

Protocols for Psychological Assessment of Recidivism and Dangerousness: a systematic review of the Brazilian scientific production

Protocolos de Avaliação Psicológica de Reincidência e Periculosidade: uma revisão sistemática da produção científica brasileira

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Abstract

The psychological assessment of recidivism and dangerousness aims to provide subsidies to legal operators on the possibility of an individual to repeat criminal offenses. In the present study, a systematic review of Portuguese-language articles was carried out in the "SciELO", "Lilacs" and "Periódicos Capes" databases to identify available instruments to carry out this assessment in Brazilian populations and their predictive capacity. It was found that the Brazilian scientific production is too scarce, only nine empirical studies have been published on the subject and only one instrument with this objective is suitable for use in forensic practice. Six other instruments have been studied, but none are suitable for practical implementation. These results point to the need for scientific production on psychological assessment of recidivism and dangerousness to provide psychologists with the necessary instruments for their performance in Legal Psychology.

Keywords: Criminal psychology; Forensic psychology; Psychological assessment; Recidivism.

Resumo

A avaliação psicológica de reincidência e periculosidade tem por objetivo fornecer subsídios aos operadores do Direito sobre a possibilidade de um indivíduo reincidir. No presente trabalho foi realizada uma revisão sistemática de artigos em português nas bases de dados "SciELO", "Lilacs" e "Periódicos Capes" para identificar instrumentos disponíveis

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para realizar esta avaliação em populações brasileiras e qual a sua capacidade preditiva. Descobriu-se que a produção científica brasileira é demasiado escassa, apenas nove trabalhos empíricos foram publicados no tema e somente um instrumento com este objetivo está apto para uso na prática profissional. Seis outros instrumentos foram estudados, mas nenhum está apto para utilização na prática. Estes resultados apontam a necessidade de produção científica sobre avaliação psicológica de reincidência e periculosidade para munir psicólogos com os instrumentos necessários para sua atuação nesta área da Psicologia Jurídica.

Palavras-chave: Avaliação psicológica; Psicologia criminal; Psicologia forense; Reincidência.

The advent of the expansion of Psychology follows the growth of the demands for psychological services in the various segments of society, as in the legal area, for example (Serafim et al., 2015). This growth is also associated with the development of systematic methods for assessing the psychological consequences caused by traumatic events, the impact of mental disorders, as well as the increasing mapping of affective and cognitive processes of people with antisocial behaviors (Serafim et al., 2015). This scope includes the psychological assessment that is defined by the *Conselho Federal de Psicologia* (CFP, Federal Council of Psychology), through Resolution nº 9 of April 25, 2018 in Art. 1, " [...] as a structured process of investigation of psychological phenomena, composed of methods, techniques, and instruments, with the objective of providing information to decision making, at the individual, group, or institutional levels, based on specific demands, conditions and purposes " (CFP, 2018, online).

Psychological assessment can be used in different contexts, for example, in the clinical area for diagnosis, directing psychotherapeutic care and interventions in the organizational area, to assist in the selection of candidates, and in the legal area, to assist legal operators in their decision making (Dourado & Silva, 2016). According to Serafim and Saffi (2019), legal psychological assessment is configured in the mental health expertise modality, which consists of the process of psychological understanding of a given case, whose objective is to answer a legal question expressed by the judge or by another agent (legal or third party). This assessment must be based on the questions prepared by the requesting agent, and the expert psychologist must deeply investigate the mental functioning of the individual submitted to the examination (the person undergoing the expert assessment).

In another context, the Psychological Assessment of Recidivism and Dangerousness (PARD) has also been used as a subtype of expert psychological assessment (Jung, 2014). In this scope, the objective is to identify the risk of criminal recidivism and possible strategies to reduce such risk. For this, two groups of factors are analyzed: risk and protection (Brown & Singh, 2014). Risk factors refer to variables that increase the likelihood of recidivism, such as the use of psychoactive substances or personality disorders. While protection measures favor the reduction of recidivism, such as family support or financial stability, both factors can be of a static nature, that is, historical and unalterable (criminal record, educational level, health problems, among others), as well as of a dynamic nature, that is, modifiable (family support, use of substances, unemployment, among others). When performing a PARD, the psychologist will use strategies such as interviews, tests, inventories, and scales to identify the risk of criminal recidivism and suggest methods for its prevention (Brown & Singh, 2014).

