



THE PERSONALITY ASSESSMENT INVENTORY (PAI): A SYSTEMATIC REVIEW OF ITS USE IN THE LEGAL FIELD

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Este estudio bibliométrico analiza la evidencia disponible sobre el uso del Personality Assessment Inventory (PAI, Morey, 1991) en contextos legales, tanto en muestras de personas imputadas y condenadas, como en víctimas y demandantes. Siguiendo el protocolo PRISMA-P se identificaron 131 artículos. La productividad se concentra en un número limitado de autores, instituciones, países y revistas. La mayoría de artículos emplean el PAI para analizar características de personalidad y psicopatológicas o las propiedades psicométricas del instrumento en muestras de hombres de mediana edad en prisiones de Estados Unidos y Canadá. Investigaciones con el PAI en muestras de víctimas, en mujeres y en contextos legales del mundo de habla hispana surgen como prometedoras áreas de vacancia. Su desarrollo dependerá en gran parte de la capacidad cooperativa que logren las instituciones jurídicas, penitenciarias y de seguridad con los grupos de investigación.

Palabras clave: *Inventario de evaluación de la personalidad, Evaluación psicológica forense, Contexto legal, Revisión sistemática*

This systematic review study summarizes the available evidence on the use of the Personality Assessment Inventory in legal contexts, both with samples composed of accused and convicted persons, as well as with victims and plaintiffs. Following the PRISMA-P protocol, 131 articles that met the eligibility criteria were analyzed according to the subjects and psychometric properties investigated. Productivity was concentrated in a limited number of authors, institutions, countries, and journals. Most of the articles refer to the use of the PAI to analyze general personality and psychopathological characteristics, or psychometric properties of the instrument, in samples of middle-aged men in prisons in the United States and Canada. Research studies that use the PAI in samples of victims and women, and in Spanish-speaking legal contexts, emerge from this review as promising areas for future investigation. The development of these areas depends to a large extent on the cooperative capacity that legal, correctional, and security services achieve with academic research groups.

Key words: *Personality assessment inventory, Forensic psychological assessment, Legal context, Systematic Review.*

P psychological assessment instruments play an increasingly significant role in the outcomes of legal cases (Neal et al., 2019). To establish the admissibility of psychological evidence some jurisdictions have developed criteria to guide judges in this task (Hardcastle, 2017). Examples of these include the availability of scientific evidence on the validity and reliability of the tests published through peer review, their use in cases that are relevant to the issue in question, and their acceptance by the scientific community (Daubert, *William vs. Merrell Dow Pharmaceuticals, Inc.*, 1993; Neal et al., 2019). In the generation of this evidence, compliance with the standards that guide the development and evaluation of psychological

tests (AERA, APA, & NCME, 2014) takes on special relevance. In turn, these standards, which are technical in nature, are complemented by the deontological criteria that establish as good practice the basing of forensic evaluation on updated scientific evidence (American Psychological Association, 2017).

In relation to the acceptability criterion, numerous surveys have been conducted with doctoral and accredited forensic psychologists in scientific and professional bodies in different countries to explore the psychological assessment instruments that have greater acceptance and are most used for the assessment of different variables of legal relevance (Archer et al., 2006; Borum & Grisso, 1995; Lally, 2003; Neal & Grisso, 2014). The results demonstrate that multidimensional personality inventories are considered acceptable, recommended, or essential for the assessment of different issues in legal contexts. Among the most widespread and widely used in this field are the various versions of the *Minnesota Multiphasic Personality Inventory* (e.g., Butcher et al., 1989), the *Millon Multiaxial Clinical*

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Inventory (e.g., Millon et al., 1997), and the *Personality Assessment Inventory* (Morey, 1991) (see Archer et al., 2006; Borum & Grisso, 1995; Lally, 2003). Evidence of the use and application of the first two is summarized in different review studies (Craig, 1999; Redondo et al., 2019; Zambrano Cruz, 2015).

The present study reviews the evidence for the latter. Numerous reasons justify drawing attention to this measure. First, it is a tool widely accepted in legal contexts by both professional users (Lally, 2003) and legal practitioners (Mullen & Edens, 2008). Secondly, it has been translated into languages as diverse as German (Groves & Engel, 2007), Greek (Lyraeos, 2011), Italian (Pignolo et al., 2018), and Spanish (Ortiz-Tallo et al., 2013). At the same time, the Spanish version has been adapted in Latin American countries such as Mexico (Cardenas et al., 2015), Chile (Ortiz-Tallo et al., 2015, 2017) and Argentina (Stover et al., 2015). This suggests the progressive increase in the use of this instrument in the Western world, and particularly in the Spanish-speaking regions.

