with both Rorschach methods: a mild impairment of cognitive processing as well as marked difficulties in interpersonal relationship, confirming preliminary previous findings in similar sample of murderers (Zizolfi, Catanesi, Grattagliano & Zizolfi, 2017).

The lower S in murderers as compared with international normal control group is somewhat intriguing: perhaps S responses did not always indicate interpersonal oppositionality (Mihura, et al., 2018), but a repression of oppositional behavior in murderers has been frequently described in forensic setting evaluations (Martino, et al., 2016).

Strong correlations were found (Pearson's r, $p < 0.001$) between CS and SRR variables and indexes associated to cognitive mediation and accuracy of thinking (CS: XA%, WDA%, X-%, X+%, Xu%; SRR: R+%, F+%, V, O) along with interpersonal perception (CS: Human Content, Pure H, Isolation Index; SRR: H, H%, Hd, H+Hd, H%+Hd%).

Our results should be considered as preliminary for two major reasons: the retrospective design, and the limited number of subjects examined. Further studies with larger samples are needed following a better balanced design.

5. Conclusions

The literature and scientific research on Rorschach, especially in the forensic field, is constantly evolving, requiring clinicians, consultants and experts to be constantly up-

dated on the results from the research world, in order to better defend their work in the courtrooms, where the use or abuse of tests, especially the Rorschach, can be the subject of heavy criticism for what regards its validity and reliability (Viglione, et al., 2022).

This is not the place to review the use of the Rorschach test in forensic psychology and psychiatry, which would require an extensive and focused investigation, even if concise. Anyways, it must be well kept in mind that a precise and absolute correspondence between Rorschach results and formal standardized psychiatric diagnoses such as by means of DSM-5 or ICD-11 criteria, is not an achievable goal. All we can obtain are Rorschach data configurations more or less compatible with psychiatric clinical conditions and standardized diagnostic pictures, which can help us to either confirm or falsify clinical diagnosis by means of Rorschach variables and indexes which are, for their nature, origin and collection, far different from clinical signs and symptoms. In this respect, the seminal metanalysis of Mihura, Meyer, Dumitrascu & Bombel (2013), has outlined that Rorschach variables and indexes associated to accuracy of perception and thinking are the most valid, thus deserving the utmost attention in the psychodiagnostic assessment in forensic setting, as the 'key variables' in the evaluation of legal capacity as well as of other forensic dimensions, (Affatati, et al, 2012) (Grattagliano, Zizolfi, Zizolfi, Zecca & Catanesi, 2019a e 2019b).

In order to achieve this goal, it is of absolute need the use of well standardized Rorschach methods, such as CS and SRR within an integrated Evidence Based Multimethod Psychological Assessment (EBMPA) (Erard & Evans, 2017; Giromini & Zennaro, 2019).

In the present study, a comparison was performed between two well standardized and psychometrically valid Rorschach systems, widely used in Italy: the CS and the SRR.

30 Rorschach records collected according to SRR in a group of 30 murderers with no psychiatric history and without any psychiatric symptoms or disease, examined for forensic purposes and judged as legally sane, were rescored according to CS.

The results highlighted a similar psychodiagnostic picture with both Rorschach methods: a mild impairment of cognitive processing as well as marked difficulties in interpersonal relationship, confirming preliminary previous findings in similar sample of murderers (Zizolfi, Catanesi, Grattagliano & Zizolfi, 2017).

The reduced productivity (lower R) confirmed the well known defensive behavior of subjects tested in a forensic setting (Rapaport, Gill, & Shafer, 1968; Pacente, & Grattagliano, 2007; Rogers, 2008; Grattagliano et al, 2019a; Grattagliano et al, 2019b).

Strong correlations were found (Pearson's r, $p < 0.001$) between CS and SRR variables and indexes associated to cognitive mediation and accuracy of thinking (CS: XA%, WDA%, X-%, X+%, Xu%; SRR: R+%, F+%, V, O) along with interpersonal perception (CS: Human Con-

tent, Pure H, Isolation Index; SRR: H, H%, Hd, H+Hd, H%+Hd%).

These results are very interesting because variables and indexes associated to cognitive mediation and accuracy of thinking are, indeed, the most valid and reliable from a psychometric point of view as well as the most significant concerning psychodiagnostic assessment in the forensic field.

Anyway, our results are still preliminary, because of the retrospective design, and the limited number of subjects examined. Further studies with larger samples are needed following a better balanced design.

References

- Abbate, L., Storace, B. (2004). *I test psicologici*. In V. Lingiardi (a cura di), *La personalità e i suoi disturbi. Lezioni di psicopatologia dinamica*. Milano: Il Saggiatore, 160-210.
- Abbate, L., & Porcelli, P. (2017). *Rorschach Comprehensive System. Manuale di Siglatatura e Interpretazione*. Milano: Raffaello Cortina Editore.
- Affatati, V., Grattagliano, I., Todarello, O., & Catanese, R. (2012). Utilizing the Rorschach Test in the diagnosis of gender identity disorder and in the evaluation of eligibility for sex reassignment. *Rivista di Psichiatria*, 47, (4), 337-344.
- Archer, R.P., Buffington-Vollum, J.K., Vauter Stredny, R. & Hande, R.V. (2006). A Survey of Psychological Test Use Patterns Among Forensic Psychologists. *Journal of Personality Assessment*, 87(1), 84-94.
- Archer, R.P., & Weeler, E.M.A. (Eds) (2013). *Forensic uses of clinical assessment instruments*. (2nd ed.). New York, NY: Routledge.
- Areh, I., Verkampt, F., & Allan, A. (2022). Critical review of the use of the Rorschach in European courts. *Psychiatry, Psychology and Law*, 1-29: 183-205.
- Bianchi, A. (2008) (a cura di). *Lesame neuropsicologico dell'adulto, applicazioni cliniche e forensi*. Firenze: Giunti O.S.
- Cassano, A., & Grattagliano, I. (2019). Lying in the medicolegal field: Malingering and psychodiagnostic assessment. *La Clinica Terapeutica*, 2, 134-141.
- Catanese, R., & Martino, V. (2006). Verso una psichiatria forense basata su evidenze. *Rivista Italiana di Medicina Legale*, 28: 1011-1065.
- Cicioni, R. (2016). *Il Test di Rorschach. Manuale di Raccolta, Siglatatura e Diagnosi. Metodo Italiano Scuola Romana Rorschach*. Roma: Edizioni Kappa.
- Convertini, A., Greco, R., Grattagliano, I., Catanese, R. (2020). The use of mmpi-2 and rorschach tests in parenting capacity evaluations: A case contribution. *Rassegna Italiana di Criminologia*, 14: 64-79.
- De Fidio, D., & Grattagliano, I. (2007). Correlazione tra il MMPI-2 e il Rorschach: un'analisi possibile? *Giornale Italiano di Psicopatologia*, 13:162-170.
- Erard, R.E., & Evans, B.F. (2017). *The Rorschach in Multimethod Forensic Assessment. Conceptual Foundations and Practical Applications*. New York: Routledge.
- Exner, J. E. Jr (1969). *The Rorschach Systems*. New York: Grune & Stratton.
- Exner, J. E. Jr (1974). *The Rorschach: A Comprehensive System. Volume 1*. New York: John Wiley & Sons.
- Exner, J. E. Jr (1978). *The Rorschach: A Comprehensive System. Volume 2: Current Research and Advanced Interpretation*. New York: John Wiley & Sons.
- Exner, J. E. Jr (1986). *The Rorschach: A Comprehensive System. Volume 1: Basic Foundations (Second Edition)*. New York: John Wiley & Sons.
- Exner, J. E. Jr (1991). *The Rorschach: A Comprehensive System. Volume 2: Interpretation (Second Edition)*. New York: John Wiley & Sons.
- Exner, J. E. Jr (1993). *The Rorschach: A Comprehensive System. Volume 1: Basic Foundations (Third Edition)*. New York: John Wiley & Sons.
- Exner, J. E. Jr (1997, 2003). *The Rorschach: A Comprehensive System. Volume 1: Basic Foundations and Principles of Interpretation (4th Edition)*. New York: John Wiley & Sons.
- Exner, J. E. Jr (2001). *A Rorschach Workbook for the Comprehensive System*. Rorschach Workshops
- Exner, J. E. Jr, & Erdberg, P. (2005). *The Rorschach: A Comprehensive System. Volume 2: Advanced Interpretation (3rd Edition)*. New York: John Wiley & Sons.
- Exner, J. E. Jr, Porcelli, P., Appoggetti, L. (2001). *Il Test di Rorschach secondo il Sistema di Exner*. Trento: Edizioni Erickson.
- Gacono, C.B. & Evans, F.B. (2008). *The Handbook of Forensic Rorschach Assessment*. New York: Taylor & Francis.
- Giambelluca, F.C., Parisi, S., & Pes, P. (1995). *L'interpretazione psicoanalitica del Rorschach. Modello dinamico strutturale*. Roma: Edizioni Kappa.
- Giromini, L., Pasqualini, S., Corgiat Loia, A., Pignolo, C., Di Girolamo, M., & Zennaro, A. (2022). A survey of practices and beliefs of Italian psychologist regarding malingering and symptom validity assessment. *Psychological Injury and Law*, 15: 1-13.
- Giromini, L., & Zennaro, A. (2019). *Il test di Rorschach. Applicazioni e ambiti di intervento nel terzo millennio*. Bologna: Il Mulino.
- Grattagliano, I., Zizolfi, S., Zizolfi, D., Valerio, A., Zecca, S., & Catanese, R. (2019a). Il Test di Rorschach nelle valutazioni sulla capacità di intendere e di volere negli autori di omicidio. *Rassegna Italiana di Criminologia*, 13: 119-128.
- Grattagliano, I., Zizolfi, S., Zizolfi, D., Valerio, A., Zecca, S., & Catanese, R. (2019b). Rorschach Test on the crime scene in the authors of homicide: retrospective statistical study. *Rassegna Italiana di Criminologia*, 13: 65-74.
- Hinselroth, M.J., & Strycker, G. (2004). A Consideration of Challenges to Psychological Assessment Instruments Used in Forensic Settings: Rorschach as Exemplar. *Journal of Personality Assessment*, 83(2), 141-152.
- Lis, A., Zennaro, A., Salcuni, S., Parolin, L. & Mazzeschi, C. (2007). *Il Rorschach secondo il Sistema Comprensivo di Exner. Manuale per l'utilizzo dello strumento*. Milano: Raffaello Cortina.
- Martino, V., Campobasso, F., Cannito, A., Massaro, Y., Lisi, A., Grattagliano, I., Mazzotta, N. & Catanese, R. (2013a): Il test MMPI-2 fuzzy. Incremento dell'accuratezza diagnostica del MMPI-2 per mezzo di un innovativo metodo di somministrazione. Dati preliminari di una ricerca. *Rivista Italiana di Medicina legale*, 35: 1307-1320.
- Martino, V., Campobasso, F., Cannito, A., Massaro, Y., Lisi, A., Grattagliano, I., Mazzotta, N., & Catanese, R. (2013b). L'uso Del Test Mmpi-2 Nella Valutazione Delle Condotte Distorsive: La Dissimulazione. *Rivista Italiana di Medicina legale*, 35: 133-144.
- Martino, V., Grattagliano, I., Bosco, A., Massaro, Y., Lisi, A., Campobasso, F., Marchitelli, M. A., & Catanese, R. (2016). A New Index for the MMPI-2 Test for Detecting Dissimu-