Due to this course of action, the PARD is directly linked to Criminal Law, in the phase of imprisonment, dealing with the processes of downgrading sentences or hospital discharge in cases of security measures, people considered not-imputable according to the article 26 of the Brazilian penal code, individuals who are admitted to Custody and Psychiatric Treatment Hospitals (Jung, 2014; Serafim & Saffi, 2019). The role of the psychologist in these cases is, through a PARD, to assist legal practitioners with pieces of information that go beyond their area of expertise. Information is provided on the risk of criminal recidivism, what factors are influencing this risk, and strategies that should be used to facilitate resocialization and prevent criminal recidivism (Brown & Singh, 2014). According to the literature, three specific ways to perform PARDs prevail:

Unstructured Clinical Trial (UCT), Actuarial Assessment, and Structured Professional Assessment (SPA) (Brown & Singh, 2014).

The Unstructured Clinical Trial (UCT) contemplates a subjective assessment process that does not use any structured instruments. It is based on the experiences and clinical knowledge of the assessor who seeks, usually through the exclusive use of interviews with the individual being assessed, to identify the probability and factors related to recidivism (Brown & Singh, 2014). The main advantage of this approach is its flexibility, since the assessor can consider any factors that he or she considers relevant to the individual case, following a more idiographic and individualized approach to each case. As for the Actuarial Assessment method, it follows a strict statistical approach through standardized instruments with a list of risk and/or protective factors, which can be of dynamic and/or historical nature (Mossman, 2015; Rettenberger et al., 2017). The Structured Professional Assessment (SPA) method, on the other hand, can be considered as a combination of the actuarial method with the UCT, as this procedure seeks to reinsert the professional's opinion, experience and subjectivity, without neglecting the necessary structure to maintain good levels of inter-assessor accuracy and reliability (De Bortoli et al., 2017). Thus, the SPA method uses instruments seeking to assess risk and/or protective factors, of a dynamic and/or historical nature that are related to criminal recidivism.

Bearing in mind that the predictive power of PARDs has already been evidenced in scientific research (Singh et al., 2011), the importance of their implementation becomes clearer when taking into account the cost of crime and the recidivism rate. It is estimated that about BRL 280 billion a year is spent due to crime, equivalent to about 1.3% of the Brazilian GDP (Secretaria Especial de Assuntos Estratégicos, 2018). In addition to these expenditures, the few studies on criminal recidivism in Brazil to date point to a percentage between 30.7% and 51.4% when analyzed at the state level, while the only nationwide data available point to a rate of 70.0% (Sapori et al., 2016).

Based on the above, looking for ways to expand risk assessment methods, as in the case of crime, is a relevant theme in psychology through the use of PARDs. In addition, in view of the lack of specific instruments for this procedure, professionals are led to adapt clinical instruments for forensic use, which is not always appropriate (Jung, 2014).

Therefore, in view of the need to provide forensic psychologists with specific instruments for their area, this article aims to identify, through a systematic review, which actuarial and SPA instruments are available for use by PARD psychologists. Three questions guided the objectives of this study: (1) Which tests are validated and able to be used by psychologists in PARDs? (2) In which population have these tests been validated to provide an empirical basis for use in their professional activity? (3) What is the predictive capacity for recidivism and dangerousness?

Method

Systematic review protocol

The search was carried out in three databases that are references for scientific research in Brazil: SciELO, Lilacs, and *Periódicos Capes*. The following Portuguese-language descriptors were used, in order to achieve the broad objectives of the search to identify all PARD instruments validated for use in Brazil: "*Avaliação Psicológica Judicial*" (Judicial Psychological Assessment), "*Avaliação Psicológica Forense*" (Forensic Psychological Assessment), "*Avaliação Neuropsicológica e Forense*" (Neuropsychological and Forensic Assessment), "*Avaliação Neuropsicológica e Judicial*" (Neuropsychological and Judicial Assessment), "*Perícia Psicológica*" (Psychological Expert Assessment), "*Perícia Psicológica Judicial*" (Legal Psychological Expert Assessment), "*Laudo Psicológico*" (Psychological Appraisal Report), "*Exame Criminológico e Psicologia*"

(Criminological and Psychological Assessment), "*Risco de Reincidência*" (Risk of Recidivism). Other descriptors were also used to identify Brazilian studies on specific PARD instruments. For this purpose, the study of Singh et al. (2011) was used, which points out the nine PARD instruments most commonly searched worldwide. From that, this study's searches were performed using descriptors with the title of these instruments in English and their respective abbreviation: "Level of Service Inventory - Revised", "LSI-R", "Psychopathy Checklist - Revised", "PCL-R", "Sex Offender Risk Appraisal Guide", "SORAG", "Sexual Violence Risk - 20", "SVR-20", "Spousal Assault Risk Assessment", "SARA", "Static-99", "Structured Assessment of Violence Risk in Youth", "SAVRY", "Violence Risk Appraisal Guide", "VRAG", "Historical, Clinical, Risk Management - 20", "HCR-20".