Third, some advantages of the PAI in relation to other measures traditionally used for personality assessment have been described. For example, it is significantly shorter than the MMPI2, it allows greater discrimination in the responses by

having four categories versus the two of the MMPI-2, and it requires a minimum reading level of 4th grade, compared to the MMPI-2 which requires a minimum level of 6th grade (Duellman & Bowers, 2004). This last characteristic makes it preferable in populations with a low level of schooling (Edens et al., 2001). Its format is also an advantage, since it is self-report and can be administered to a large number of subjects at the same time and does not require trained interviewers for its administration (Boyle & Helmes, 2009).

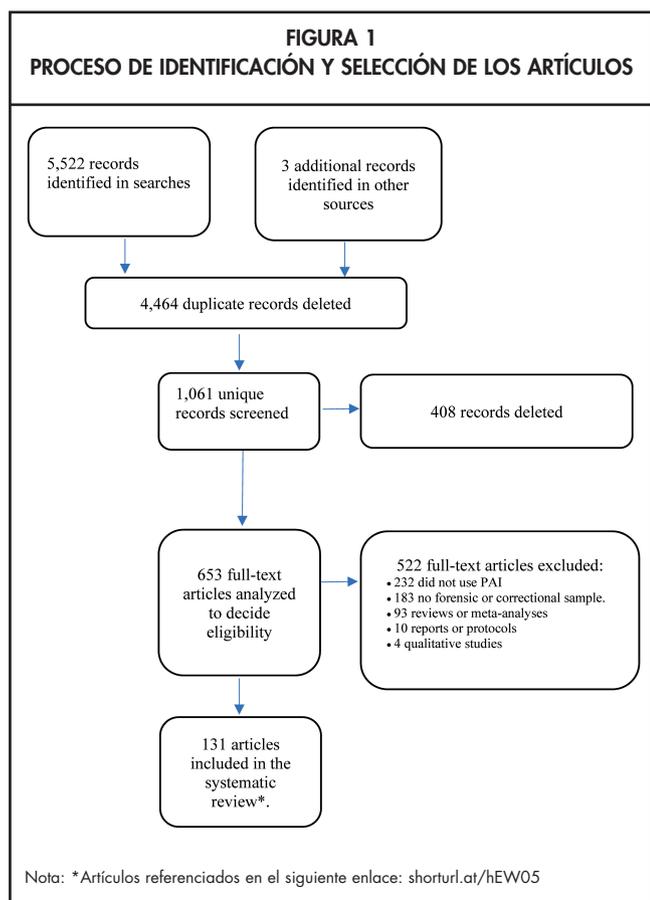
This bibliometric study aims to review and summarize the evidence available in scientific articles reporting the use of the PAI for assessment in legal contexts, in order to guide practitioners in making decisions regarding its use in samples of both accused and convicted persons, as well as victims and plaintiffs. In this study, answers to the following questions are posed: How many and which studies report data on the PAI in forensic or correctional contexts? Which authors, institutions, and countries are the most productive in this regard? Which journals have published on this topic? What topics or variables have been studied with this instrument? What psychometric properties have been tested? A systematic review makes it possible to synthesize the best available evidence to answer these types of questions (Perestelo-Pérez, 2013). These compiled answers seek to assist the professional in deciding not only which tool to use for a specific topic, but also how to use it and in which population. It can also guide judges on its admissibility as a source of evidence when the quality standards to be met by psychological tests are not clearly defined.

METHOD

Procedure

This systematic review follows the guidelines established in the *Preferred Reporting Items for Systematic reviews and Meta-Analyses* (PRISMA-P) protocol (Moher et al., 2015) and uses empirical research articles as the unit of analysis. These were located by searching in Google Scholar, EBSCO Psychology and Behavioral Science Collection, ScienceDirect, Dialnet, Redalyc, and Scielo and included the entire period up to March 4, 2020.