- lation in Forensic Evaluations: A Pilot Study. *Journal of Forensic Sciences*, 61(1), 249–253. <https://doi.org/10.1111/1556-4029.12889>
- Meyer, G.J., Erdberg, P., & Shaffer, T.W. (2007). Toward international normative reference data for the Comprehensive System. *Journal of Personality Assessment*, 89 (S1): S201-S216.
- Meyer, G.J., & Viglione, D.J. (2011). New developments in Rorschach-based behavioral assessment. *Annual Convention of the American Psychological Association*, August, 4-7, Washington, DC.
- Meyer, G.J., Viglione, D.J., Mihura, J.L., Erard, R.E. & Erdberg, P. (2013). *Rorschach Performance Assessment System. TM. Administration, Coding, Interpretation and Technical Manual*. Toledo, OH: Rorschach Performance Assessment System, LLC.
- Meyer, G.J., Viglione, D.J., Mihura, J.L., Erard, R.E. & Erdberg, P. (2015). *Rorschach Performance Assessment System. TM. Somministrazione, siglatura, interpretazione e manuale tecnico*. Edizione Italiana a cura di Lis, A. & Zennaro, A. Milano: Raffaello Cortina Editore.
- Mihura, J.L., Dumitrascu, N., Roy, M., & Meyer, G.J. (2018). The centrality of the response process in construct validity: An illustration via the Rorschach space response. *Journal of Personality Assessment*, 100: 233-249.
- Mihura, J.L., & Meyer, G.J. (2018). *Using the Rorschach Performance Assessment System (R-PAS)*. New York: The Guilford Press.
- Mihura, J.L., Meyer, G.J., Dumitrascu, N., & Bombel, G. (2013). The validity of individual Rorschach variables: systematic reviews and meta-analyses of the Comprehensive System. *Psychological Bulletin*, 139, 548-605.
- Neal, T.M., & Grisso, T. (2014). Assessment practices and expert judgment methods in forensic psychology and psychiatry: An international snapshot. *Criminal Justice and Behavior*, 41: 1406-1421.
- Pacente, F., & Grattagliano, F. (2007). Il reattivo di Rorschach secondo l'Exner Comprehensive System in ambito medico-legale e psichiatrico-forense. *Rassegna Italiana di Criminologia*, 1: 170-198.
- Parisi, S., & Pes, P. (1990a). *Lo Specchio dei Computi Rorschach secondo il Metodo della Scuola Romana Rorschach*. Roma: Edizioni Kappa.
- Parisi, S., & Pes, P. (1990b). *RORCOMP Rev. 1.0 Software per l'Archiviazione dei Computi Rorschach secondo il Metodo della SRR*. Roma: Edizioni Kappa.
- Rapaport, D., Gill, M.M. & Shafer, R. (1968) *Diagnostic psychological testing*. New York, International University Press. Traduzione Italiana: Rapaport, D., Gill, M.M. & Shafer, R. (1975). *Reattivi psicodiagnostici*. Torino: Boringhieri.
- Rizzo, C., Parisi, S., & Pes, P. (1980). *Manuale per la Raccolta, Localizzazione e Siglatura delle Interpretazioni Rorschach*. Roma: Edizioni Kappa.
- Rogers, R. (Ed.). (2008). *Clinical assessment of malingering and deception* (3rd ed, cap. IV, pp. 330-334). New York: Guilford Press.
- Rorschach, H. (1921). *Psychodiagnostik. Methodik und Ergebnisse eines wahrnehmungsdiagnostischen Experiments (Deutenlassen von Zufallsformen)*. Herausgegeben von Walter Morgenthaler. 10. Unveränderte Auflage. Bern: Hans Huber.
- Rorschach, H. (1942). *Psychodiagnostics. Ninth Edition*. Bern: Hans Huber.
- Rorschach, H. (1981). *Psicodiagnostica. Metodologia e Risultati di un Esperimento Diagnostico Basato sulla Percezione (Interpretazione di Forme casuali)*. Roma: Kappa.
- Viglione, D.J., de Ruiter, C., King, C.M., Meyer, G.J., Kivisto, A.J., Rubin, B.A., & Hunsley, J. (2022). Legal admissibility of the Rorschach and R-PAS: A review of research, practice, and case law. *Journal of Personality Assessment*, 104: 137-161.
- Wood, J.M., Garb, H.N., Nezworski, M.T., Lilienfeld, S.O., & Duke, M.C. (2015). A second look at the validity of widely used Rorschach indices: comment on Mihura, Meyer, Dumitrascu, and Bombel (2013). *Psychological Bulletin*, 141, 236-249.
- Zizolfi, S. (2016). I fondamenti scientifici del test di Rorschach: le caratteristiche psicometriche. *Rassegna Italiana di Criminologia*, 10, 101-114.
- Zizolfi, S., Catanesi, R., Grattagliano, I., & Zizolfi, D. (2017). *Rorschach Test in Murderers: Rorschach Variables Associated with Crime of Impetus in Fully Responsible Criminals*. Oral Presentation, XXII Congresso IRS International Rorschach Society, 17-21 luglio 2017, Parigi.

Psychopathy in a sample of mentally ill women ascertained in the Italian court and considered socially dangerous

Psicopatia in un campione di donne con infermità mentale accertata in sede giudiziaria italiana e ritenute socialmente pericolose

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OPEN ACCESS

Double blind peer review

How to cite this article: Stanga et. al (2022). Psychopathy in a sample of mentally ill women ascertained in the Italian court and considered socially dangerous. *Rassegna Italiana di Criminologia*, XVI, 3, 233-243. <https://doi.org/10.7347/RIC-032022-p233>

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Received: 28.12.2021

Accepted: 01.06.2022

Published: 22.12.2022

Pensa MultiMedia
ISSN 1121-1717 (print)
ISSN 2240-8053 (on line)
[doi10.7347/RIC-032022-p233](https://doi.org/10.7347/RIC-032022-p233)

Abstract

In this retrospective observational study, we aimed at investigating the presence and degree of psychopathy as well as its possible association with clinical characteristics in a sample of women detained in the Italian residence for the execution of security measure (REMS) of Castiglione delle Stiviere (Mantova, Italy). The 50 recruited women had been judged to be lacking criminal responsibility or having substantially diminished responsibility and socially dangerous. A PCL-R total score cut-off > 25 was used to distinguish between patients with or without psychopathy. The analysis of the data highlighted significant associations between psychopathy and borderline personality disorder with comorbid substance abuse, crimes of theft or personal injury. Those patients who were detained due to homicide or attempted homicide and suffered from schizophrenia spectrum disorders showed lower PCL-R scores than others.

Keywords: female psychopathy, italian forensic psychiatric residence, safety measure, personality disorders, addiction.

Riassunto

In questo studio osservazionale retrospettivo, si è mirato ad indagare la presenza e il grado di psicopatia nonché la sua possibile associazione con le caratteristiche cliniche in un campione di donne internate nelle Residenze per l'esecuzione delle misure di sicurezza (REMS) di Castiglione delle Stiviere (Mantova, Italia). Le 50 donne reclutate erano state giudicate totalmente o parzialmente incapaci di intendere e di volere nonché socialmente pericolose. Un punteggio totale PCL-R > 25 è stato utilizzato per distinguere tra pazienti con o senza psicopatia. L'analisi dei dati ha evidenziato associazioni significative tra psicopatia e disturbo borderline di personalità con disturbo da uso di sostanze in comorbidità, reati di furto o lesioni personali. Le pazienti che sono stati internate a causa di un omicidio o tentato omicidio e che erano affette da disturbi dello spettro schizofrenico hanno mostrato punteggi PCL-R inferiori rispetto alle altre.

Parole chiave: psicopatia femminile, REMS, misure di sicurezza, disturbi di personalità, dipendenze.

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Psychopathy in a sample of mentally ill women ascertained in the Italian court and considered socially dangerous

Introduzione

A partire dal XIX secolo si è osservato un progressivo interesse nei confronti del costrutto di psicopatia, come dimostrato dalle numerose pubblicazioni scientifiche ad esso dedicate, che progressivamente si sta estendendo anche alle persone di genere femminile interessate da tale organizzazione personologica (Beryl, Chou, & Völlm, 2012; Nicholls et al. 2004; Warren et al., 2003; Weizmann-Henelius et al. 2010; Wynn et al., 2012). Il lavoro pionieristico dello psichiatra americano Cleckley *“The Mask of Sanity”* (1941) individua e descrive sedici criteri volti a definire la persona psicopatica. Attraverso tale classificazione si arrivava ad evidenziare una personalità che vista dall'esterno è in grado di imitare un funzionamento normale, sostenuta da abilità che mascherano o camuffano la fondamentale mancanza della propria struttura interna. Lo psicopatico è dunque descritto come persona incapace di sperimentare internamente emozioni genuine con aspetti antisociali del comportamento. Si deve ad Hare (1980) una trattazione maggiormente approfondita di tale disturbo, di cui ha delineato le principali caratteristiche ed evidenziato le differenze con altri disturbi di personalità. Descrive un disturbo che comprende sia fattori affettivi e interpersonali che fattori comportamentali e di stile di vita del soggetto. Sempre ad Hare si deve la creazione della scala Psychopathy Checklist (PCL) per l'inquadramento della psicopatia negli adulti, successivamente rivista nel 1991 e nel 1993 fino a dar vita allo strumento ancora oggi utilizzato, la Psychopathy Checklist Revisited (PCL-R). Come per altri disturbi di personalità, i tratti e i comportamenti caratteristici dell'età adulta cominciano a manifestarsi a partire dall'infanzia. Nel dettaglio, i traumi infantili possono rappresentare un fattore di rischio per il futuro sviluppo di una personalità psicopatica (Lansing et al., 2018) e tale rischio aumenta in relazione alla precocità del trauma. Se ne può evincere che tale organizzazione di personalità è il prodotto di interazioni complesse tra predisposizioni biologiche e forze sociali (Hollerbach, 2018). Nel merito della seguente trattazione, riferendoci al solo genere femminile, questo statisticamente ha una tendenza a compiere meno reati rispetto alla popolazione maschile. Questa differenza si rileva anche nella natura dei reati, meno violenti. Le differenze di genere in termini di aggressività e violenza sono state messe in luce anche da Buss e Perry (1992) nella propensione all'attacco fisico, significativamente più alta negli uomini, nonostante descrizioni delle esperienze di rabbia e ostilità simili nei due sessi. Discrepanze permangono anche nell'ambito di reati violenti gravi; si evidenzia infatti una minor frequenza di omicidi nella popolazione

femminile rispetto a quella maschile. Alcuni studi presenti in letteratura mostrano come circa la metà delle donne rispetto agli uomini presenti tratti psicopatici (Sutton et al., 2002) ed al contempo come le donne psicopatiche assumano comportamenti più ingannevoli e incontrollati rispetto agli uomini psicopatici, che a loro volta presentano invece un comportamento più antisociale (Strand e Belfrage, 2005). In studi di comunità, le donne ottengono punteggi totali più bassi ed eterogenei rispetto agli uomini (Cale & Lilienfeld, 2002; Berkout et al., 2011). Poco è noto sui correlati neurali dei tratti psicopatici nelle donne, poiché gran parte della ricerca neurobiologica sulla psicopatia si è concentrata sinora sullo studio di psicopatici di sesso maschile. Ad oggi, gli studi disponibili suggeriscono che sia i maschi che le femmine con livelli più elevati di psicopatia abbiano deficit simili in risposta alla paura, ma le donne non mostrano alcuni dei deficit di elaborazione emotiva presenti invece nei maschi. Non è stato riscontrato che donne con tratti psicopatici presentino risposte perseverative o di evitamento passivo, ma la relazione tra la psicopatia e altri processi cognitivi come l'elaborazione degli errori sembra essere simile nei maschi e nelle femmine. Potrebbero anche esserci differenze nel modo in cui maschi e femmine con un livello più elevato di psicopatia elaborano le informazioni morali, incluso il modo in cui rispondono all'ingiustizia e alle violazioni morali. Sono però necessari ulteriori studi che confrontino direttamente maschi e femmine all'interno dello stesso campione per esaminare ulteriormente le differenze di genere nei correlati della psicopatia (Efferson e Glenn, 2018).

Nel merito l'attuale ordinamento giuridico italiano prevede, per chi commette reati causalmente determinati dalla presenza di un disturbo mentale, la sussistenza di una condizione di *non imputabilità*. Questo presupposto è dato dall'assenza, parziale o totale, della capacità di intendere e di volere. In Italia, fino alla recente riforma legislativa (Legge 9/2012 e successiva Legge 81/2014), questi percorsi si svolgevano all'interno degli O.P.G. (Ospedali Psichiatrici Giudiziari). Tra questi l'unica realtà forense che accoglieva utenza femminile era quella di Castiglione delle Stiviere (Mantova). Dal 2015 sono subentrate nuove strutture sanitarie denominate REMS (Residenze per l'esecuzione delle misure di sicurezza), dislocate sull'intero territorio nazionale (attualmente sono circa trenta) ed aventi come bacino di utenza quello dei cittadini residenti nella regione di pertinenza. A seguito di tale modifica normativa la struttura femminile di Castiglione delle Stiviere è stata protagonista di un "processo di trasformazione", divenendo una delle varie REMS che ospitano tale utenza (massimo 20 pazienti).

Obiettivo dello studio

Il presente studio si pone l'obiettivo generale di indagare l'incidenza del costrutto di Psicopatia in donne, valutate al momento del reato, incapaci di intendere e di volere e ritenute socialmente pericolose in sede giudiziaria. Nello specifico saranno ricercate associazioni con i reati commessi, le diagnosi psichiatriche e le comorbidità.

Materiali e Metodi

La valutazione dell'incidenza del costrutto di Psicopatia e le associazioni con i reati, le diagnosi psichiatriche e comorbidità, sono stati rilevati sulle pazienti internate in una delle principali R.E.M.S (Residenza per l'esecuzione delle misure di sicurezza) femminili italiane, quella di Castiglione d/S (Italia), struttura erede dell'unico O.P.G. italiano (Ospedale Psichiatrico Giudiziario) ospitante pazienti donne fino alla citata riforma normativa decretata del 2014 (Legge 81). Lo studio osservazionale e retrospettivo ha previsto i seguenti criteri di inclusione: (i) sesso femminile, (ii) pazienti presenti dal Marzo 2016 (istituzione operativa della REMS femminile di Castiglione d/S) al Marzo 2019. Sono state escluse le autrici di reato che presentavano: (i) diagnosi di disabilità intellettiva moderata o grave (ii) transessualismo (iii) lingua di origine e/o informazioni giuridiche tali da non permettere un'adeguata compilazione della scala adibita alla valutazione della psicopatia. Questa selezione ha permesso di includere 50 pazienti. Attraverso l'analisi delle cartelle cliniche e delle relazioni dei servizi psichiatrici referenti per i casi, sono stati estrapolati i dati: socio-demografici (età, ragione sociale, occupazione al momento del reato), psicopatologici (diagnosi principale, uso di sostanze stupefacenti e/o alcolici) e giuridici (precedenti reati e/o detenzioni). La diagnosi principale e le comorbidità sono state derivate dagli elaborati peritali, presenti e disponibili per tutte le pazienti incluse nello studio: la concordanza diagnostica fra i valutatori è stata conseguentemente del 100%. Mediante la scala PCL-R (Psychopathy Checklist-Revised) si è misurato il costrutto di psicopatia. Nello specifico i dati sono stati ottenuti attraverso l'integrazione delle informazioni: fornite dalle autrici di reato in appositi colloqui, ricavate dall'osservazione comportamentale e relazionale all'interno della struttura, dall'analisi delle informazioni collaterali (cartella clinica attuale, sentenze del tribunale, relazioni e cartelle cliniche di percorsi clinici e/o giuridici precedenti). Tutte le rilevazioni sono state effettuate da Psichiatri e Psicologi con specifica formazione ed esperienza professionale nel settore forense-criminologico, lo strumento viene applicato di routine a tutte le pazienti degenti nella struttura forense di riferimento per il presente studio.