Inclusion and exclusion criteria

In order to have access to all publications in the area, no time cut was made. The researchers of this study assessed that there would not be a high volume of publications in view of the results regarding the lack of PARD instruments found in Brazilian studies. Only Portuguese-language, fully available studies were included in the final analysis of this research. In the databases that provided the option to filter by language, this tool was used to display only Portuguese-language texts. This criterion was included to make sure that all studies assessed in this systematic review would be accessible to all Brazilians, regardless of their fluency in a second language, access to restricted information, or the need to pay for access.

Studies that did not use a Brazilian sample in their analysis were excluded, such as Portuguese-language articles on the validation of instruments in other Portuguese-speaking countries, such as Portugal and Angola. This criterion was used, since the validation of psychometric instruments, including those aimed at assessing recidivism, must go through not only a translation to the target language, but also to the typical characteristics of the population and culture in which it will be applied (Cunha et al., 2016; Shepherd & Lewis-Fernandez, 2016). Finally, studies that had not followed an empirical methodology, such as reviews, literature reviews, among others, were excluded. On the other hand, studies from the so-called "gray literature" were included, publications that did not undergo blind peer review in scientific journals, such as master's and doctoral theses, presentations at congresses and conferences, government reports, etc.

Selection process

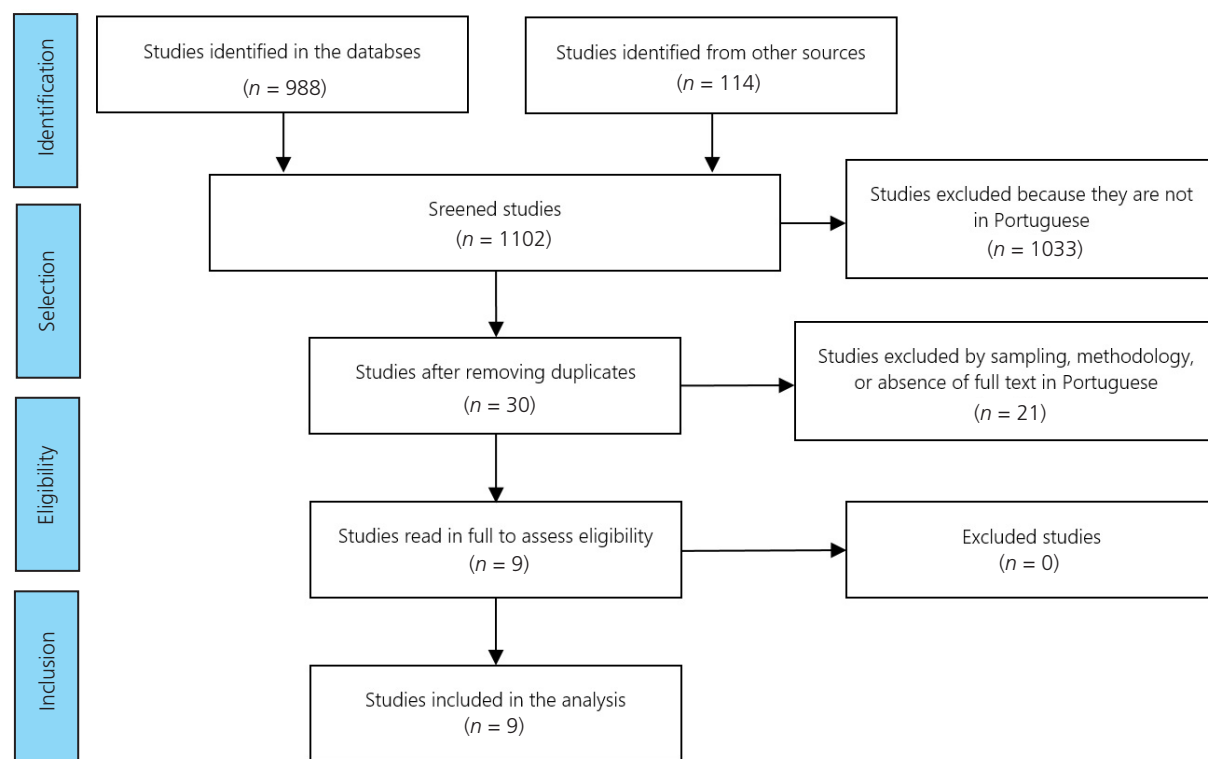
According to this research protocol, a total of 1 102 studies were initially identified, of which 114 are part of the gray literature. After the initial assessment of the title and language of the available texts, 1033 of these studies were excluded. Of the remaining 69, 39 were excluded because they were duplicates present in more than one database or repeated documents in the same database. The abstracts of the remaining 30 papers were assessed, resulting in the exclusion of 21 of them for not meeting the inclusion criteria. Lastly, the final sample is composed of 9 studies that were read in full and which met all the criteria (Figure 1).