Figure 1 shows the complete search and article selection process. Two searches were performed, one in English using the following terms: «Personality Assessment Inventory» AND (forensic OR correction OR offender OR offender OR inmate OR aggressor OR crime OR criminal OR prisoner OR victim), and another in Spanish using the same terms and their synonyms. The unique records were downloaded in RIS format and imported into the Covidence program (2014). In the screening, we selected the articles that met the following eligibility requirements: a) empirical studies that report PAI results, b) participants were individuals of either sex going through a judicial process due to having been accused or sentenced for committing a crime or due to having been a victim of one, and c) published in Spanish, Portuguese,





Catalan, Italian, French, English, or German language. Excluded were books, book chapters, theses, bulletins, conference transcripts, non-empirical theoretical studies, and publications where the full text was not accessible. All other records were screened in a second instance by examining their full text. Three studies not previously included were identified by scanning the excluded meta-analyses. The total sample consisted of 131 studies that were analyzed in relation to bibliometric indicators and are referenced in the following link: shorturl.at/hEW05.

Data analysis

The analyses were organized according to two types of information. First, productivity was analyzed by year, author, institution, country, and journal, as well as collaboration between authors, institutions and countries, exploring the presence of invisible schools¹ and research nuclei² (Ardanuy, 2012; Price & Beaver, 1966). Secondly, the subjects or topics of interest of the studies were analyzed by dividing them into two mutually exclusive groups, the first included descriptive, quasi-experimental, and *ex post facto* studies and the second, studies on instruments (Montero & León, 2007). In the studies on instruments, it was of interest to determine which ones explored the psychometric properties of the PAI and its results, and to differentiate them from those that used the PAI in a secondary way, that is, analyzing the psychometric properties of another instrument. The analysis of the studies also considered the context of the study, which was classified in the following categories: correctional, criminal forensic, and civil forensic. A fourth category (clinical) was subsequently created to group three studies that included individuals evaluated in a subsequent clinical case independent of the judicial process.

The results are organized according to the different classical bibliometric indicators and different dimensions derived from the analysis of subjects and topics. Descriptive statistics are reported for each analysis. Some results complementary to the objectives of the work are presented as appended material in an external link.

RESULTS

Productivity

Studies that use the PAI in legal contexts began to be published in 1995. Peak productivity occurred between 2006 and 2010 (Figure 2). No articles published in the period reviewed in 2020 met the eligibility criteria.

The production of studies was unequal among the 272 authors identified. At the least productive end, 240 authors signed 1 or 2 articles, while at the most productive end, 10

authors accounted for 45% of the publications. A table with the 10 most productive authors can be found in the link to the annexed material (shorturl.at/hEW05).

A total of 125 institutions were found as affiliations of the authors. The most productive were concentrated in the southeastern United States and southwestern Canada. The University of South Florida in Tampa (USA) is the most productive, with 22 studies signed by authors affiliated with this institution. The most productive author was affiliated with five different institutions and therefore his current institution (Texas A&M) is not listed as the most productive. A table with the 10 most productive institutions can be found in the link to the attached material (shorturl.at/hEW05).

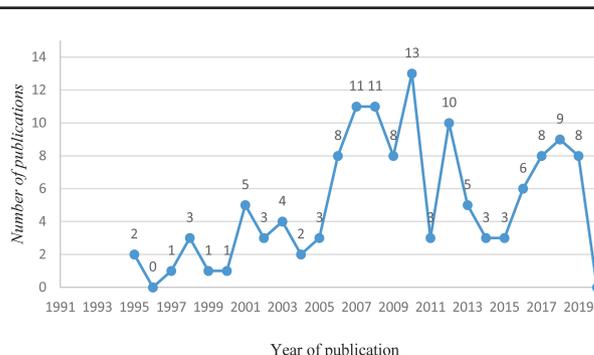
In accordance with the above, the United States accounts for 77% of the studies using the PAI in the legal context ($n= 101$), followed by Canada ($n= 25$), the United Kingdom ($n= 10$), and Spain ($n= 6$). Of the 6 studies published in Spain, 4 were conducted with samples from Latin American countries. A figure with the total number of articles by country can be found in the link to the annexed material (shorturl.at/hEW05).

The 131 articles were published in 52 different journals. Table 1 shows the 11 most productive journals, accounting for 65% of the articles.

Collaboration

All but four articles were published by more than one author. The mean number of authors per article was 3.77 ($SD= 1.76$). To deepen the analysis of collaboration, a network analysis was performed to discover the *invisible schools* and the degree of *nuclearity* of the authors. The analysis was performed on the basis of a tree diagram that makes it possible to visualize the

FIGURA 2
NÚMERO DE ARTÍCULOS PUBLICADOS POR AÑO QUE EMPLEAN EL PAI EN CONTEXTOS LEGALES.