Lo strumento PCL-R consente di ottenere una misurazione sia dimensionale, su una scala da 0 a 40, che categoriale dei tratti psicopatici presenti nei soggetti esaminati (Hare, 2003). La scala è composta dai seguenti 20 item:

loquacità/fascino superficiale; senso di sé grandioso; bisogno di stimoli/propensione alla noia; menzogna patologica; impostore e manipolativo; assenza di rimorso o senso di colpa; affettività superficiale; insensibilità/assenza di empatia; stile di vita parassitario; deficit del controllo comportamentale; comportamento sessuale promiscuo; problematiche comportamentali precoci; assenza di obiettivi realistici e/o a lungo termine; impulsività; irresponsabilità; incapacità di accettare la responsabilità delle proprie azioni; numerosi rapporti di coppia di breve durata; delinquenza in età giovanile; revoca della libertà condizionale; versatilità criminale. Gli item sono a loro volta suddivisi in due fattori, ciascuno composto da due componenti. Il primo fattore è quello interpersonale/affettivo, a sua volta suddiviso nella componente interpersonale (item 1, 2, 4 e 5) e nella componente affettiva (item 6, 7, 8 e 16); il secondo fattore è quello della devianza sociale, suddiviso nella componente stile di vita (item 3, 9, 13, 14 e 15) e nella componente antisociale (item 10, 12, 18, 19 e 20). Ad ogni Item può essere attribuito un punteggio che va da 0 a 2. Quando la caratteristica indagata non è applicabile al soggetto, o non si riscontra il comportamento descritto, si assegna il punteggio 0, quando il soggetto è compatibile con le caratteristiche descritte si assegna 2, nei casi in cui la descrizione sia solo parzialmente riscontrabile, ovvero non nella misura da garantire l'attribuzione del punteggio più alto si applica il punteggio 1. Nelle situazioni in cui risulta impossibile valutare l'item, spesso a causa di informazioni insufficienti, si omette la risposta contrassegnandola con una X. La somma dei punteggi fornisce un valore per ognuna delle quattro componenti, per ognuno dei fattori e un valore totale. Il punteggio totale indica in quale grado il soggetto esaminato corrisponde al "prototipo" dello psicopatico. A livello internazionale, è stato stabilito un cut-off clinico uguale o maggiore al punteggio di 30, vengono considerati di alto livello anche i punteggi uguali o superiori a 25. Soggetti che ottengono tali punteggi presentano un'alta probabilità di recidiva criminale. La *popolazione normale* mediamente ottiene punteggi che si collocano tra gli 8 e i 10 punti, mentre i *criminali comuni* presentano punteggi intorno a 18-20 punti (Hare, 2003). Vitale e Newman (2001) hanno testato l'affidabilità e la validità della PCL-R quando somministrata a campioni femminili, concludendo che l'affidabilità degli item è buona, mentre la validità più modesta.

Il presente studio è stato approvato dal Comitato Etico "Val Padana" nella seduta del 17.05.2019.

Statistica

Per l'analisi statistica è stato utilizzato il software "SPSS" versione 21 ("Statistical Package for Social Science", IBM Inc.). Sono state utilizzate statistiche descrittive per le caratteristiche socio-demografiche e cliniche del campione, calcolando le frequenze delle variabili nominali e le medie delle variabili continue. A livello inferenziale sono stati

considerati i valori significativi ottenuti con la classificazione di psicopatia basata sul punteggio alla PCL-R ≥ 25 ; con il test *Chi-quadrato* sono state confrontate le principali variabili categoriali, mentre per confrontare le caratteristiche dei sottogruppi derivati dal campione originale secondo caratteristiche cliniche e criminologiche, è stato utilizzato il test *test U di Mann-Whitney*. Sono stati considerati significativi valori di $p < 0.05$ (2 code).

Risultati

L'analisi descrittiva dei dati (tabella 1) evidenzia le seguenti caratteristiche del campione (50 donne): età media di 41 anni con il 64% dei casi che si colloca nel range 26-45 anni. Al momento del reato il 50% delle donne era nubile, le restanti sposate o conviventi (24%) o separate (26%). Il 66% dei casi presenta un titolo di studio pari o al di sotto della licenza media inferiore (8 anni di istruzione). L'8% ha una storia familiare di adozione.

A livello diagnostico i disturbi dello spettro schizofrenico e quelli dell'umore sono presenti rispettivamente al 36% e al 12%. La diagnosi prevalente è quella di disturbo della personalità (52%), principalmente riconducibile, secondo l'approccio nosografico del DSM 5, al cluster B (44% dei casi totali). Tra questi un'ampia percentuale è rappresentata dal Disturbo Borderline di personalità (30% dei casi totali). L'uso di sostanze stupefacenti e di alcol si riscontrano rispettivamente nel 40% e nel 34% del campione. In ambito criminologico la maggioranza dei casi (82%) sta scontando la prima misura di sicurezza detentiva, a differenza dei restanti (18%) con precedenti ingressi. Tra i reati commessi quello maggiormente rappresentato è l'omicidio/tentato omicidio (62%), a cui seguono le lesioni personali e aggravate (30%), i maltrattamenti in famiglia (20%) e le trasgressioni degli obblighi di legge (16%).

Si rileva un valore medio alla PCL-R di 14,26. Considerando un cut-off maggiore o uguale a 30, il 10% delle donne in misura di sicurezza soddisfa il criterio per la diagnosi di psicopatia. Queste donne hanno un'età media di 30 anni, quelle che si collocano nei valori inferiori (PCL-R < 30) di 43,5 anni. Quando il valore di riferimento alla PCL-R è ≥ 25 , riferimento solitamente associato alla probabilità di incorrere in recidiva di reato (Laurell and Dardeman, 2005), le donne con psicopatia risultano essere il 20% del campione. Il rapporto dell'età media rimane sostanzialmente stabile (PCL-R > 25, età media 30,5 anni D.S. 6,7; PCL-R < 25, età media 43,6 anni D.S. 10,9).

L'analisi inferenziale ha permesso di identificare associazioni del costrutto di psicopatia (pazienti che presentano punteggi ≥ 25 nella scala PCL-R) con i disturbi della personalità, prevalentemente del tipo Borderline e con il disturbo da uso di sostanze (DUS). Significativa in merito anche la comorbilità tra i due disturbi. Diversamente i disturbi della schizofrenia e dello spettro psicotico correlano negativamente con il costrutto di psicopatia (tabella 2). Indagando nel dettaglio quali aspetti contribuiscono a tali

relazioni, si sono potuti rilevare valori mediamente più alti in entrambi i fattori della scala: interpersonale-affettivo e devianza sociale, nelle pazienti con DDP Borderline e in quelle con DUS, riscontrando anche valori significativamente inferiori nelle pazienti con disturbo dell'umore per quanto concerne la sola devianza sociale (tabella 3).

L'analisi del campione attraverso le principali tipologie di reati commessi ha rilevato un'associazione del costrutto di psicopatia con le autrici di Lesioni; mentre il reato di omicidio/tentato è risultato significativamente non associato a tale condizione (tabella 4). Il successivo confronto volto ad indagare gli aspetti presenti nella scala determinanti tali associazioni, ha rilevato valori mediamente più alti nel fattore 2, devianza sociale, nelle donne autrici lesioni personali/aggravate; fattore rilevante anche per chi ha commesso una trasgressione obblighi. Il reato di omicidio/tentato omicidio, nel campione psichiatrico preso in esame, correla negativamente con il fattore della devianza sociale (tabella 5).

Discussione

Il campione di donne in misura di sicurezza con infermità mentale accertata risulta eterogeneo sia in termini diagnostici che demografici. La maggioranza delle interessate si trova al primo ingresso in un contesto detentivo e ha un'età media sostanzialmente maggiore rispetto a chi presenta le caratteristiche del costrutto di psicopatia. Se ne evince che le donne che commettono reati collegati ad una condizione psicopatologica non siano caratterizzate da una tendenza alla recidiva, ma principalmente a singoli comportamenti spesso espressi nei contesti familiari. Il costrutto di psicopatia si collega invece ad un'età mediamente più giovane al momento della commissione dei reati e interessa una minor parte del campione analizzato (20%). Le donne che soddisfano tale criterio presentano una diagnosi di disturbo borderline di personalità che può associarsi a condotte di abuso di sostanze stupefacenti. Tali dati trovano riscontro in precedenti studi che suggeriscono nel disturbo borderline l'espressione fenotipica della psicopatia femminile, nell'uomo data invece dal disturbo antisociale di personalità (Carabellese et al., 2018; Nicholls et al., 2004; Warren et al., 2003) e che evidenziano una più evidente associazione in codiagnosi nelle donne psicopatiche di disturbo da uso di sostanze (Wynn et al., 2012). L'uso di sostanze si conferma come caratteristica determinante il rischio di agire comportamenti aggressivi, sia nei pazienti psichiatrici che nei detenuti che accedono alle classiche misure detentive carcerarie in entrambi i sessi (Fazel et al., 2018).

Chi raggiunge valori alti nella scala PCL-R presenta una storia di trasgressione degli obblighi di legge e di reati come le lesioni personali, che possono esprimersi con maggior probabilità al di fuori dei contesti relazionali familiari. Queste donne (pazienti con disturbo della personalità borderline e pazienti con disturbo da uso di sostanze) presentano quindi caratteristiche di devianza so-

ciale, ma a differenze delle altre autrici di reato anche di caratteristiche tipiche del fattore 1 della scala, con deficit empatici, affettività superficiale, tendenza alla manipolazione dell'altro e assenza di rimorso e colpa nei confronti delle vittime dei reati; caratteristiche che nel nostro campione non si riscontrano nelle autrici di omicidio. Di notevole interesse risulta infatti l'assenza del costrutto di psicopatia nelle donne autrici di omicidio e tentato omicidio, le quali commettono i reati prevalentemente all'interno dei propri contesti familiari, non presentando una storia di comportamenti analoghi e di condotte violente.

Conclusioni

Il disturbo borderline di personalità associato all'uso di sostanze si conferma, nelle realtà detentive femminili, come una caratteristica associata ad alti livelli di psicopatia e di recidiva. La realtà descrittiva emersa restituisce una tendenza a delinquere limitata, spesso riconducibile ad un solo agito seppur grave come l'omicidio, ma tendenzialmente svincolato da strutture personologiche prive di empatia e di rimorso. La maggioranza di accessi in misura di sicurezza di donne con condizioni riconducibili a disturbi dell'umore e dello spettro schizofrenico con caratteristiche non psicopatiche trova conferma nella tendenza a richiedere con maggior probabilità, in sede giudiziaria, una perizia psichiatria quando è la donna a delinquere ed in particolare quando si rende autrice di reati gravi (Merzgora Betsos, 2003). Questi riscontri si discostano da quello che a volte è il pregiudizio di pericolosità sociale, spesso attribuito alle persone con diagnosi di schizofrenia.

Gli agiti etero-aggresivi delle donne psicopatiche si distinguono dunque da quelli che non rientrano in tale definizione: le prime agiscono in maniera indifferenziata su terzi, mentre le seconde secondo un criterio maggiormente legato alla reattività passionale-affettiva. Le psicopatiche tendono a trasportare al di fuori della sfera relazionale primaria le situazioni di conflitto, agendo solitamente in risposta a ingiustizie percepite, a cui tentano di porre rimedio con comportamenti indirizzati al riappropriarsi di quello che pensano gli sia stato negato. I percorsi di trattamento risentono di tali caratteristiche per cui i soggetti arrivano a vivere come forma di ingiustizia l'intervento restrittivo loro attuato, mostrando difficoltà nel ricondurre una finalità di tipo riabilitativo. A tal riguardo, indagini future su tale categorie di pazienti, potrebbero concentrarsi sull'analisi dei trattamenti con l'obiettivo di individuare gli aspetti favorevoli la *compliance*. A tal riguardo un interessante spunto viene fornito da Schimmenti, Passanisi, & Caretti (2014), i quali rilevano un'alta attenzione degli individui psicopatici ai disturbi dati da sintomi somatici, aspetto che potrebbe essere una possibile chiave di accesso per la costruzione dell'alleanza terapeutica.

Limiti dello studio

La natura retrospettiva dello studio non ha reso possibile un'analisi diretta delle caratteristiche psicopatologiche e comportamentali, indagabili con appositi strumenti diagnostici e di risk assessment, tale da restituire un riscontro di stato e di processo dato dal contesto della misura di sicurezza. Altro limite è da ricondursi al numero di pazienti di donne individuate con presenza del costrutto di psicopatia (10 pazienti), che limita le possibilità di confronto con le autrici di reato incapaci di intendere e di volere non classificabili in tale categoria diagnostica.

Gli autori dichiarano l'assenza di conflitti d'interesse.