Results

Following all the criteria for carrying out this review, only nine studies met the inclusion criteria for the analysis of Brazilian publications on the validation, standardization, and use of psychological instruments for PARDs. When analyzing their publication sources, it was evidenced that each one was published in a different journal, with no tendency, even if minimal, to focus the topic on a specific dissemination platform according to the presentation of the results.

Figure 1

Flowchart of the systematic review



1) Which tests are validated and suitable for use by psychologists in PARDs?

Seven different PARD instruments were identified as the object of research among the nine studies under analysis (Table 1).

Among the instruments expressed in Table 1, only the Psychopathy Checklist – Revised (PCL-R) and the Interpersonal Measure of Psychopathy (IM-P) were the object of research in more than one study, which means that there is only one study on the use of each of the remaining instruments.

Table 1

List of studies identified in the systematic alphabetical review of the instrument under study

Author/year	Instrument	Journal
Oliveira et al. (2016)	HCR-20	<i>Revista Latinoamericana de Psicopatologia Fundamental</i>
Ronchetti et al. (2010)	PCL:YV	<i>Revista Interamericana de Psicologia</i>
Davoglio et al. (2011)	IM-P	<i>Trends in Psychiatry and Psychotherapy</i>
Salvador-Silva et al. (2012)	IM-P and PCL-R	<i>Avaliação Psicológica</i>
Morana (2004)	PCL-R	<i>Tese de Doutorado, Universidade de São Paulo</i>
Schmitt et al. (2006)	PCL-R	<i>Revista de Psiquiatria Clínica</i>
Gouveia et al. (2009)	CAD	<i>Psicologia: Reflexão e Crítica</i>
Fonseca et al. (2019)	SVR-20	<i>Gerais Revista Interinstitucional de Psicologia</i>
Maruschi et al. (2012)	YLS/CMI	<i>Estudos de Psicologia (Campinas)</i>

Note: CAD: *Questionário de Comportamentos Anti-sociais e Delitivos* (Antisocial and Criminal Behavior Questionnaire); HCR-20: Historical, Clinical, Risk Management – 20; IM-P: Interpersonal Measure of Psychopathy; PCL-R: Psychopathy Checklist – Revised; PCL:YV: Hare’s Psychopathy Checklist: Youth Version; SVR-20: Sexual Violence Risk – 20; YLS/CMI: Youth Level of Service/Case Management Inventory.

It is also noteworthy that, among all the instruments presented here, only the PCL-R is included in the *Sistema de Avaliação de Testes Psicológicos* (SATEPSI, Psychological Test Assessment System) online platform. This platform is the source of information used by the CFP to disclose which tests are suitable for use by psychologists and which are still in the assessment process *Conselho Federal de Psicologia* (CFP, Federal Council of Psychology), through Resolution nº 9 of April 25, 2018 (CFP, 2018). The PCL-R is assessed on this platform as a favorable test, which allows its use by psychologists for psychological assessments and subsequent reports. However, this fact highlights the other instruments, as this indicates not only that they are not available for use by the psychologist at this time, but that they have not yet been submitted to the assessment of the CFP to enter the list of instruments with a favorable opinion.

2) In which population have these tests been validated to provide an empirical basis for their use in psychological activities?

Bearing in mind the necessity to understand in which populations a psychological instrument has already been tested and validated, the characteristics of the sample in which each instrument was studied are presented below, as well as the objective of each study (Table 2).