¹ Invisible schools refer to the informal affiliation of scientists, inserted in pre-existing institutions, with common interests that are the basis of the relationships established among them.

² The nucleus is the author who brings together the other authors, participating in all or most of the collaborations of the invisible school to which he/she belongs.



relationships³ between the authors. An interactive version of the resulting graph can be found at the following link <https://onodo.org/visualizations/124989/The> 131 studies covered 910 relationships, of which 97 involved J. Edens. The other most productive authors were involved in a range of 22 to 65 relationships. The mean number of relationships for all authors was 6.69 and showed a significant dispersion ($SD=9.57$).

According to the number of relationships between the authors, 39 groups were identified, of which 27 were made up of authors who produced a single collaborative study. Among the remaining 12 groups, the one with the largest number of participants ($n = 40$) had J. Edens as its nucleus, and was the most productive invisible school, followed by the group whose nucleus was G. Walters (23 participants) and the group of S. Sinclair and D. Antonius (19 participants).

Of the 131 studies, 103 (78.62 %) were produced between two or more institutions (up to eight) which, in turn, correspond to the institutions of affiliation of the most productive authors. Among the most collaborative were the University of South Florida, Texas A&M University, and the Simon Fraser University. Among the 20 most collaborative institutions, all were university institutions except the U.S. Federal Bureau of Prisons.

Material analysis

To analyze the subjects or topics explored with the PAI, the studies were classified according to their design, in order to obtain mutually exclusive categories. The first group consisted of 46 studies with descriptive, quasi-experimental, and *ex post facto* designs that used the PAI to assess one or more variables

in three types of samples: correctional, forensic, and clinical (the participants in the latter had had contact with the legal context at some point). The variables studied can be grouped into those related to personality, psychopathology, response validity, and treatment characteristics. Table 2 classifies the studies according to whether they dealt with these variables in different samples and contexts.

Additionally, 85 studies on instruments were identified, of which 60 had the main objective of analyzing different psychometric properties of the PAI (Table 3) and 25 analyzed properties of other instruments and used the PAI as a measure of contrast. The first group are presented in Table 3 according to the psychometric indicators analyzed (validity and reliability) and the context of the study (prison and forensic). No instrument study was conducted in the clinical context. Nor were any studies found that analyzed content-based validity or validity based on the response process.

When the PAI was employed as a convergence or discrimination instrument it was most frequently used in validation studies of the *Psychopathic Personality Inventory*^{116, 111, 110, 107}, the *Psychopathy Checklist-Revised*^{107, 108} and the *Psychological Inventory of Criminal Thinking Styles*^{129, 130}. It was also used in single studies for the validation of 16 other instruments of a very diverse nature^{109, 112, 113, 114, 115, 117, 118, 119, 120, 121, 122, 124, 125, 126, 127, 128, 131}.

Characteristics of the samples

In the 131 studies identified, 166 samples were evaluated, mostly in correctional settings ($n=113$), followed by forensic ($n= 49$ forensic) and clinical ($n= 4$) samples. Since most studies were conducted with single samples ($n= 110, 84%$), reference is made below to the number of studies (not the number of samples). Most studies recruited samples at the local or institutional ($n= 92$) or regional ($n= 37$) level. Only one employed a national level sample¹⁰² with participants from the United States, and another¹³ an international sample with participants from Canada, the United States, and Sweden. The countries of origin of the samples corresponded with the most productive countries, as the most frequent samples were from the United States ($n= 99$ studies), Canada ($n= 11$ studies), and the United Kingdom ($n= 9$ studies). Of the 131 studies, only five had Latin American samples, specifically from Ecuador^{4, 9, 52} and the Dominican Republic^{5, 6}. Two other studies were conducted with the same sample from Spain^{85, 86}.