Riferimenti bibliografici

- Adolphs, R., Tranel, D., Damasio, H., & Damasio, A. (1994). Impaired recognition of emotion in facial expressions following bilateral damage to the human amygdala. *Nature*, 15, 372(6507), 669-72.
- Alterman, A.I., McDermott, P.A., Cacciola, J.S., Rutherford, M.J., Boardman, C.R., McKay, J.R., & Cook, T.G. (1998). A typology of antisociality in methadone patients. *J Abnorm Psychol*, 107(3), 412-22.
- Amon, S., Putkonen, H., Weizmann-Henelius, G., Fernandez Arias, P., & Klier, C.M. (2019). Gender differences in legal outcomes of filicide in Austria and Finland. *Arch Womens Ment Health*, 22(1), 165-172.
- Banasik, M., Gierowski, K., & Nowakowski, K. (2017). Aggressiveness and the intensity of psychopathic symptoms - gender differences. *Psychiatr Pol.*, 29, 51(4), 751-762. English, Polish.
- Bechara, A., Damasio, H., Damasio, A.R., & Lee, G.P. (1999). Different contributions of the human amygdala and ventromedial prefrontal cortex to decision-making. *J Neurosci.*, 1, 19(13), 5473-81.
- Beryl, R., Chou, S., & Völlm, B. (2014). A systematic review of psychopathy in women within secure settings. *Personality and Individual Differences*, (71), 185-195.
- Blair, R.J. (2005). Applying a cognitive neuroscience perspective to the disorder of psychopathy. *Dev Psychopathol.*, 17(3), 865-91.
- Buss, A.H., & Perry, M. (1992). The aggression Questionnaire. *J. Pers. Soc. Psychol.*, 6, 452-459.
- Cale, E.M., & Lilienfeld, S.O. (2002). Sex differences in psychopathy and antisocial personality disorder. A review and integration. *Clin Psychol Rev.*, 22(8), 1179-207. doi: 10.1016/s0272-7358(01)00125-8
- Calogero, A. (2008). Dal disagio psichico al reato. In *Donne figlicide e infanticide presso OPG di Castiglione delle Stiviere*. Osservatorio Nazionale Femminile.
- Carabellese, F., Felthous, A.R., Rossetto, I., La Tegola, D., Franconi, F., Catanesi, R. (2018). Female Residents with Psychopathy in a High-Security Italian Hospital. *J Am Acad Psychiatry Law.*, 46(2), 171-178.
- Cardona, N., Berman, A.K., Sims-Knight, J.E., & Knight, R.A. (2020). Covariates of the Severity of Aggression in Sexual Crimes. *Psychopathy and Borderline Characteristics. Sex Abuse.*, 32(2), 154-178.

- Dvorak-Bertsch, J.D., Curtin J.J., Rubinstein T.J., & Newman J.P. (2009). Psychopathic traits moderate the interaction between cognitive and affective processing. *Psychophysiology*, 46(5), 913-21.
- Efferson L.M., & Glenn A.L. (2018). Examining gender differences in the correlates of psychopathy: A systematic review of emotional, cognitive, and morality-related constructs. *Aggression and Violent Behavior*, 41, 48-61. <https://doi.org/10.1016/j.avb.2018.05.009>
- Fazel, S. (2018). Editorial: Synthesizing the Evidence on Prisoner Health-Taking Stock and Moving Forward. *Am J Epidemiol*, 1, 187(6), 1137-1139
- Hare, R.D. (2009). *Psicopatia. Valutazione diagnostica e ricerca empirica* (eds. By V. Caretti & A. Schimmenti). Roma: Astrolabio (Ed. Or. *Without conscience: The disturbing world of the Psychopaths among us*, Guilford Press., 1998).
- Hare, R.D. (2003). *The Hare Psychopathy Checklist-Revised. 2nd Edition. Manual*. Toronto: MultiHealth Systems.
- Hare, R.D., Hart, S.D., Harpur, T.J. (1991). Psychopathy and the DSM-IV criteria for antisocial personality disorder. *J. Abnorm. Psychol.*, 100(3), 391-398.
- Hare, R.D., & Neumann, C.S. (2009). Psychopathy: assessment and forensic implications. *Can J Psychiatry*, 54(12), 791-802. DOI: 10.1177/070674370905401202
- Hollerbach P, Johansson A., Ventus D., Jern P., Neumann C.S., Westberg L., Santtila P., Habermeyer E., & Mokros A. (2018). Main and interaction effects of childhood trauma and the MAOA uVNTR polymorphism on psychopathy. *Psychoneuroendocrinology*, 95, 106-112.
- Gabbard, G.O. (2005). Mind, brain, and personality disorders. *Am J Psychiatry*, 162(4), 648-55.
- Jack, S.P.D., Petrosky, E., Lyons, B.H., Blair, J.M., Ertl, A.M., Sheats, K.J., Betz, C.J. (2018). Surveillance for Violent Deaths - National Violent Death Reporting System, 27 States, 2015. *MMWR Surveill Summ.*, 28, 67(11), 1-32.
- Kantza G. (2005). *Come uccidono le donne. Una lettura psicoanalitica*. Magi Edizioni.
- Korcz I. Agresia – wyzwaniem cywilizacyjnym. In Kowalski D., Kwiatkowski M., Zduniak A. (eds.), *Edukacja dla bezpieczeństwa: wybrane perspektywy*.
- Lansing A.E., Plante W.Y., Beck A.N., & Ellenberg M. (2018). Loss and Grief Among Persistently Delinquent Youth: The Contribution of Adversity Indicators and Psychopathy-Spectrum Traits to Broadband Internalizing and Externalizing Psychopathology. *J Child Adolesc Trauma*, 11(3), 375-389.
- Laurell J., & Daderman A.M. (2005). Recidivism is related to psychopathy (PCL-R) in a group of men convicted of homicide. *International Journal of Law and Psychiatry*, 28, 255-268.
- Lilienfeld, S.O., & Arkowitz, H. (2007). Facts and Fictions in Mental Health. *SA Mind*, 18, 6, 80-81 doi:10.1038/scientificamericanmind1207-80
- Lykken, D.T. (2006). Psychopathic personality: The scope of the problem. In C.J. Patrick (Ed.), *Handbook of psychopathy*. New York: Guilford.
- Merzagora Betsos I. (2003). *I demoni del focolare. Madri e mogli che uccidono*. Torino: Centro Scientifico.
- Müller, J.L., Sommer, M., Döhnel, K., Weber, T., Schmidt-Wilcke, T., & Hajak, G. (2008). Disturbed prefrontal and temporal brain function during emotion and cognition interaction in criminal psychopathy. *Behav Sci Law*, 26(1), 131-50. doi: 10.1002/bsl.796.
- Nicholls, T. L., Ogloff, J. R. P., & Douglas, K. S. (2004). Assessing risk for violence among male and female civil psychiatric patients: The HCR-20, PCL:SV, and VSC. *Behavioral Sciences & the Law*, 22(1), 127-158.
- Newman, J.P., & Schmitt, W.A. (1998). Passive avoidance in psychopathic offenders: a replication and extension. *J Abnorm Psychol.*, 107(3), 527-32.
- Ogloff, J.R. (2006). Psychopathy/antisocial personality disorder conundrum. *Aust N Z J Psychiatry*, 40(6-7), 519-28.
- Osterman, K., Bjorkqvist, K., Lagerspetz, K.M., Kaukiainen, J.A., Landauu, S.F., & Frackez, A. et al. (1998). Cross-cultural evidence of female indirect aggression. *Aggressive Behav*, 24, 1-8.
- Schimmenti, A., Passanisi, A., & Caretti, V. (2014). Interpersonal and affective traits of psychopathy in child sexual abusers: evidence from a pilot study sample of Italian offenders. *J Child Sex Abus.*, 23(7), 853-60.
- Strand, S., & Belfrage, H. (2005). Gender differences in psychopathy in a Swedish offender sample. *Behav Sci Law*, 23(6), 837-50. doi: 10.1002/bsl.674.
- Sutton, S.K., Vitale, J.E., & Newman, J.P. (2002). Emotion among women with psychopathy during picture perception. *Abnorm Psychol.*, 111(4), 610-9. doi: 10.1037//0021-843x.111.4.610.
- Vitale, J.E., & Newman, J.P. (2001). Using the psychopathy checklist-revised with female samples: reliability, validity, and implications for clinical utility. *Clinical Psychology: science and practice*, 8, 117-132.
- Umbach, R., Berryessa, C.M., & Raine, A. (2015). Brain imaging research on psychopathy: Implications for punishment, prediction, and treatment in youth and adults. *Journal of Criminal Justice*, 43(4), 295-306.
- Warren, J. I., Burnette, M. L., South, S. C., Chauhan, P., Bale, R., & Friend, R., et al. (2003). Psychopathy in women: Structural modeling and comorbidity. *International Journal of Law and Psychiatry*, 26(3), 223-242.
- Weizmann-Henelius, G., Putkonen, H., Grönroos, M., Lindberg, N., Eronen, M., & Häkkinen-Nyholm, H. (2010). Examination of psychopathy in female homicide offenders-confirmatory factor analysis of the PCL-R. *Int J Law Psychiatry*. 33(3), 177-83.
- Wynn, R. M., Marita, H Høiseth, M. H. & Pettersenn, G. (2012). Psychopathy in women: theoretical and clinical perspectives. *International Journal Womens Health*, 4, 257-263.

Tabella 1.
Statistiche descrittive pazienti donne in misura di sicurezza. REMS Castiglione d/S (Italia) periodo marzo 2016-marzo 2019

VARIABILE	CATEGORIA	PAZIENTI (N = 50) N (%)
Età (media = 41)	18-25	3 (6,00)
	26-35	15 (30,00)
	36-45	17 (34,00)
	46-50	7 (14,00)
	>50	8 (16,00)
Nazionalità	Italiana	34 (68,00)
	Unione europea	6 (12,00)
	Altro	10 (20,00)
Stato civile	Stato libero	25 (50,00)
	Coniugata/Convivente	12 (24,00)
	Separata	13 (26,00)
Adozione	Paziente non adottata	46 (92,00)
	Paziente adottata	4 (8,00)
Titolo di studio	Non rilevabile	1 (2,00)
	Istruzione elementare (5 anni)	3 (6,00)
	Istruzione media inferiore (8 anni)	29 (58,00)
	Istruzione media superiore (13 anni)	11 (22,00)
	Laurea	6 (12,00)
Diagnosi	Schizofrenia/Psicosi	18 (36,00)
	Disturbi dell'umore	6 (12,00)
	Disturbi personalità	26 (52,00)
	Comorbilità abuso sostanze stupefacenti	20 (40,00)
	Comorbilità abuso alcol	17 (34,00)
Misura di sicurezza	Prima assegnazione	41 (82,00)
	Precedenti misure di sicurezza	9 (18,00)
Principali reati commessi	Omicidio/tentato omicidio	19 (38,00)
	Lesioni personali	10 (20,00)
	Lesioni personali aggravate	5 (10,00)
	Maltrattamenti familiari	10 (20,00)
	Resistenza pubblico ufficiale	6 (12,00)
	Tentata rapina	6 (12,00)
	Furto	3 (6,10)
	Atti persecutori	5 (10,00)
	Trasgressione obblighi di legge	8 (16,00)
PCL-R	>= 25	10 (20,00)

Tabella 2.

Diagnosi psichiatrica e Psicopatia (PCL-R \geq 25). Pazienti donne REMS di Castiglione d/S (Italia). Periodo marzo 2016- marzo 2019.

DIAGNOSI	Psicopatia		Chi quadrato	p value
	PCL-R <25	PCL-R \geq 25		
Disturbo personalità (DDP)				
No	24 (100.0%)	0 (0.0%)	11.538	0.001*
Sì	16 (61.5%)	10 (38.5%)		
DDP Borderline				
No	35 (100.0%)	0 (0.0%)	11.538	0.001*
Sì	5 (33.3%)	10 (66.7%)		
DDP Borderline + DUS				
No	2 (100.0%)	0 (0.0%)	4.615	0.032*
Sì	3 (23.1%)	10 (76.9%)		
Schizofrenia/Psicosi				
No	22 (68.8%)	10 (31.3%)	7.031	0.008*
Sì	18 (100.0%)	0 (0.0%)		
Disturbi dell'umore				
No	33 (76.7%)	10 (23.3%)	2.035	0.154
Sì	7 (100.0%)	0 (0.0%)		
DUS Disturbo uso sostanze				
No	30 (100.0%)	0 (0.0%)	18.750	0.000*
Sì	10 (50.0%)	10 (50.0%)		

* livello significatività $p < 0.05$

Tabella 3.

Diagnosi psichiatrica e fattori della PCL-R. Pazienti donne REMS Castiglione d/S (Italia). Periodo marzo 2016-marzo 2019.

DIAGNOSI				
FATTORI PCL-R	Disturbo Personalità		U di Mann-Whitney	p value
	No (n = 24)	Si (n = 26)		
	Media (D.S.)	Media (D.S.)		
Interpersonale/affettivo	5.0 (3.4)	7.0 (4.6)	239.0	0.155
Devianza sociale	4.2 (4.2)	9.6 (5.7)	145.0	0.001*
DDP Borderline				
	No (n = 35)		U di Mann-Whitney	p value
	Si (n = 15)			
	Media (D.S.)	Media (D.S.)		
Interpersonale/affettivo	4.8 (3.2)	9.0 (4.6)	123.0	0.003*
Devianza sociale	4.6 (4.1)	12.7 (4.5)	52.5	< 0.001*
DDP Borderline + DUS				
	No (n = 2)		U di Mann-Whitney	p value
	Si (n = 13)			
	Media (D.S.)	Media (D.S.)		
Interpersonale/affettivo	3.5 (4.9)	9.9 (4.0)	3.5	0.104
Devianza sociale	4.9 (4.1)	13.9 (3.3)	1.0	0.040*
Schizofrenia/Psicosi				
	No (n = 32)		U di Mann-Whitney	p value
	Si (n = 18)			
	Media (D.S.)	Media (D.S.)		
Interpersonale/affettivo	6.6 (4.4)	5.2 (3.7)	241.5	0.345
Devianza sociale	9.2 (5.5)	3.1 (3.3)	102.5	< 0.001*
DUS				
	No (n = 30)		U di Mann-Whitney	p value
	Si (n = 20)			
	Media (D.S.)	Media (D.S.)		
Interpersonale/affettivo	4.8 (3.3)	8.0 (4.5)	182.0	0.019*
Devianza sociale	3.5 (3.6)	12.3 (3.8)	31.5	< 0.001*
Disturbi dell'umore				
	No (n = 43)		U di Mann-Whitney	p value
	Si (n = 7)			
	Media (D.S.)	Media (D.S.)		
Interpersonale/affettivo	6.5 (4.3)	3.6 (2.3)	88.5	0.082
Devianza sociale	7.7 (5.7)	3.0 (3.2)	79.0	0.045*

* livello significatività $p < 0.05$

Tabella 4.
Reati commessi e Psicopatia (PCL-R \geq 25). Pazienti donne REMS di Castiglione d/S (Italia). Periodo marzo 2016- marzo 2019.