Table 2

Samples used to validate the Psychological Assessment of Recidivism and Dangerousness instruments

Author/year	Instrument	Population	Objective
Oliveira et al. (2016)	HCR-20	A 60-year-old man serving time for murder	A case study on the Verification of Cessation of Dangerousness Assessment and mental health
Ronchetti et al. (2010)	PCL:YV	Twenty adolescents serving socio-educational measures	To validate the PCL:YV in a Brazilian sample
Davoglio et al. (2011)	IM-P	Twenty adolescents serving socio-educational measures	To validate the IM-P in a Brazilian sample
Salvador-Silva et al. (2012)	IM-P and PCL-R	Twenty-three men between 20 and 56 years old, serving time in closed conditions or in pre-trial detention	To verify the relationship between psychopathy and the manifestation of interpersonal behaviors
Morana (2004)	PCL-R	Fifty-six men between 16 and 51 years old, serving time in closed conditions or socio-educational measures	To identify the cutoff point of the PCL-R for a sample of the Brazilian forensic population to and identify the subjects who could be considered psychopaths and those considered non-psychopaths
Schmitt et al. (2006)	PCL-R	Forty-eight adolescents, between 16 and 18 years old, in serving socio-educational measures	To assess psychopathy, criminal recidivism, and history of abuse among adolescents who committed crimes against life compared to other adolescent offenders
Gouveia et al. (2009)	CAD	A total of 1943 students of elementary, middle, and higher education. Between 10 and 36 years old and 59.9% of them being females	To verify the factorial validity and the internal consistency of the CAD and to test a reduced version of this instrument
Fonseca et al. (2019)	SVR-20	A man, 49 years old, served time for intra-family sexual violence	An exploratory study to assess the risk of recidivism using an actuarial instrument in conjunction with a psychological interview
Maruschi et al. (2012)	YLS/CMI	Forty offending adolescents, men, between 12 and 17 years old	An exploratory study of the YLS/CMI and its ability to predict the recidivism of adolescent offenders

Note: CAD: *Questionário de Comportamentos Antissociais e Delitivos*; HCR-20: Historical, Clinical, Risk Management – 20; IM-P: Interpersonal Measure of Psychopathy; PCL:YV: Hare's Psychopathy Checklist: Youth Version; PCL-R: Psychopathy Checklist – Revised; SVR-20: Sexual Violence Risk – 20; YLS/CMI: Youth Level of Service/Case Management Inventory.

We will initially consider the PCL-R because it has had favorable feedback by psychologists, with the standardization studies being finished on 12/2/2020 and with a regulated extension to 12/31/2021 according to CFP Resolution no 09/2020. Among the three identified studies that used the PCL-R, one of them is related to the validation of this instrument for application in Brazil (Morana, 2004). Another study sought to identify the degree of recidivism by assessing 48 adolescents serving a socio-educational measure (Schmitt et al., 2006), while the third used the PCL-R as a comparative measure for the validation of a second instrument with 23 participants (Salvador-Silva et al., 2012). Thus, the sum of all Brazilian empirical studies using the PCL-R consists of a total of 127 individuals, of which only 104 had their risk of recidivism assessed. In addition, all individuals were male and were carrying out some socio-educational measure, in the case of adolescents, or in closed conditions, in the case of adults. With these data, it is clear that the population in which the PCL-R can be reliably applied is composed of: male individuals, in prison conditions, between 16 and 51 years old.

Although the other instruments have not yet been approved to be used in psychological activities, it is important to assess how studies have been conducted, so that we can build an overview of how this area has been developing in Brazil. For this, the type of population and sampling used, as well as the method of translation and validation of the instrument for the research, were analyzed. The study using the Historical, Clinical, Risk Management – 20 (HCR-20), for example, assessed only one individual case, describing an examination conducted for the Cessation of Dangerousness Assessment in the context of the Brazilian Penal Code which, in its essence, dates back to 1940 (Oliveira et al., 2016). The authors carried out an exploratory study using this instrument, which has versions in English, addressing its validation in Brazil (Telles et al., 2009). The study with the PCL:YV, on the other hand, portrays a preliminary study with 20 adolescents fulfilling a socio-educational measure. When using rigid and structured methods of translation and back-translation of the instrument, the authors can validate its reliability, emphasizing that it should be used in research only (Ronchetti et al., 2010).