Sample sizes ranged from 8 to 15,546 participants. Since 4 studies had fewer than 28 participants and 2 had more than 2,000 participants, and in order to control for the effect of outliers, the summary measures presented below do not take these samples into account. The mean number of participants in the studies was 360.60 ($SD= 437.46$), somewhat lower in

**TABLE 1
PRODUCTIVITY OF JOURNALS ACCORDING TO
THE NUMBER OF ARTICLES PUBLISHED**

| Journals | k | % ^a |
|---|----|----------------|
| Assessment | 14 | 10.69 |
| Psychological assessment | 14 | 10.69 |
| Journal of Personality Assessment | 13 | 7.63 |
| Criminal Justice and Behavior | 8 | 6.11 |
| Behavioral Sciences & the Law | 6 | 4.58 |
| Journal of Forensic Psychiatry & Psychology | 5 | 3.82 |
| Journal of Personality Disorders | 5 | 3.82 |
| Journal of Abnormal Psychology | 5 | 3.82 |
| Law and Human Behavior | 5 | 3.82 |
| Criminal Behavior and Mental Health | 4 | 3.05 |
| International Journal of Forensic Mental Health | 4 | 3.05 |

Note: ^aThe percentage was calculated with respect to the total number of articles ($n = 131$)

³A «relationship» is considered to be a bidirectional exchange between two authors who have published a study together. Example: Edens and Douglas published a study as co-authors, this collaboration is quantified as 1 relationship (Edens-Douglas).



TABLE 2
VARIABLES EXPLORING DESCRIPTIVE, QUASI-EXPERIMENTAL, AND EX POST FACTO STUDIES (N= 46)
THAT USE THE PAI IN LEGAL CONTEXTS

| Personality | Correctional context | | | Forensic context | | | Clinical Context |
|---------------------------------------|----------------------------|-------------|--------|----------------------|-----------------------|-------|------------------|
| | Closed | Psychiatric | Open | Criminal (Treatment) | Criminal (Assessment) | Civil | |
| General characteristics (profile) | 4, 15, 31, 33, 36, 38, 42 | 23, 40 | 22, 27 | 33, 39, 41 | - | - | 37, 9 |
| Antisocial characteristics | 17, 43, 44 | - | 30 | - | - | - | - |
| Borderline personality disorder | 2, 10, 17 | 3, 16 | - | - | - | - | - |
| Psychopathology | | | | | | | |
| General | 14, 15, 25, 28, 29, 33, 34 | 45 | - | 33 | - | - | - |
| Anxiety | 32 | - | - | 32 | - | - | 5 |
| Depression | 17 | - | - | - | - | - | - |
| Suicidal tendency | 13 | 13 | - | 13 | 11, 13 | - | 6 |
| Substance abuse | 26, 36, 43 | - | - | 26 | - | - | - |
| Internalizing/externalizing disorders | 46 | - | - | 46 | - | - | 5 |
| General validity | | | | 35 | | | |
| Validity scales | - | 35 | - | 20 | - | 7 | - |
| Malingering | 34 | 12 | - | 18 | 21 | 8 | - |
| Treatment rejection | 25 | 1 | - | | 18 | - | - |

Note: The numbers indicate the article that can be seen in the Annex available at the following link: shorturl.at/hEW05.

TABLE 3
PSYCHOMETRIC PROPERTIES OF THE PAI ANALYZED IN 60 STUDIES THAT
USE IT AS A PRIMARY MEASURE

| Evidence of Validity | k ^a | Correctional context | | | Forensic context | | | |
|--|-----------------------|--|---|--------------------|----------------------|---------------------|-----------------------------|---|
| | | Closed | Psychiatric | Open | Criminal (Treatment) | Penal (Evaluation) | Civilian (Victims) | |
| Test/criteria relationships | Concurrent-Predictive | 30 | 48, 49, 51, 50, 53, 57, 60, 61, 63, 67, 68, 75, 81, 85, 87, 89, 92, 94, 96, 99, 101 | 64, 71, 76, 80, 97 | 88 | 71, 74, 79 | 61, 97, 104 | - |
| | Convergent | 20 | 9, 53, 59, 60, 66, 69, 70, 82, 83, 84, 91, 99 | 66, 105 | - | 70, 72, 82 | 47, 53, 56, 77, 78, 95, 104 | - |
| | Contrasted groups | 17 | 53, 54, 59, 60, 62, 66 | 58, 66, 90 | 98 | - | 58 | - |
| | Discriminant | 8 | 53, 59, 66, 82, 83, 84 | 66 | - | 72, 82 | 53, 95 | - |
| Internal structure | 6 | 86, 93 | 71, 97 | 98 | 71, 73, 93 | 97 | - | |
| Sensitivity^a | 21 | 49, 53, 54, 59, 60, 61, 66, 68, 70, 75, 81, 94 | 58, 64, 66, 90 | 88 | 70, 72 | 47, 53, 58, 77, 104 | 106 | |
| Reliability Evidence | | | | | | | | |
| Item covariance (Internal consistency) | 8 | 65, 85, 86, 100, 102, 103 | - | 98 | - | 95 | - | |
| Test re-test | 3 | 86, 89 | - | - | - | - | 106 | |

Note: The numbers indicate the article that can be seen in the Annex available at the following link: shorturl.at/hEW05. Some studies analyze more than one psychometric property and/or were conducted in more than one context.