REATO	Psicopatia		Chi quadrato	p value
	PCL-R <25	PCL-R \geq 25		
Omicidio				
No	21 (67.7%)	10 (32.3%)	7.661	0.006*
Sì	19 (100.0%)	0 (0.0%)		
Maltrattamenti in famiglia				
No	34 (85.0%)	6 (15.0%)	3.125	0.077
Sì	6 (60.0%)	4 (40.0%)		
Lesioni personali/aggravate				
No	35 (89.7%)	4 (10.3%)	10.519	0.001*
Sì	5 (45.5%)	6 (54.5%)		
Resistenza pubblico ufficiale				
No	36 (81.8%)	8 (18.2%)	0.758	0.384
Sì	4 (66.7%)	2 (33.3%)		
Tentata rapina				
No	35 (79.5%)	9 (20.5%)	0.047	0.828
Sì	5 (83.3%)	1 (16.7%)		
Furto				
No	39 (84.8%)	7 (15.2%)	4.972	0.026*
Sì	1 (33.3%)	2 (66.7%)		
Atti persecutori				
No	36 (80.0%)	9 (20.0%)	0.000	1.000
Sì	4 (80.0%)	1 (20.0%)		
Trasgressione obblighi				
No	35 (83.3%)	7 (16.7%)	1.823	0.177
Sì	5 (62.5%)	3 (37.5%)		
Danneggiamento				
No	38 (80.9%)	9 (19.1%)	0.355	0.552
Sì	2 (66.7%)	1 (33.3%)		

* livello significatività $p < 0.05$

Tabella 5.
Reati e fattori della PCL-R. Pazienti donne REMS Castiglione d/S (Italia). Periodo marzo 2016- marzo 2019.

	REATI			
FATTORI DELLA PCL-R	Omicidio		U di Mann-Whitney	p value
	No (n = 31)	Si (n = 19)		
	Media (D.S.)	Media (D.S.)		
Interpersonale/affettivo	6.7 (4.3)	5.0 (3.6)	235.0	0.232
Devianza sociale	9.9 (5.0)	2.3 (2.4)	64.0	< 0.001*
	Maltrattamenti in famiglia		U di Mann-Whitney	p value
	No (n = 40)	Si (n = 10)		
	Media (D.S.)	Media (D.S.)		
Interpersonale/affettivo	6.0 (4.0)	6.6 (5.0)	191.5	0.836
Devianza sociale	6.7 (5.8)	8.2 (5.3)	158.0	0.307
	Lesioni personali/aggravate		U di Mann-Whitney	p value
	No (n = 39)	Si (n = 11)		
	Media (D.S.)	Media (D.S.)		
Interpersonale/affettivo	5.6 (4.1)	7.8 (4.0)	150.0	0.129
Devianza sociale	5.9 (5.4)	11.1 (4.8)	98.0	0.006*
	Resistenza pubblico ufficiale		U di Mann-Whitney	p value
	No (n = 44)	Si (n = 6)		
	Media (D.S.)	Media (D.S.)		
Interpersonale/affettivo	5.9 (4.0)	7.5 (5.5)	112.0	0.549
Devianza sociale	6.4 (5.7)	11.2 (2.0)	66.5	0.050
	Tentata rapina		U di Mann-Whitney	p value
	No (n = 44)	Si (n = 6)		
	Media (D.S.)	Media (D.S.)		
Interpersonale/affettivo	6.0 (4.2)	6.1 (4.0)	129.5	0.940
Devianza sociale	6.7 (5.8)	9.6 (4.1)	95.0	0.268
	Furto		U di Mann-Whitney	p value
	No (n = 46)	Si (n = 3)		
	Media (D.S.)	Media (D.S.)		
Interpersonale/affettivo	5.8 (4.1)	8.3 (4.1)	45.0	0.315
Devianza sociale	6.4 (5.4)	13.2 (4.6)	23.0	0.054
	Atti persecutori		U di Mann-Whitney	p value
	No (n = 45)	Si (n = 5)		
	Media (D.S.)	Media (D.S.)		
Interpersonale/affettivo	6.1 (4.0)	5.8 (6.0)	100.5	0.697
Devianza sociale	7.3 (5.6)	4.8 (6.1)	79.0	0.277
	Trasgressione obblighi		U di Mann-Whitney	p value
	No (n = 42)	Si (n = 8)		
	Media (D.S.)	Media (D.S.)		
Interpersonale/affettivo	6.0 (4.0)	6.6 (4.7)	158.0	0.790
Devianza sociale	6.3 (5.3)	10.8 (5.9)	92.5	0.045*
	Danneggiamento		U di Mann-Whitney	p value
	No (n = 47)	Si (n = 3)		
	Media (D.S.)	Media (D.S.)		
Interpersonale/affettivo	6.0 (4.0)	7.3 (6.6)	65.0	0.821
Devianza sociale	7.1 (5.7)	5.0 (6.2)	52.0	0.448

* livello significatività p<0.05

Psychogenic amnesia or criminal amnesia? Points of reflection from a case study

Amnesia psicogena o amnesia criminosa? Spunti di riflessione da un caso peritale

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OPEN ACCESS

Double blind peer review

How to cite this article: Barbieri C. et al. (2022). Psychogenic amnesia or criminal amnesia? Points of reflection from a case study. *Rassegna Italiana di Criminologia*, XVI, 3, 244-252. <https://doi.org/10.7347/RIC-032022-p244>

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Received: 22.02.2022

Accepted: 26.05.2022

Published: 22.12.2022

Pensa MultiMedia
ISSN 1121-1717 (print)
ISSN 2240-8053 (on line)
[doi10.7347/RIC-032022-p244](https://doi.org/10.7347/RIC-032022-p244)

Abstract

This article aims to provide some reflections on the phenomenon of psychogenic amnesia and its likely symptomatic-semiotic value in the technical evaluation of some types of crime. The Authors, in fact, taking a cue from an expert case that came to their observation, an apparently unmotivated theft by a person with a clean record, intend to examine the meaning and value of this disorder also in the criminal, clinical and psychological-psychiatric forensic field.

Keywords: Psychogenic amnesia, Personality structure, Defense mechanisms, Sense and significance of the disorder, Imputability.

Riassunto

Il presente articolo si propone di fornire alcune riflessioni sul fenomeno dell'amnesia psicogena e sul suo verosimile valore sintomatico-semiotico nella valutazione tecnica di alcune tipologie delittuose. Gli Autori, infatti, prendendo spunto da un caso peritale giunto alla loro osservazione, un furto apparentemente immotivato da parte di un soggetto incensurato, intendono esaminare il significato ed il valore di tale disturbo anche in ambito criminologico clinico e psicologico-psichiatrico forense.

Parole chiave: Amnesia psicogena, Struttura di personalità, Meccanismi di difesa, Senso e significato del disturbo, Imputabilità.

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Psychogenic amnesia or criminal amnesia? Points of reflection from a case study

1. Premesse

Questo contributo intende avanzare qualche osservazione sul fenomeno dell'amnesia psicogena e sul suo verosimile valore epifenomenico non solo in ambito psicopatologico, ma anche criminologico, con particolare riferimento ad un certo tipo di reato. A tale scopo, dapprima, si presenta un caso peritale ritenuto esemplificativo – un furto (apparentemente) immotivato commesso da un soggetto incensurato – e, successivamente, con il supporto della letteratura sul tema, si porranno alcune riflessioni critiche.

2. Il caso

Trattasi di un soggetto di sesso maschile, quarantacinquenne all'epoca dei fatti di causa, incensurato, dirigente medico di secondo livello, coniugato, padre di una minore, rinviato a giudizio per furto. Infatti, al termine di un turno di lavoro notturno, si recava in un negozio di abbigliamento di un centro commerciale, da lui frequentato anche in precedenza; qui, dopo aver indossato un maglione ed un giaccone scelti tra altri capi, senza togliere i cartellini dei prezzi ed i dispositivi anti-taccheggio e dopo aver lasciato il cappotto con il portafogli ed i documenti all'interno del camerino di prova, si dirigeva verso l'uscita, dove veniva bloccato dal personale accortosi dell'accaduto grazie alle telecamere di sorveglianza.

Da quel momento, sino all'arrivo delle forze dell'ordine, subito allertate, non solo restava in silenzio, nonostante le numerose domande rivoltegli, ma, stando alle testimonianze dei presenti, manteneva per diverso tempo un'espressione "strana", "assente", "distaccata", con una condotta "quasi meccanica". Nel corso del fermo e dell'interrogatorio di garanzia, riprendeva a parlare e dichiarava sia di non ricordare nulla dell'accaduto, sia di non essere in grado di dare alcuna spiegazione in merito. I suoi ricordi si sarebbero interrotti al suo ingresso nel centro commerciale e sarebbero appunto ripresi durante la stesura del verbale di sommarie informazioni da lui rese nella locale caserma dei Carabinieri. Dopo il predetto interrogatorio, veniva portato a casa dal suo avvocato difensore, il quale apprendeva dalla moglie di un episodio tanto pregresso, quanto simile a quello verificatosi. Infatti, tre anni prima, egli avrebbe telefonato alla coniuge per chiederle di "andare a recuperarlo", perché, dopo un turno lavorativo notturno, si sarebbe ritrovato in una zona periferica della città senza ricordarsi né come vi fosse giunto, né perché si fosse recato in quel luogo, anziché a casa, come sempre. Nonostante ciò, egli né si sarebbe rivolto ad altri

specialisti, né avrebbe ritenuto quantomeno opportuno, se non necessario, sottoporsi a debiti controlli clinici.

L'istruttoria esitava in un rinvio a giudizio per il reato di furto, ma nel corso del dibattimento, considerando sia la palese difformità tra la sua condizione socio-economica, nonché professionale ed il costo modesto dei capi di abbigliamento, sia la sua condotta para- e post-delictum riferita da tutti i testimoni e in parte filmata dalle telecamere, sia le dichiarazioni sue e della moglie circa il suddetto precedente, il G.I.P. disponeva una perizia psichiatrica sull'imputabilità e sulla pericolosità sociale del soggetto. Ad essa, partecipavano anche il Consulente Tecnico del Pubblico Ministero e quello dell'Avvocato Difensore.

In tale sede, sebbene la raccolta anamnestica remota e prossima risultassero negative per qualsivoglia antecedente patologico, sia organico, che psichico, almeno fino all'episodio riferito dalla moglie e confermato dal periziando, nella sua complessiva storia di vita si ravvisavano aspetti di formalismo, meticolosità, serialità, stencità, scrupolosità, con spiccata autostima, ridotta empatia ed introversione. Segnatamente: figlio unico di una coppia di medici (padre, primario ospedaliero; madre, ricercatrice universitaria); scolarità non solo regolare, ma conseguita sempre con il massimo dei voti (maturità scientifica, laurea, specializzazione, dottorato di ricerca, diverse esperienze lavorative all'estero); dedizione pressoché prioritaria alla carriera professionale (dirigente di I livello un anno dopo il dottorato; dirigente di II livello dopo otto anni); nessuna storia affettiva significativa fino alla conoscenza di una collega di lavoro cinque anni prima dei fatti di causa; matrimonio dopo un anno di fidanzamento; paternità a due anni dal matrimonio.

Negli ultimi due anni, inoltre, si rilevava un notevole distress in ambito lavorativo (per carenza di personale, turni di dodici ore per sei giorni a settimana, con sei notti al mese in media).

All'esame psichico e personologico, si riscontrava una struttura di personalità con un funzionamento di tipo anancastico-narcisistico.

La valutazione psicodiagnostica (basata su: Personality Assessment Inventory, Reattivo di realizzazione grafica di Wartegg e Dissociative Experience Scale) concludeva per: "... presenza di sintomatologia ansiosa con prevalenza di manifestazioni somatiche reattiva ad un elevato livello di stress in un quadro personologico caratterizzato da marcata rigidità mentale ed interpersonale, da ipercontrollo, da inibizione dell'espressione delle emozioni e scarso contatto con le proprie istanze interiori, nonché da eccessiva attivazione dei meccanismi difensivi".

Una TC cerebrale (senza mezzo di contrasto) ed un EEG (standard) non evidenziavano reperti di valenza patologica.

Il Perito del G.I.P., dopo aver escluso l'esistenza sia di disturbi di ordine neurologico, sia di altre condizioni psicopatologiche (come la cleptomania, quale disturbo del controllo degli impulsi, o come una personalità antisociale), sia di "una simulazione comunque cosciente e volontaria di un disturbo della sfera di memoria" da parte del reo, formulava diagnosi di "passaggio all'atto in corso di amnesia dissociativa in personalità anancastico-narcisistica"; alla stessa riconosceva il valore di infermità mentale perché "...l'episodio amnesico (assumeva)...il significato dell'avvenuta alterazione dello stato di coscienza", durante la quale il soggetto "... non aveva un adeguato contatto con la realtà" e "...non possedeva un sufficiente autocontrollo"; così da integrare un vizio totale di mente. Inoltre, la probabilità di recidiva era ritenuta "...assai ridotta, ascrivendosi sino a prova contraria la suddetta condotta ad intenso distress vissuto nel contesto professionale".

3. Richiami psicopatologici

Si richiamano preliminarmente le conoscenze cliniche sull'amnesia psicogena perché ritenute propedeutiche a tutte le osservazioni tecniche formulate nella valutazione del caso presentato.