One of the IM-P studies follows the same proposal as the PCL:YV one. The authors use a sample of 20 adolescents under supervised freedom, they measure and follow a rigid and structured method of translation and back-translation. However, despite having verified the instrument's reliability, it is suitable for research use only (Davoglio et al., 2011). The second study using the IM-P aimed to assess psychometric abilities and psychopathy disorder in comparison with the results obtained through the PCL-R. The results indicated significant correlation rates between the two instruments, suggesting that the IM-P can be used as an auxiliary tool in the diagnosis of psychopathy among incarcerated men (Salvador-Silva et al., 2012).

The *Questionário de Comportamentos Antissociais e Delitivos* (CAD, Antisocial and Criminal Behavior Questionnaire) is another instrument that is not present in the SATEPSI, but the authors carried out a detailed study to affirm that it is “[...] appropriate for use in studies involving the assessment of antisocial and criminal behaviors among adolescents and young adults” (Gouveia et al., 2009, p. 22). Thus, the instrument is validated in the Brazilian reality with almost 2000 school-level participants, but it is suitable for research use only. In the case of the SVR-20, the research was conducted with only one case, through documentary assessment. The instrument applied was the Portuguese-language version, translated from the original for application in Portugal (Fonseca et al., 2019). Finally, the study on the Youth Level of Service/Case Management Inventory (YLS/CMI) was the first study in the country using this instrument. For this reason, the authors prepared interview scripts according to the instrument manual, but they did not provide examples of this script so that the reader could better understand the instrument. Despite this, the research was conducted with a considerable sample of 40 adolescents who attended the forum for informal inquiry by the Brazilian Public Ministry (Maruschi et al., 2012).

3) What is the predictive capacity for recidivism and dangerousness?

The PCL-R, as already reported, presents two surveys assessing its ability to predict criminal recidivism. In her validation survey, Morana (2004) identified that 39.39% of individuals with Global Personality Disorder (psychopaths) repeated their criminal offenses, while only 8.69% of those with Partial Personality Disorder (common criminals, non-psychopaths) repeated offenses. In the research by Schmitt et al. (2006), adolescents with Global Personality Disorder committed offenses again in 70.40% of cases, compared with 23.80% of non-psychopaths. These data on recidivism refer to documentary information already present during the research. In other words, it was assessed whether psychopaths were repeat offenders in the past, but longitudinal, prognostic or prevention research has not been conducted. Thus, it is known that psychopaths do repeat offenses more than non-psychopaths, but there is no information on how long it took until recidivism, what type of crime was committed, or what measures were implemented to prevent recidivism.

Among all the other instruments under analysis, only the survey using the YLS/CMI sought to identify its degree of predicted recidivism. The authors collected data on new infractions at six months and one year after the initial assessment. The sample was divided according to the risk of recidivism of the instrument: very high, high, moderate, and low. All individuals assessed as high risk committed criminal offenses again, while all assessed as low risk did not commit crimes again during this period. The area under the curve, the most commonly used statistical method to assess the reliability of a PARD instrument (Singh et al., 2011), was significant (area = 80.8%, $p = 0.002$). This indicates that the instrument was able to identify high-risk adolescents (sensitivity), while excluding those who were not at risk of recidivism (specificity).

Discussion

The present research was aimed at carrying out a survey of publications referring to instruments used to conduct Psychological Assessments of Recidivism and Dangerousness (PARD). In this study, it was sought to identify the instruments validated and approved by the CFP for use by psychologists in their professional activities. In addition, the degree of precision of these instruments in predicting recidivism and in which populations they can be used to obtain reliable results was investigated.

As a first finding, it is necessary to point out the absence of journals in Brazil focused exclusively on the area of forensic psychology. Even so, it was evidenced that the nine studies analyzed had their publications in nine different journals. This indicates that there are journals dedicated to this area, but that there is still no journal or group of journals that specifically deal with this topic and concentrate scientific publications. The verification of this reality goes hand in hand with the identification of the reduced number of PARD-related publications in the Brazilian reality. At first, this limits the possibility of expanding knowledge production and, consequently, the opportunity to subsidize professionals in the area regarding more adequate knowledge regarding its applicability and limits.

When analyzing the studies identified by the literature review, it was noticed that seven PARD instruments were the subject of Portuguese-language Brazilian studies, but only one of them (PCL-R) is validated and authorized for professional use by the CFP through the SATEPSI platform, since it met all requirements for use. It is also understood that this evidence opens space to think about how broad performance possibilities are, but still in need of further study. This fact points to the lack of resources, so that professionals working in this area can carry out more effective and specific assessments. This corroborates the findings of Jung (2014), where it was evidenced that psychologists working in legal areas make use of clinical instruments for their assessments, even if they have not been validated for a forensic population.