^a Sensitivity reports on validity in the context of classification and decision making.



the case of the few studies in the Spanish-speaking region ($M=298.60$, $SD=260.23$).

The ages of the participants ranged from 11 to 85 years ($M=34.51$ years; $SD=5.26$). Eleven studies were identified with samples comprised wholly or partly of adolescents aged 11 to 18 years, eight samples included young people who had committed criminal offenses^{13, 57, 75, 87, 89, 95, 98, 122}, and three samples included victims⁹ or complainants^{8, 106}. These studies use the adolescent version of the PAI (PAI-A) (Morey, 2008).

Of the 131 studies, 76 (56.30 %) had samples made up exclusively of men, 15 (11.11 %) exclusively of women, and 44 (35.60 %) had mixed samples. The total does not coincide with the total number of studies reviewed, because some studies used more than one sample and not all had the same percentage of men and women in their composition.

DISCUSSION

Forensic psychological assessment has both legal and scientific requirements for its results to be admissible in court (AERA, APA, & NCME, 2014; American Psychological Association, 2017). Dispensing with these creates the risk of relying on the expert's opinion based solely on his or her experience (Faigman & Monahan, 2009), and this has been shown to be subject to biases inherent in human judgment, even with long-standing experts (Neal & Grisso, 2014; Zapf et al., 2018). To counter this, summary evidence about an assessment test affords the practitioner an agile approach to its uses, weaknesses, and strengths and represents valuable information when deciding on its scientific acceptability in a court of law.

The PAI is a widely accepted instrument in legal and correctional contexts in several countries (Edens et al., 2001; Lally, 2003; Mullen & Edens, 2008), but the evidence derived from its use in these contexts is dispersed among various sources. The present study aimed to systematically review this evidence and sort it according to certain categories that may be useful for those who have to make decisions on its use, acceptance, or admissibility.

Productivity and collaboration

Despite the diversity of studies published in the last 25 years, the productivity on the PAI is concentrated in a relatively limited number of authors, institutions, countries, and journals. This supports the proposals of Lotka's Law (1926) which predicts that, independent of discipline, the production of studies is uneven because the largest volume of publications comes from a small proportion of highly productive authors. In this case it is represented by a group of researchers from the United States and Canada who in network analysis were found to be brought together by J. Edens. Practitioners wishing to stay current on this topic could take advantage of the concentration of evidence in three psychological assessment journals: *Assessment*, *Psychological Assessment*, and *Journal of Personality Assessment*. This finding supports the

postulations of Bradford's Law (1934), which predicts that the largest number of publications will be concentrated in a small number of journals, while a large number of journals will present few publications.

Likewise, the results show that collaborative activity is central to the scientific productivity (Hall et al., 2018). The most productive authors are those who collaborate most with each other, so it is relatively easy to identify the group(s) of reference in this topic for the period covered by this review. Important practical implications arise from the collaboration identified between correctional and university institutions. The connection between these types of institutions represents a clear contribution to applied research in criminological psychology and related disciplines, as it facilitates the solving of the obstacle of access to samples (Farrington et al., 2006) and orienting research towards the institutional needs which form, to a large extent, the basis of public policies (Sampson et al., 2013).

Materials and samples

Most of the evidence found in this review refers to samples of middle-aged males serving a custodial sentence in North American prisons. To what extent these findings could justify the use of the PAI in legal contexts in Spain, Latin America, or other regions remains an empirical question.

In general terms, personality characteristics and psychopathological variables have been the most explored topics. Antisocial and borderline personality traits received specific attention in some studies. This corresponds with ample evidence on the association of these variables with criminal behavior (Yu et al., 2012). Also, although to a lesser extent, validity scales have been investigated in these samples. The evidence in relation to these scales is especially relevant in the legal field given that the risk of biased responses is increased by the potential consequences of the responses (Echeburúa et al., 2011).