Dal punto di vista storico, si rammenta che furono Jean-Martin Charcot e Pierre Janet a formulare le prime teorie scientifiche sulla dissociazione, perché all'epoca i disturbi dissociativi iniziavano ad essere studiati in modo dettagliato, anche se dopo il 1890 ricevettero scarsa attenzione per quasi ottanta anni, fino a quando vennero progressivamente ripresi negli anni Novanta del XX secolo (Granacher, 2014), con il puntuale approfondimento del rapporto fra trauma e dissociazione (Bromberg, 2007). Infatti, è ormai scientificamente accertato come un evento traumatico provochi un'attivazione neurologica che supera la capacità di adattamento emotivo e cognitivo arrivando a causare "dissociazione della coscienza, amnesia, ottundimento emotivo, iperreattività agli stimoli e possibile riattivazione dell'esperienza traumatica" (Lingiardi & Gazzillo, 2014, p. 110); oppure "incapacità di ricordare aspetti importanti dell'evento (amnesia dissociativa)" (DSM 5, 2014, pp.3014-3015); tant'è che, nel DSM-5 (2014), il capitolo dei "Disturbi dissociativi" è contiguo a quello a dei "Disturbi correlati ad eventi traumatici e stressanti"; quasi a sottolineare la stretta correlazione tra queste due tipologie di disturbi. I primi, infatti, si manifestano frequentemente dopo esperienze traumatiche e molti dei sintomi, tra i quali l'imbarazzo e la confusione, o il desiderio di nascondersi, sono influenzati dalla prossimità cronologica al trauma; inoltre, secondo i criteri diagnostici del DSM-5, l'amnesia dissociativa consiste in un disturbo che presenta, come manifestazione principale, uno o più episodi di incapacità a ricordare dati personali importanti, di solito di natura traumatica, o stressogena, incapacità che risulta troppo estesa per potersi spiegare con la banale tendenza a dimenticare (Criterio A); i sintomi causano disagio clini-

camente significativo oppure menomazione nel funzionamento sociale, lavorativo, o in altre aree importanti (Criterio B) e non si presentano esclusivamente nel corso di un disturbo dissociativo dell'identità, disturbo post-traumatico da stress, disturbo acuto da stress, o disturbo di somatizzazione (Criterio D), e non sono dovuti all'effetto fisiologico diretto di una sostanza (per es. abuso di droga, o di un medicinale), oppure a una condizione medica generale o neurologica (per es. disturbo amnesico dovuto a trauma cranico) (Criterio C).

Gli individui con amnesia dissociativa spesso sono inconsapevoli, o solo parzialmente consapevoli, dei loro problemi di memoria; non a caso, peculiare di questo tipo d'amnesia è l'incapacità di ricordare importanti informazioni autobiografiche, che dovrebbero essere conservate correttamente in memoria e che, in condizioni fisiologiche, sarebbero prontamente ricordate. A differenza delle amnesie permanenti, però, in questo caso la memoria ha correttamente immagazzinato le informazioni, per cui l'amnesia è sempre potenzialmente reversibile.

Secondo letteratura (Van Der Hart & Nijenhuis, 2001), è possibile riconoscere diverse forme di amnesia dissociativa:

- *amnesia localizzata*: consiste nell'incapacità a rievocare eventi durante un periodo di tempo circoscritto, di solito le prime ore successive ad un evento gravemente stressogeno (ad es., il sopravvissuto ad un incidente nel quale è rimasto ucciso qualcuno a lui molto vicino non riesce a ricordare quanto è accaduto al momento dell'evento);
- *amnesia selettiva*: in tal caso, si ha la possibilità di ricordare alcuni eventi accaduti durante un periodo di tempo circoscritto, ma non tutti (ad es., un reduce di guerra può rammentare soltanto alcune esperienze di combattimento);
- *amnesia generalizzata*: trattasi della perdita di memoria completa e ad esordio acuto della propria storia di vita; al punto da dimenticare l'identità personale, o da non poter più utilizzare competenze precedenti e ben apprese;
- *amnesia sistematizzata*: è costituita dalla privazione dei ricordi per una specifica categoria di informazioni (ad es. sull'infanzia, o su persone note);
- *amnesia continua*: è data dall'impossibilità di rammentare gli eventi da un certo momento in poi della vita.

La fuga dissociativa è considerata una sub-manifestazione dell'amnesia dissociativa ed è descritta come un allontanamento inaspettato da casa, o dall'abituale posto di lavoro, con incapacità di ricordare il proprio passato, confusione circa l'identità personale, oppure assunzione di una nuova identità, parziale o completa. Può variare da spostamenti di breve durata (ore o giorni), a vagabondaggi prolungati (settimane o mesi), fino ai casi nei quali il soggetto attraversa i confini di diversi stati senza rendersene conto. Durante la fuga, appare esteriormente esente da disturbi psichici e non attira l'attenzione, ma, ritornato allo

stato antecedente, può non aver alcun ricordo di quanto successo nel periodo in questione.

Precedenti comuni sono esperienze traumatiche singole o ripetute (ad es., maltrattamenti in tempo di guerra, o nel periodo dell'infanzia, oppure un disastro naturale, o un genocidio), anche se l'insorgenza dell'amnesia può essere ritardata di ore, giorni, o anche più a lungo.

L'esordio dell'amnesia generalizzata è solitamente improvviso, mentre si hanno meno informazioni circa l'insorgenza dell'amnesia localizzata e delle amnesie selettive, perché sono raramente evidenti, anche per il soggetto. Gli individui possono segnalare diversi episodi di amnesia dissociativa ed un singolo episodio può predisporre ad episodi futuri. Alcuni di essi si risolvono rapidamente (ad es., quando la persona si allontana dalla fonte di distress), mentre altri persistono per periodi di tempo maggiori.

L'amnesia dissociativa è stata osservata in bambini, adolescenti e adulti ed è più probabile che si verifichi in presenza di esperienze infantili di traumi fisici e/o psicologici e/o sessuali; o di rapporti interpersonali violenti e reiterati; o di eventi comunque psicolesivi, di intensità e frequenza ancora maggiori (come i disastri naturali).

La rimozione dalle circostanze traumatiche all'origine dell'amnesia dissociativa può favorire un rapido ritorno della memoria, anche se la *restituito* può rivelarsi molto più difficile dopo una fuga dissociativa.

Fattispecie diversa risulta l'amnesia globale transitoria (AGT), consistente in una perdita improvvisa e temporanea della memoria. L'AGT è caratterizzata dalla brusca insorgenza di un episodio di amnesia anterograda e retrograda, la durata del quale varia generalmente tra le quattro e le otto ore; in ogni caso, l'episodio dovrebbe risolversi completamente e spontaneamente entro e non oltre le ventiquattro ore (Galimi, 2012). Infatti, una diversa durata dovrebbe far propendere per un disturbo di differente natura; in particolare, per un evento di natura vascolare, nel caso di una lacuna mnemonica superiore alle ventiquattro ore; oppure per un episodio epilettico, in caso di amnesia inferiore ad un'ora (Galimi 2012).

L'AGT interessa principalmente il sistema della memoria episodica, provocando un'estesa lacuna anterograda, alla quale se ne associa una significativa di tipo retrogrado (Eustache et al., 1999; Quinette et al., 2003). Tuttavia, appaiono preservate le altre componenti della sfera mnemonica (memoria a breve termine, semantica, procedurale o implicita), le funzioni cognitive (il linguaggio, l'attenzione, le abilità visuo-spaziali e prassiche), le funzioni motorie, sensitive e riflesse (Bartsch & Deuschl, 2010; Galimi, 2012); il che permette ai soggetti di svolgere attività anche molto complesse durante l'episodio amnesico (Zeman & Hodges, 1997). Nel corso di esso, sovente, le persone – pur mantenendo integra la loro identità – risultano disorientate nello spazio e nel tempo, con conseguente necessità di formulare ripetutamente domande sul luogo nel quale si trovano, o sull'accaduto (Galimi, 2012).

Inoltre, in aggiunta al disturbo della sfera di memoria, si osserva un'evidente alterazione dello stato emotivo, con agitazione, o angoscia (Galimi, 2012). Con la risoluzione

dell'episodio, si assiste ad una graduale scomparsa di tali manifestazioni, ad eccezione dei ricordi degli eventi capitati durante il medesimo, ricordi perciò definitivamente persi (Evans & Lewis, 2005; Galimi, 2012).

Questo tipo di amnesia è quasi sempre benigna ed il tasso di recidiva è molto basso (Miller et al., 1987; Galimi, 2012). Ad esserne colpiti sono generalmente pazienti di età compresa tra i 50 e gli 80 anni, per cui è raro osservare l'AGT in soggetti di età inferiore ai 40 anni e superiore agli 80 (Quinette et al., 2006). Secondo letteratura (Caplan, 1985; Hodges & Warlow, 1990), la diagnosi di AGT può essere formulata se risultano soddisfatti i seguenti criteri diagnostici: presenza di amnesia anterograda testimoniata da un osservatore; assenza di obnubilamento dello stato di coscienza, o di perdita dell'identità personale; compromissione cognitiva limitata all'amnesia; nessun segno neurologico di tipo focale; assenza di storia recente di trauma cranico, o di crisi epilettiche; risoluzione dei sintomi entro ventiquattro ore; eventuale presenza di lievi sintomi vegetativi (cefalea, nausea, vertigini) durante la fase acuta.

La diagnosi differenziale si pone con le seguenti condizioni (Galimi, 2012): infezione cerebrale; crisi parziale complessa prolungata, o stato epilettico non convulsivo (con amnesia, arresto del linguaggio ed alterazione dello stato di coscienza); amnesia epilettica transitoria (con episodi amnesici ripetuti e di durata non superiore a sessanta minuti); trauma cranico contusivo, o commotivo (segni di concussione ed amnesia retrograda); amnesia psicogena (pazienti giovani, con prevalente amnesia retrograda); ictus cerebri coinvolgente l'ippocampo e il talamo (sonnolenza, sintomi neurologici focali); intossicazioni e/o assunzione di farmaci (con amnesia, sonnolenza, positività dello screening tossicologico).

L'eziopatogenesi dell'AGT non è stata ancora del tutto chiarita, anche se si concorda nell'attribuire il disturbo ad un'alterazione della regione medio-basale del lobo temporale, della regione para-ippocampale e dell'ippocampo, quali aree cruciali per la formazione di ricordi episodici e per il loro recupero (Baron et al., 1994; Strupp, 1998; Bartsch et al., 2006; Galimi, 2012). Tra i possibili fattori di rischio si annoverano: emicrania, ipossia e/o ischemia cerebrali, episodi convulsivi ed anche fattori psicologici (Galimi, 2012). La maggior parte degli episodi di AGT sembra verificarsi spontaneamente, ma in certi casi sono stati indicati, quali fattori precipitanti: immersione improvvisa in acqua fredda o calda, sforzo fisico, stress emotivo, dolore, procedure mediche, rapporti sessuali, manovra di Valsalva (Caplan, 1985; Quinette, 2006; Galimi, 2012). Inoltre, è stata segnalata l'associazione tra AGT ed eventi che implicano un marcato distress, come alterazioni nell'omeostasi fisica dell'organismo, o sovraccarico lavorativo (Hodges & Warlow, 1990; Merriam et al., 1992; Berlitz, 2000; Kessler, 2001), soprattutto in individui con preesistente fragilità; fino a sostenere che, in molti casi, sarebbe proprio un evento produttivo di tensione emotiva e/o fisica ad accelerare l'insorgenza di AGT (Griebe, Bänzner, Kablau, Hennerici & Szabo, 2015). In-

fine, è stato osservato (Pantoni et al., 2005) come l'episodio di AGT sia spesso preceduto da eventi ad intenso contenuto emotivo, o da stati ansiosi ed è stato altresì notato che il 50% dei pazienti con AGT presentava tratti fobici di personalità; dati questi che si ricollegano alla segnalata presenza di altri disturbi psichici, come sintomi depressivi e/o attacchi di panico (Neri, 1995; Inzitari, 1997; Quinette, 2006).

4. Richiami criminologici

Anche in ambito criminologico, è stato preso in considerazione il ruolo dell'amnesia psicogena nella commissione di alcuni delitti (Kopelman, 1987). Questa, infatti, è stata descritta non solo nei casi di omicidio, in percentuali che variano tra il 25% e il 45%, ma anche in altri tipi di crimini violenti e, occasionalmente, anche in reati non violenti. Generalmente insorge durante stati dissociativi, di eccitazione emotiva e di intossicazione alcolica, ma può derivare anche da deficit nei processi mnesici di codifica e di recupero delle informazioni ed è associata frequentemente a tratti isterici, ipocondriaci e depressivi di personalità (Parwatikar, Holcomb & Meninger, 1985).

Inoltre, riprendendo la distinzione tra amnesia psicogena (derivante da eventi traumatici / stressanti e da stati depressivi) e amnesia organica (derivante da abuso di alcool / sostanze, trauma cranico, ipoglicemia ed epilessia) discussa in letteratura (Whitty et al., 1977; Shacter, 1986a; Kopelman, 1986), è stato dato un ulteriore contributo alla diagnosi differenziale tra quella simulata e quella autentica dopo un reato (Kopelman, 1987), già oggetto di precedenti studi (Price & Terhune, 1919; Lennox, 1943; Power, 1977; Shacter, 1986a). La distinzione tra queste due fattispecie, sotto il profilo clinico, sarebbe possibile esaminando sia il momento di insorgenza della lacuna mnesica (un esordio improvviso potrebbe indicare una franca simulazione), sia la natura del reato (un'amnesia autentica si verificherebbe più probabilmente nel contesto di un evidente disturbo psichiatrico, di un reato non pianificato e in presenza di testimoni), sia la personalità del soggetto (da valutarsi anche alla luce della coerenza delle sue dichiarazioni nel tempo). In tale prospettiva, è stato sottolineato che proprio le caratteristiche cliniche dell'amnesia correlata al crimine potrebbero garantire una maggior comprensione dei diversi disturbi mnesici oggetto di valutazione forense (Bourget & Whitehurst, 2007); al punto che lo sviluppo di un eventuale profilo degli aspetti tipici dell'amnesia delittuosa potrebbe anche definire delle linee guida per la valutazione di tali situazioni (Bourget & Whitehurst, 2007). In quest'ottica, se la diagnosi di amnesia su base organica non pone particolari problemi, quella di un'amnesia dissociativa para/post-delittuosa pone necessariamente il problema del "guadagno secondario", per cui l'eventuale simulazione della perdita di memoria dovrebbe sempre essere presa in considerazione; infatti, se il riconoscimento di un'amnesia dissociativa non dovrebbe basarsi soltanto sulla semplice

esclusione di una matrice organica, quello di una fattispecie simulatoria dovrebbe essere sostenuta o esclusa su una base esplicita (Giger, Merten & Merckelbach, 2012).