Other authors have already addressed the problem of making use of psychological instruments that have not been developed or validated for the population under analysis. The conclusion is that the results of these assessments are not highly reliable (Cunha et al., 2016). An instrument developed and validated to measure aggressiveness in a psychotherapeutic context should not be used in other contexts, since the same rules for scores, and of application and categorization of this instrument will hardly be valid in a forensic context.

This is, as Jung (2014) portrays, due to the central differences between therapeutic and forensic psychological assessments. A clinical psychological assessment aims to guide therapeutic interventions for the patient seeking treatment. The focus in this context is assistance, where the individual under assessment and the client are usually the same people. On the other hand, a forensic psychological assessment aims to provide subsidies to assist the performance of Law enforcers. Its focus is related to the judicial demand, the individual under assessment generally did not voluntarily seek for treatment, while the client is the one who requested the psychological assessment, for example, the judge or one of the parties involved in the judicial process.

In view of these specific characteristics of psychological assessment in a forensic context, it is expected that the subjects under assessment will adopt behaviors that are different from those found in the clinical environment. Authors point to the possibility of non-cooperation on the part of the individual being assessed. They may not interact with the psychologist, try to deceive the professional, adjust their responses to what is expected, or even lie so that they increase their chances of being successful in the judicial process (Jung, 2014). These differences emphasize the need to use instruments developed specifically for forensic contexts, or that have at least been validated for this purpose. However, what was found in the present study is the lack of such instruments for PARDs.

Several reasons may be influencing the lack of tools available to psychologists for performing PARDs. Among them, it is possible to identify the confusion about the legitimacy of the psychologist's role in the specific role of PARDs, as well as the lack of academic interest. The legitimacy of the psychologist's performance was a point of debate when the CFP vetoed the "elaboration of a criminological prognosis for recidivism, the assessment of dangerousness" through resolution 012/2011 (CFP, 2011). This resolution was in force for 4 years, until the Public Prosecutor's Office intervened and revoked it in April/2015, returning psychologists the right to perform their activities within the scope of criminological examination and PARDs (Silva & Daiuto, 2018). This aspect is open to various understandings but, without a doubt, psychological assessments, specifically in the sphere of the Criminal Enforcement Court, which is governed by a 1940 code, still needs to be further investigated. The increase in the production of knowledge corroborates this perspective, as well as collaborating in the training of psychologists, ensuring that Psychological professional activity in this area is not configured as a punishment or sentence tool, but rather as clarifications respecting human dignity.

Still, based on these observations, we can see the absence of more robust knowledge production that will support the discussion, scientific production, and norms of psychological professional activity in the forensic scenario. As previously mentioned, each study was published in a different scientific journal. In addition, the lack of courses offered within the scope of this activity is also present in undergraduate courses and lines of research in *stricto sensu* graduate courses. Féres-Carneiro et al. (2010) analyzed all Psychology courses with *stricto sensu* graduate programs in Brazil. The results show that Legal Psychology is not part of the lines of research or titles of courses, being still absent when placed in comparison with the other areas of Psychology. This is contrary to the demands in Brazil, as Serafim and Saffi (2019) point out, with the increase of phenomena such as violence and the consequent crimes of social commotion, increasingly requiring the participation of psychologists to clarify the facts. Given that master's and doctoral courses are the main sources of knowledge generation and scientific production, it is not surprising that Brazilian scientific production in the area of Legal and Forensic Psychology is moving slowly and not meeting the expectations of those who need their results to give empirical support to their performance.

When analyzing the PCL-R, the only psychological instrument that presents an assessment of aspects of recidivism and is validated according to the Brazilian criteria, the need for new studies and new instruments for use in the PARD area is highlighted again. The PCL-R aims to assess the presence of psychopathic characteristics, its construction was not aimed at assessing the risk of recidivism, but as a diagnostic method (Boduszek & Debowska, 2016). However, due to the relationship between psychopathy and crime and its positive results in predicting recidivism and dangerousness, the PCL-R has been used in this role by several countries since its creation (Singh et al., 2011). However, in Brazil there are only two studies assessing the PCL-R's ability to predict recidivism. Such studies used a sample of less than 100 subjects and achieved results that indicate a probability of recidivism between 40% and 70% for those diagnosed with psychopathy. Although both studies point to a significant increase in the possibility of recidivism in the face of a positive diagnosis of psychopathy, this wide range of probability (30%) can hinder decision making by the assessor and stakeholders. As a result, more studies are needed to better understand the likelihood of recidivism among those diagnosed with psychopathy and the factors that may influence this likelihood.