Less evidence is available regarding the use of the PAI in victim samples, so this population remains a gap area for future research. The post-traumatic stress disorder, anxiety, and depression scales that have been explored so far appear to be relevant in the psychological screening of crime victims.

The studies conducted with adolescent samples may be of interest to professionals working in the field of juvenile criminal justice who are required to conduct in-depth evaluations of the mental state and personality of adolescents.

Instrument studies

The psychometric properties of the PAI have been particularly explored in the countries where it is most widely used. In addition to results supporting the reliability of the test, validity indicators have been obtained regarding the association of the test with external criteria relevant to the context where it has been most studied, such as criminal recidivism^{48, 104} and institutional misconduct^{49, 60}.



In general terms, the average number of participants was around 300, which represents an adequate number for the different statistical contrasts required in the instrument studies. This reflects the feasibility of using this instrument in large samples despite the considerable time and cost associated with its administration.

Evidence of both its reliability and validity in the legal context could help practitioners in the most productive countries to inform their choice in particular cases. However, further research will be needed in different regions or population groups where this instrument is planned to be validly and reliably implemented in routine forensic assessment practices (American Psychological Association, 2013).

The lack of studies of content-based validity or validity based on the response process is noteworthy. It would be desirable to have studies that, through cognitive interviews, analyze how people understand and process the items and how they decide on a particular response (Ericsson & Simon, 1993). This is of interest given that the reading comprehension skills of part of the population in legal contexts may be different from those of the original samples, which in turn may affect item comprehension. For example, the normative data of the PAI in Argentina were obtained from a highly educated population, 43% had university studies, and 49% had completed high school (Stover et al., 2015). In contrast, only 0.4% of the correctional population in this country had completed university level and 7% had completed secondary school (Dirección Nacional de Política Criminal, 2014). Given these and the other particularities mentioned in relation to psychological evaluation in legal contexts, having this evidence will be a relevant contribution to the justification for its use.

Strengths and limitations of the study

The present study summarizes evidence that had not been reviewed to date with the intention of performing a qualitative analysis and integration of the content. The effort to access articles in different languages attempted to overcome the exclusion that tends to occur in systematic reviews of material exclusively in English (e.g. Craig, 2003; Rogers et al., 2003). Likewise, due to the availability and wide dissemination of the PAI in the Spanish-speaking world, it was considered beneficial to make this review available to professionals in Spanish.

The use of technical tools such as PRISMA-P and Covidence made it possible to adapt this study to the recommended guidelines for the publication of a systematic review and to

control possible biases in the identification of studies (Moher et al., 2015). Despite the concentrated productivity of studies in high-income English-speaking countries (such as the United States, Canada, and the United Kingdom), the diversity of languages and databases established *a priori* aimed to control for publication bias. However, it is possible that, by eliminating these or other technical documents, studies that were actually conducted but did not result in publication may not have been captured.

CONCLUSIONS

With time and the advancement of forensic psychology, it is feasible that judges will request from testifying experts specific expertise on the domain in which they are proposing their testimony (Faigman & Monahan, 2009). Currently, explicit regulation of the admissibility of psychological evidence in legal contexts is not a uniform practice across countries. In its absence, practitioners who must decide how to proceed technically in their assessments are faced with a myriad of options. Reliance on the use of tools that lack evidence of their validity and reliability or of their acceptability in that context will be detrimental to the scientific and ethical standards that govern professional practice.

In Spanish-speaking countries, the availability of the Spanish version of the PAI facilitates its use by any professional. However, in order to justify its use in legal contexts, scientific productivity in this regard should be increased, both in samples of victims and perpetrators. According to psychometric criteria, a necessary line of research will be the generation of norms for these population groups considering the particularities that may be identified in them. In order to develop research, both on the PAI and on other similar techniques, it is essential to overcome the difficulties associated with the costs of this tool in this region⁴ and access to samples. Inter-institutional connections between the institutions of the administration of justice and academia appear to be the most promising way forward in this regard.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest. The authors do not receive any benefit from the use or dissemination of the instrument analyzed here.

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⁴ For example, to acquire the PAI in Argentina you must pay approximately € 400, including shipping costs. This is equivalent to what a psychologist receives in professional fees for 63 sessions as recommended by the Psychological Association of Córdoba. In contrast, in Spain the cost of the PAI is close to the value of 5 professional sessions. In addition, the cost of individual computer corrections must be considered.



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