Sul tema precipuo, sono state anche utilizzate diverse tecniche strumentali (Lennox, 1943; Adatto, 1949; Bradford & Smith, 1979; Lynch & Bradford, 1980), come la poligrafia e l'ipnosi, ma le conclusioni sono risultate di dubbia validità. Se, del resto, la memoria non è un dominio cognitivo unitario, dal punto di vista tanto clinico, quanto neuro-biologico (Wortzel & Arciniegas, 2008), anziché ricorrere alle predette metodiche, è stata sostenuta l'opportunità di approfondire preliminarmente il dato biochimico ed anatomo-funzionale del substrato cerebrale, laddove si debba valutare non solo la plausibilità biologica di un disturbo mnesico, ma anche la verosimile rilevanza forense del medesimo (Wortzel & Arciniegas, 2008), dal momento che un'amnesia dichiarata dopo un reato dall'autore dello stesso dovrebbe essere sempre trattata con sospetto e scetticismo in assenza di una comprovata disfunzione ippocampale al momento del crimine (Centor, 1982; Jelacic, 2018).

Secondo un approccio di tipo sperimentale, è stato altresì affermato che i simulatori tendono ad amplificare il loro ruolo e ad ottenere prestazioni scarse nei compiti di memoria di riconoscimento (Brandt, Rubinsky & Lassen, 1985), nelle risposte agli item più semplici delle *Matrici Progressive di Raven* ed alla "prova di recupero" della *Gudjonsson Suggestibility Scale* (Gudjonsson & Shakleton, 1986; Smith & Gudjonsson, 1986). In tale prospettiva, è stato proposto il seguente percorso diagnostico-differenziale (Jelacic, 2018): dopo aver escluso alterazioni organiche a livello ippocampale, è necessario concentrarsi sulle caratteristiche cliniche dell'amnesia, perché possono fornire importanti informazioni sull'autenticità della perdita di memoria segnalata dall'autore del reato, anche se non possono considerarsi come completamente esaustive; infatti, il delinquente potrebbe sempre possedere una certa conoscenza dei deficit mnesici, per cui non è ancora possibile escludere in assoluto la possibilità di una certa finzione. Ne deriva l'esigenza di ricorrere anche a strumenti di tipo psicodiagnostico, quali: T.O.M.M. (Test of Memory Malingering, Tombaugh, 1996), S.I.M.S. (Structured Inventory of Malingered Symptomatology, Smith & Burger, 1997) e S.V.T. (Symptom Validity Testing, Frederick, Carter & Powel 1995; Denney, 1996; Pankratz, 1997). Pertanto, solamente in presenza di molteplici e convergenti elementi probatori di una palese produzione fittizia del disturbo – a loro volta raccolti secondo una metodologia articolata su più livelli (Giger, Merten & Merckelbach, 2012; Jelacic, 2018) – l'amnesia correlata al crimine dovrebbe considerarsi non autentica (Peters, Van Oorsouw, Jelacic, Merckelbach, 2013; Jelacic, 2018),

D'altra parte, è importante rammentare che le prove sull'autenticità / inautenticità del fenomeno amnesico ancora oggi risultano dibattute e non sempre univoche, poiché potrebbe non sussistere una netta distinzione tra *malingering* consapevole e volontaria – da un lato – e rimozione inconsapevole ed involontaria – dall'altro – (Jen-

kins, Kapur & Kopelman, 2009); infatti, la differenza tra le due fattispecie potrebbe riguardare più il “grado”, che il “tipo” di disturbo, essendovi anche la possibilità, vuoi in soggetti amnesici, vuoi in quelli non amnesici, di sviluppare una sorta di “freddezza emotiva” verso il reato commesso, che ne motiverebbe l’asserita mancanza di ricordi (O’ Connell, 1960).

5. Considerazioni conclusive

Premesso che, da un punto di vista narratologico – sempre più diffuso in Criminologia Clinica (Barbieri, 2015, 2016, 2017; Barbieri & Roncaroli, 2008; Barbieri & Verde, 2007, 2014; Barbieri, Bandini & Verde, 2015; Francia, 2010; Francia, Verde & Birkhoff, 1999; Verde, Angelini, Boverini & Majorana, 2006; Verde & Barbieri, 2010) – quello presentato risulta un caso, per così dire, di “produzione muta”, perché l’imputato, a causa dell’alterazione del suo stato di coscienza, non può costruire alcun racconto né su di sé, né sul fatto del quale resta comunque artefice, è corretto domandarsi se proprio tale “silenzio” non sia un elemento estremamente importante in un’ottica non solo clinica, ma anche forense; in altri termini, sembra fondamentale chiedersi se proprio l’impossibilità di accedere a e di rievocare ricordi, sensazioni ed emozioni alla fine rappresenti il contenuto di una trama narrativa che il consulente tecnico deve ricostruire, specialmente laddove sia chiamato a pronunciarsi sull’imputabilità di un tale autore di reato.

In questa prospettiva, atteso che la valutazione clinica e forense dei disturbi della memoria non sembra né scontata, né agevole, nella misura in cui implica una complessa diagnostica di tipo differenziale (De Fidio & Grattagliano, 2007; Martino et al., 2016; Cassano & Grattagliano, 2019; Grattagliano et al., 2019; Grattagliano et al., 2020; Bosco et al., 2020), l’iter da seguire è il seguente: innanzitutto, è necessario stabilire se le dichiarate lacune mnestiche siano il risultato di condotte tanto difensive, quanto distorsive, volte all’amplificazione, o alla rappresentazione fraudolenta di un disturbo, oppure di vere e proprie forme neuro-psico-patologiche; successivamente, si deve dimostrare “perché” e “come” tali forme integrino il concetto/costrutto di infermità; infine, si deve esaminare “se” e “fino a che punto” questa incida sulle capacità espressamente previste dalla legge penale, come illustrato in altri contributi (Barbieri, 2011; Barbieri & Grattagliano, 2021 a, b).

Nella presente fattispecie, una volta escluse vuoi la riproduzione fittizia di un disturbo della sfera della memoria con finalità tanto simulatorie, quanto deresponsabilizzanti, vuoi le plausibili cause di tipo neurologico e tossicologico del medesimo, l’osservazione clinica, la raccolta anamnestica, la disamina degli atti di causa (testimonianze, deposizioni, filmati, etc.) e la valutazione psicodiagnostica hanno evidenziato: sia l’assetto obiettivamente difettuale della personalità del Periziando (perché di tipo narcisistico-anancastico), sia le sue disfunzionali modalità di inte-

razione e di adattamento (poiché basate essenzialmente su meccanismi di coazione a ripetere uno stenico autocontrollo, una costante inibizione emotiva ed un ridotto contatto sia con le proprie, che con le altrui istanze interiori), sia il suo comportamento para- e post-delittuoso, non solo per nulla pianificato, ma palesemente disorganizzato (non togliere i cartellini dei prezzi ed i dispositivi anti-taccheggio; abbandonare il cappotto con il portafogli ed i documenti all’interno del camerino di prova; non prestare minimamente attenzione alle telecamere, nonostante i cartelli indicatori della video-sorveglianza in atto; avere per circa quattro ore un atteggiamento distaccato ed un’espressione assente).

In tal caso, l’analisi del rapporto tra la patologica struttura di personalità e gli altrettanto deficitari meccanismi difensivi della stessa, tanto più maladattivi, quanto più verosimilmente sollecitati dall’intenso distress dell’ambiente lavorativo, ha comprovato come quella tipologia di lacuna mnastica – cioè quel “silenzio” dal punto di vista narrativo in quel peculiare contesto storico-spazio-temporale – divenga epifenomenica – cioè espressiva e dimostrativa – di un’alterazione dello stato di coscienza; alterazione che diventa giuridicamente rilevante nella misura in cui integra una vera e propria perdita della “consueta continuità della conformità al senso comune”, cioè della c.d. *Sinnngesetzlichkeit* del *Dasein* (Schneider, 1953; Müller-Suur, 1956; De Vincentiis & Semerari, 1968; Semerari & Citterio, 1975; Semerari, 1981). In altri termini, pare proprio che sia l’“assenza” e non la “presenza” della parola a comunicare la mancanza di ogni contatto con la realtà a causa del blackout dello stato di coscienza.

Sul punto, del resto, giova richiamare la Dottrina psicopatologica (De Vincentiis, Callieri & Castellani, 1972), laddove insegna che “L’esperienza del tempo [...] è [...] una modalità dell’essere psichico e del divenire psicologico. Tutto quanto emerge nel campo della coscienza si rivela già dotato di una sua imprescindibile connotazione temporale. Ove si abbia a discutere di esperienza, viene tenuto presente implicitamente lo sviluppo temporale dal quale questa è emersa come sua particolare puntualizzazione. Nell’amnesia, l’oblio si mostra specificamente in rapporto con la sede che l’esperienza rievocata occupa nel tempo soggettivo e personale; fatto, che si traduce poi nell’impossibilità di effettuare i riferimenti obbiettivi di questo tempo storico. Si sarebbe tentati di credere ad una mancanza della nozione di continuità nel tempo, quasi che le esperienze e le impressioni personali perdano la possibilità di essere «classificate» [...] Onde, deriva la nota constatazione che l’esperienza della durata, il sentimento e la cognizione di essa, fanno totalmente difetto od almeno risultano profondamente turbati.” (p. 175); al punto da considerare come accertata “...l’eventualità che il disturbo della nozione e dell’esperienza temporali divenga sufficiente da solo a rendere ragione degli aspetti clinici della sindrome amnesica”, dal momento che “Qualora il concetto di coscienza venga dotato anche di una curvatura temporale, i disturbi mnastici potranno essere compresi fra le alterazioni della coscienza «riflettente» e

cioè di quell'ambito coscienziale che fuoriesce dall'immediatamente vissuto per ordinarlo e seriarlo, o per accoglierlo nella sua continuità storico-significativa in ordine all'esperire precedente ed all'anticipato" (p. 175); ecco perché, se è vero che "La memoria unitamente alla capacità psichica di esperire l'io e il tempo è una delle fondamentali proprietà dell'esperienza vissuta" (p.167), allora la "sindrome amnestica", nelle sue diversificate articolazioni cliniche, "riconosce alla propria origine la radicale impossibilità antropologica di declinarsi nel parametro del ricordo" (p.175) e l'atto delittuoso compiuto in quelle peculiari condizioni acquisisce "valore di malattia" giacché "...la capacità di rievocare e di riattualizzare l'io e pertanto il ricordo non costituisce più un avvenimento personalizzante e dinamizzante la progettazione del futuro, ma permane quale tessera isolata di un mosaico, senza un contesto che la sostenga e che la ordini, ovvero senza una rete di riferimento idonea a conferirle valore consequenziale" (p.175); con tutte le conseguenze del caso anche dal punto di vista vuoi medico-valutativo, vuoi giudiziario.

Prescindere da tale impostazione equivale a rinunciare alla possibilità di cogliere il senso, il significato e la cifra del passaggio, "con" o (apparentemente) "senza" le parole, dal "fatto" all' "uomo" (Callieri & Barbieri, 2007; Barbieri, 2013), quale vincolo ineludibile del "sapere" e del "saper fare" in Criminologia Clinica ed in Psicopatologia Forense.