The PCL-R continues to be one of the most used instruments to assess the risk of recidivism, but it presents the worst results when compared to other instruments developed for this purpose. Thus, among the PARD instruments most commonly used worldwide, the PCL-R is the least indicated, with other better quality options such as the HCR-20, the SVR-20, the Static-99, among others (Singh et al., 2011). In addition, the PCL-R, in Brazil, is validated in prison populations only with male individuals, therefore other instruments are needed that can cover other populations, such as those with severe mental illnesses, underage individuals, or other genders.

The validation of these new instruments is necessary, since the accuracy and reliability of PARD instruments are directly linked to their specificity in each case. It is important to have a wide range of PARD instruments because, to date, there is still not a single instrument that stands out from the rest, with results that are constantly better than all other ones (Brown & Singh, 2014). In addition, it is necessary to have several instruments, since each one of them is calibrated for specific situations and populations (Douglas et al., 2017). For example, an instrument developed and validated to assess sexual recidivism achieves better results than an instrument aimed at general or specific recidivism for other crimes. As an addendum to these notes, two aspects can be highlighted. One emphasizing the need to conduct further research, and the other favoring the expansion of psychological activities of interventional nature in the penitentiary system by identifying risk and protective factors.

The problem of not having other tests available for professional psychological use could have already been reduced, since six other tests, in addition to the PCL-R, have already been used in research with the Brazilian population. In addition to the fact that part of these studies already aimed at validating the construct and faithfully translating the instrument to the Brazilian reality and culture. This platform lists all psychological tests that have already been assessed, favorable or not, as well as those that are still being assessed. Despite this, at the time of writing this article, none of the other six tests were found on this platform, indicating that they had not been sent for assessment. It was not possible to ascertain the reasons why the authors chose not to send such instruments for assessment by the CFP and inclusion in the SATEPSI platform. However, by not doing so, psychologists are unable to use all the instruments at their disposal and be as effective as possible in their professional activities and services to society.

Studies on the use of psychological instruments is a relevant topic and of professional scientific interest, regardless of the psychological area. Thus, it is worth mentioning that the present study focused on strictly exploring psychological risk assessments in the forensic context, which does not represent the other possible actions of Psychology in criminal matters, an aspect that is configured as a limitation of this study.

Conclusion

Based on the international literature, it is possible to identify at least about 400 instruments developed for the psychological assessment of recidivism and dangerousness (PARD), which aim to contribute, with scientific evidence, to decisions on the severity of the sentence, the granting of benefits, the dangerousness, and the possibility of recidivism. This study used the systematic review method to find out which of these instruments are suitable for use by psychologists in Brazil, what their predictive capacity is and in what populations they can be used. The results point to a huge gap in the Brazilian scientific production regarding this area, with very few studies on the subject and only one instrument, the PCL-R, suitable for use. In addition, such an instrument was not developed for PARD purposes and needs more evidence about its predictive capacity.

Based on these results, it was noticed that the Brazilian criminal process is being deprived of an important tool, as well as, it is necessary to narrow the discussions between this area of Law and the various possibilities of Psychological professional activities, which will certainly reduce biases regarding clinical practice and expectations or the imaginary of the law enforcer.

On the other hand, the PARD presents principles that can identify risk factors and the protection of a subject, suggesting actions and strategies to manage the risk of the assessed individual, facilitating re-socialization, and preventing criminal recidivism. From its use, Law enforcers gain from evidence that supports their decision-making, the subject has benefits from actions geared specifically to their needs, and the society gains from the decreasing crime rates. That said, it is necessary a policy of incentives and incentives to conduct further studies to validate PARD instruments, including the creation of lines of research in stricto sensu programs and scientific journals focused on this area. This way, psychologists will be able to develop evidence to support their professional activity and thus fulfill their function of service to society.

Contributors

D. LINO contributed substantially to the study conception and design, systematic review of the literature, data interpretation, writing and review of the article. A. P. SERAFIM contributed substantially to the data interpretation, writing and review of the article.

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