Riferimenti bibliografici

- Adatto, C. P. (1949). Observations on criminal patients during narcoanalysis. *Archives of Neurology and Psychiatry*, 62, 82-92.
- American Psychiatric Association. (2014). *Manuale Diagnostico e Statistico dei Disturbi Mentali, Quinta Edizione, DSM 5*. Milano: Raffaello Cortina.
- Barbieri, C. (2011). Le neuroimaging in ambito medico-penalistico. In M. G. Ruberto & C. Barbieri (Eds.), *Il futuro tra noi. Aspetti etici, giuridici e medico-legali della neuroetica* (pp. 15-31). Milano: Franco Angeli.
- Barbieri, C. (2013). Dal fatto all'uomo: la comprensione di senso nella metodologia valutativa dell'imputabilità. *Rassegna Italiana di Criminologia*, 1, 6-16.
- Barbieri, C. (2015). Vissuti di reato e stato di coscienza: esercizi di narratologia criminologica con Maupassant. *Rassegna Italiana di Criminologia*, 1, 21-28.
- Barbieri, C. (2016). I discorsi criminologici nel c.d. delitto di Cogne. *Rassegna Italiana di Criminologia*, 4, 230-246.
- Barbieri, C. (2017). Una verosimile chiave di lettura del c.d. reato d'impeto: la causalità come "gnommero". *Rassegna Italiana di Criminologia*, 2, 84-91.
- Barbieri, C., & Grattagliano, I. (2021 a), Su di un singolare caso di c.d. legittima difesa. *Rassegna Italiana di Criminologia*, 1, 74-82.
- Barbieri, C., & Grattagliano, I. (2021 b), Su di un singolare caso di tentato matricidio. *Rassegna Italiana di Criminologia*, 2, 145-155.
- Barbieri, C. & Roncaroli, P. (2008). Da Verona a Mayerling: alcune riflessioni psicopatologiche, criminologiche e medico-legali sul fenomeno dell'omicidio-suicidio partendo da alcuni casi storico-artistici, *Rassegna Italiana di Criminologia*, 2, 247-371.
- Barbieri, C. & Verde, A. (2007). L'approccio ermeneutico nelle consulenze tecniche in ambito familiare. *Rassegna Italiana di Criminologia*, 1, 208-233.
- Barbieri, C. & Verde, A. (2014). Trauma e vittimizzazione lungo le generazioni: alcune riflessioni in margine a un caso peritale. *Rassegna Italiana di Criminologia*, 1, 30-38.
- Barbieri, C., Bandini, T. & Verde, A. (2015). "Non si sa come", ovvero il passaggio all'atto come corto circuito della narrazione. *Rassegna Italiana di Criminologia*, 4, 259-268.
- Baron, J. C., Petit-Taboué, M. C., Le Doze, F., Desgrandes, B., Ravenel, N., & Marchal, G. (1994). Right frontal cortex hypometabolism in transient global amnesia. A PET study. *Brain*, 117, 545-552.
- Bartsch, T., Alfke, K., Stingle, R., et al. (2006). Selective affection of hippocampal CA-1 neurons in patients with transient global amnesia without long-term sequelae. *Brain*, 129, 2874-2884.
- Bartsch, T., & Deuschl, G. (2010). Transient global amnesia: functional anatomy and clinical implications. *The Lancet Neurology*, 9 (2), 205-214.
- Berlit, P. (2000). Successful prophylaxis of recurrent transient global amnesia with metoprolol. *Neurology*, 55, 1937-1938.
- Bosco, A., Massaro, Y., Lisi, A., et al. (2020). La rilevazione della dissimulazione nelle procedure di arruolamento e selezione militari: un nuovo indice del test MMPI 2. *Rassegna Italiana di Criminologia*, 2, 99-109.
- Bourget, D., & Whitehurst, L. (2007). Amnesia and Crime. *Journal of the American Academy of Psychiatry and the Law*, 35, 469-480.
- Bradford, J., & Smith, S. M. (1979). Amnesia and homicide: the Padola case and a study of thirty cases. *Bulletin of the American Academy of Psychiatry and the Law*, 7, 219-231.
- Brandt, J., Rubinsky, E., & Lassen, G. (1985). Uncovering malingered amnesia. *Annals of New York Academy of Sciences*, 444, 502-503.
- Bromberg, Ph. M. (2007). *Clinica del trauma e della dissociazione. Standing in the spaces*. Milano: Raffaello Cortina.
- Callieri, B., & Barbieri, C. (2007). Dalla psicopatologia-clinica alla psicopatologia-forense: la comprensione di senso come transito da una dimensione fenomenologico-esistenziale ad una dimensione normativa. *Psichiatria Generale e dell'Età Evolutiva*, 3-4, 109-132.
- Caplan, L. (1985). Transient global amnesia. In P. J. Vinken, G. W. Bruyn & H. L. Klawans (Eds.), *Handbook of Clinical Neurology* (pp. 205-218). Amsterdam: Elsevier.
- Cassano, A., & Grattagliano, I. (2019). Lying in the medicolegal field: Malingering and psychodiagnostic assessment. *La Clinica Terapeutica*, 2, 134-141.
- Centor, A. (1982). Criminals and amnesia: comment on Bower. *American Psychologist*, 37, 240, doi: 10.1037/0003-066X.37.2.240.
- De Fidio, D., & Grattagliano, I. (2007). Correlazione tra il MMPI-2 e il Rorschach: un'analisi possibile ?. *Giornale Italiano di Psicopatologia*, 13, 162-170.
- De Vincentiis, G., & Semerari, A. (1968). *Psicopatologia e norma giuridica. Saggi interpretativi*. Novara: PEM.
- De Vincentiis, G., Callieri, B., & Castellani, A. (1972). *Trattato di psicopatologia e psichiatria forense. Volume Primo*. Roma: Il Pensiero Scientifico.
- Denney, R. L. (1996). Symptom validity testing of remote memory in a criminal forensic setting. *Archives of Clinical Neuropsychology*, 11, 589-603.
- Eustache, F., Desgranges, B., Laville, P., et al. (1999). Episodic

- memory in transient global amnesia: encoding, storage, or retrieval deficit?. *Journal of Neurology, Neurosurgery and Psychiatry*, 66, 148-154.
- Evans, R. W., & Lewis, S. L. (2005). Transient global amnesia and migraine. *Headache*, 45, 1408-1410.
- Francia, A. (2010). *Il delitto raccontato. Una lettura criminologica delle novelle di Guy de Maupassant*. Milano: Franco Angeli.
- Francia, A., Verde, A. & Birkhoff, J. (Eds.). (1999). *Raccontare delitti*. Milano: Franco Angeli.
- Frederick, R. I., Carter, M., & Powel, J. (1995). Adapting symptom validity testing to evaluate suspicious complaints of amnesia in medicolegal evaluations. *The Bulletin of the American Academy of Psychiatry and the Law*, 23, 227-233.
- Galimi, R. (2012). Amnesia globale transitoria. *Journal of Psychopathology*, 18, 251-260.
- Giger, P., Merten, T., & Merckelbach, H. (2010). Detection of feigned crime-related amnesia: a multi-method approach. *Journal of Forensic Psychology Research and Practice*, 10, 440-463.
- Giger, P., Merten, T., & Merckelbach, H. (2012). Tatbezogene Amnesien - authentisch oder vorgetäuscht?. *Fortschritte der Neurologie-Psychiatrie*, 80, 368-381.
- Granacher, R. P. (2014). Commentary: Dissociative Amnesia and the Future of Forensic Psychiatric Assessment. *Journal of the American Academy of Psychiatry and the Law*, 42, 214-218.
- Grattagliano, I., Abbrescia, D., Di Conza, A., et al. (2020). La valutazione del livello e delle qualità intellettive a livello peritale. Il contributo di due strumenti psicodiagnostici: le scale Wechsler e le matrici di Raven. *Rassegna Italiana di Criminologia*, 2, 147-155.
- Grattagliano, I., Zizolfi, S., Zizolfi, D., Valerio, A., Zecca, S., & Catanesi, R. (2019). Il Test di Rorschach nelle valutazioni sulla capacità di intendere e volere negli autori di omicidio. *Rassegna Italiana di Criminologia*, 13, 65-74.
- Griebe, M., Bätzner, H., Kablau, M., Hennerici, M. G., & Szabo, K. (2015). Transient global amnesia in legal proceedings. *International Journal of Legal Medicine*, 129, 223-226.
- Gudjonsson, G. H., & Shackleton, H. (1986). The pattern of scores on Raven's Matrices during "faking bad" and "hon-faking" performance. *British Journal of Clinical Psychology*, 25, 35-41.
- Haghir, H., Kovac, S., Speckmann, E. J., et al. (2009). Patterns of neurotransmitter receptor distributions following cortical spreading depression. *Neuroscience*, 163, 1340-1352.
- Hodges, J. R., & Warlow, C. P. (1990). Syndromes of transient amnesia: towards a classification. A study of 153 cases. *Journal of Neurology, Neurosurgery and Psychiatry*, 53, 834-843.
- Howland, J. G., & Wang, Y. L. (2008). Synaptic plasticity in learning and memory: stress effects in the hippocampus. *Prog Brain Res*, 169, 145-158.
- Inzitari, D., Pantoni, L., Lamassa, M., Pallanti, S., Pracucci, G., & Marini, P. (1997). Emotional arousal and phobia in transient global amnesia. *Archives of neurology*, 7, 866-873.
- Jelicic, M. (2018). Testing Claims of Crime-Related Amnesia. *Frontiers in Psychiatry*, 9, doi: 10.3389/fpsy.2018.00617.
- Jenkins, K. G., Kapur, N., & Kopelman, M. D. (2009). Retrograde amnesia and malingering. *Current Opinion in Neurology*, 22, 601-605.
- Joels, M. (2009). Stress, the hippocampus, and epilepsy. *Epilepsia*, 4, 586-597.
- Kessler, J., Markowitsch, H. J., Rudolf, J., et al. (2001). Continuing cognitive impairment after isolated transient global amnesia. *International Journal of Neuroscience*, 106, 159-168.
- Kopelman, M. D. (1986). Clinical tests of memory. *British Journal of Psychiatry*, 148, 517-525.
- Kopelman, M. D. (1987). Crime and amnesia: A review. *Behavioral Sciences & the Law*, 3, 323-342.
- Lennox, W. G. (1943). Amnesia, real and feigned. *American Journal of Psychiatry*, 99, 732-743.
- Lingiardi, V., & Gazzillo, F. (2014). *La personalità ed i suoi disturbi*. Milano: Raffaello Cortina.
- Lynch, B. E., & Bradford, J. M. W. (1980). Amnesia-its detection by psychophysiological measures. *Bulletin of the American Academy of Psychiatry and the Law*, 8, 288-297.
- Martino, V., Grattagliano, I., Bosco, A., et al. (2016). A New Index for the MMPI-2 Test for Detecting Dissimulation in Forensic Evaluations: A Pilot Study. *Journal of Forensic Sciences*, 1, 249-253.
- Merriam, A. E., Wyszynski, B., & Betzler, T. (1992). Emotional arousal induced transient global amnesia. A clue to the neural transcription of emotion?. *Psychosomatics*, 33, 109-113.
- Miller, J. W., Petersen, R. C., Metter, E. J., Millikan, C. H., & Yanagira, T. (1987). Transient global amnesia: clinical characteristics and prognosis. *Neurology*, 37, 733-737.
- Müller-Suur, H. (1956). Zur Frage der strafrechtlichen Beurteilung von Neurosen. *European Archives of Psychiatry and Clinical Neuroscience*, 4, 368-382.
- Neri, M., Andermarcher, E., De Vreese, L. P., Rubichi, S., Sacchet, C., & Cipolli, C. (1995). Transient Global Amnesia: memory and metamemory. *Aging*, 7, 423-429.
- O'Connell, B. A. (1960). Amnesia and homicide. *British Journal of Delinquency*, 10, 262-276.
- Pankratz, L. (1997). Symptom validity testing and symptom retraining: procedures for the assessment and treatment of functional sensory deficits. *Journal of Consulting and Clinical Psychology*, 47, 409-410.
- Pantoni, L., Bertini, E., Lamassa, M., Pracucci, G., & Inzitari, D. (2005). Clinical features, risk factors, and prognosis in transient global amnesia: a follow-up study. *European journal of neurology: the official journal of the European Federation of Neurological Societies*, 5, 350-356.
- Parwatikar, S. D., Holcomb, W. R., & Meninger, K. A. (1985). The detection of malingered amnesia in accused murderers. *Bulletin of the American Academy of Psychiatry and Law*, 13, 97-103.
- Peters, M. J. V., Van Oorsouw, K., Jelicic, M., & Merckelbach, H. (2013). Let's use those tests! Evaluations of crime-related amnesia claims. *Memory*, 21, 599-607.
- Power, D. J. (1977). Memory, identification and crime. *Medicine, Science and the Law*, 17, 132-137.
- Price, G. E., & Terhune, W. B. (1919). Feigned amnesia as a defense reaction. *Journal of the American Medical Association*, 72, 565-567.
- Quinette, P., Guillery, B., Desgranges, B., et al. (2003). Transient global amnesia: working memory and acquisition processes in episodic memory. *Brain*, 126, 1917-1934.
- Quinette, P., Guillery-Girard, B., Dayan, J., et al. (2006) What does transient global amnesia really mean? Review of the literature and thorough study of 142 cases. *Brain*, 129, 1640-1658.
- Schacter, D. L. (1986 a). On the relation between genuine and simulated amnesia. *Behavioral Sciences and the Law*, 4, 47-64.
- Schneider, K. (1953). Klinische Gedanken über die Sinnes-zlichkeit. *Meinschrift für Psychiatrie und Neurologie*, 125, 666-670.

- Semerari, A. (Ed.). (1981). *Manuale di psicopatologia forense*. Roma: Antonio Delfino.
- Semerari, A., & Citterio, C. (1975). *Medicina Criminologica e Psichiatria Forense*. Milano: Vallardi – SEL.
- Smith, K., & Gudjonsson, G. H. (1986). Investigation of the response of “fakers” and “non-fakers” on the Gudjonsson Suggestibility Scale. *Medicine, Science and the Law*, 26, 66-71.
- Smith, G. P., & Burger, G. K. (1997). Detection of malingering: validation of the Structured Inventory of Malingered Symptomatology (SIMS). *Journal of the American Academy of Psychiatry and the Law*, 25, 180-189.
- Strupp, M., Bruning, R., Wu, R. H., Deimling, M., Reiser, M., & Brandt, T. (1998). Diffusion-weighted MRI in transient global amnesia: elevated signal intensity in the left mesial temporal lobe in 7 of 10 patients. *Annals of Neurology*, 43, 164-170.
- Tombaugh, T. (1996). *Test of Memory Malingered (TOMM)*. New York, NY: Multi-Health Systems.
- Van Der Hart, O., & Nijenhuis, E. (2001). Generalized dissociative amnesia: episodic, semantic and procedural memories lost and Found. *Australian and New Zealand Journal of Psychiatry*, 35, 589-600.
- Verde, A., Angelini, F., Boverini, S. & Majorana, M. (2006). *Il delitto non sa scrivere. La perizia psichiatrica tra realtà e fiction*. Roma: DeriveApprodi.
- Verde, A. & Barbieri, C. (Eds.). (2010). *Narrative del male: Dalla fiction alla vita, dalla vita alla fiction*. Milano: Franco Angeli.
- Whitty, C., Stores, G., & Lishman, W. A. (1977). Amnesia in cerebral disease. In C. W. M. Whitty & O. L. Zangweill (Eds.), *Amnesia (2nd Ed.)* (pp. 52-92). London & Boston: Butterworths.
- Zeman, A., & Hodges, J. (1997). Transient global amnesia. *British journal of hospital medicine*, 6, 257-260.