



Article

DOI: <http://dx.doi.org/10.22483/2177-5796.2025v30id27523510>

ANALYSIS OF INITIAL TRAINING IN SCHOOL PSYCHOLOGICAL ASSESSMENT IN HIGHER EDUCATION INSTITUTIONS OF THE STATE OF MINAS GERAIS

Análise da formação inicial em Avaliação Psicológica Escolar de instituições de ensino superior do estado de Minas Gerais

Análisis de la formación inicial en Evaluación Psicológica Escolar de instituciones de educación superior en el estado de Minas Gerais

Rafael Gustavo Maluf¹

Orcid: <https://orcid.org/0000-0002-0599-0125>

E-mail: rafmaluf@gmail.com

João Arménio Lamego Lopes²

Orcid: <https://orcid.org/0000-0001-5005-120X>

E-mail: joaols@psi.uminho.pt

Célia Regina Gomes Oliveira³

Orcid: <https://orcid.org/0000-0002-8252-7337>

E-mail: celia.oliveira@ulp.pt

Abstract: The growing demand for the specialized work of psychologists in the school context has highlighted concerns regarding initial training in School Psychological Assessment (SPA). The main objective of this work was to investigate the initial training in SPA as taught in undergraduate Psychology courses at Higher Education Institutions in the state of Minas Gerais. Undergraduate programs contained an average of 3.57 Psychological Assessment (PA) disciplines (N=42), associated with a low workload (5.3% of a total of 4000 hours) (N=36). Content analyses of both discipline names and syllabi uncovered little emphasis given by undergraduate Psychology courses in Minas Gerais to the specific area of School Psychology Assessment. Our results indicate that training in PA emphasizes mechanistic application of tests, rather than a more holistic approach with the use of diverse evaluation techniques (interviews, behavioral observation, psychometry, instrument design), a fact that may lead to inadequate deployment of instruments.

Keywords: initial training; psychological assessment; training in psychology.

¹ University of Minho. Braga. Portugal.

² University of Minho. Braga. Portugal.

³ University of Minho. Braga. Portugal.

Resumo: A crescente demanda pela atuação especializada de psicólogos no contexto escolar tem evidenciado preocupações em relação à formação inicial em Avaliação Psicológica Escolar (APE). O principal objetivo deste trabalho foi investigar como se apresentou a formação inicial em APE dos cursos de Psicologia de Instituições de Ensino Superior do estado de Minas Gerais. Os resultados evidenciaram, dentre os cursos de psicologia amostrados, média de 3,57 disciplinas de Avaliação Psicológica (AP) (N=42) e, baixa carga-horária (5,3% das 4000 horas totais por curso) (N=36). Análises de conteúdo, contemplando nomes e ementas de disciplinas de Avaliação Psicológica, revelaram pouca ênfase dada pelos cursos de graduação em Psicologia em Minas Gerais à temática Avaliação Psicológica Escolar. Os resultados evidenciam a predominância, no ensino de AP, de ênfase tecnicista em testes, em detrimento de disciplinas que visam à compreensão mais ampla do processo, como o uso de técnicas de avaliação (entrevista, observação do comportamento, psicometria e construção de instrumentos, entre outras) o que pode levar à utilização indevida ou inadequada dos instrumentos.

Palavras-chave: formação inicial; avaliação psicológica; formação em psicologia.

Resumen: La creciente demanda del trabajo especializado de psicólogos en el contexto escolar ha evidenciado preocupaciones con respecto a la formación inicial en Evaluación Psicológica Escolar (EPE). El objetivo principal de este estudio fue investigar cómo se presentó la formación inicial en EPE de los cursos de psicología de las Instituciones de Educación Superior en el estado de Minas Gerais. Los resultados mostraron, entre los cursos de psicología muestreados, un promedio de 3,57 asignaturas de Evaluación Psicológica (EP) (N=42) y baja carga de trabajo (5,3% del total de 4000 horas por curso) (N=36). Los análisis de contenido, incluidos los nombres y menús de las asignaturas de Evaluación Psicológica, revelaron poco énfasis dado por los cursos de graduación en Psicología en Minas Gerais al tema de la Evaluación Psicológica Escolar. Los resultados muestran el predominio, en la enseñanza de la EP, de un énfasis tecnicista en las pruebas, en detrimento de asignaturas que apuntan a una comprensión más amplia del proceso, como el uso de técnicas de evaluación (entrevista, observación de la conducta, psicometría y construcción de instrumentos, entre otras), lo que puede llevar al uso indebido o inadecuado de los instrumentos.

Palavras clave: formación inicial; evaluación psicológica; formación en psicología.

1 INTRODUCTION

For at least two decades, the phenomenon of university expansion in Brazil has followed global trends, which have ultimately led to the massification of access to higher education in both public and private institutions, and to the emergence of undergraduate programs in a wide variety of fields. This expansion includes undergraduate Psychology programs (bachelor's degrees), creating the need to establish quality standards for them. The Ministry of Education has defined standards, criteria, and quality indicators for the creation and operation of undergraduate Psychology programs, and has as well established periodic evaluations of these programs, through the analysis of graduating students' performance (National Student Performance Exam – ENADE) (Brasil, *s. d.*), and also through the Preliminary Course Concept (CPC), which, in addition to ENADE, takes into account the academic qualifications of the faculty, as well as the infrastructure and available teaching and learning resources (Brasil, 2020).

The growing demand for school psychologists' activities has brought new challenges to the training of psychologists, especially in the area of Psychological Assessment (Ximenes; Rocha; Costa, 2024; Bandeira; Andrade; Peixoto, 2021). The academic training of psychologists, including in the field of School Psychological Assessment (SPA), has been the focus of attention (American Psychological Association–APA, 2023; Lockwood et al., 2022; Farmer et al., 2021; Nolan; Hakala; Landrun, 2021; Kusumi et al., 2016; Montreuil, 2016). Over the past three decades, the American Psychological Association (APA) has issued recommendations for improving teaching and learning in undergraduate Psychology programs, which include shared responsibilities of students, professors, Psychology departments, and academic administrators. In a survey conducted with 8,690 European psychologists, it was found that while most of them expressed a favorable attitude toward the use of psychological tests, they nonetheless considered their undergraduate training in psychological assessment (PA) to be insufficient for proper use (Muñiz et al., 2001).

In the past 20 years, it is worth noting that training in Psychological Assessment (PA) in Brazil has shown signs of progress, in contrast to earlier periods marked by setbacks, prejudice, and low-quality initial training (Bueno; Peixoto, 2018). However, the quality of training still appears to fall short of the levels seen in European and North American countries, particularly regarding the nature and number of available assessment instruments, the training of faculty and researchers in the field, and the preparation of psychologists to improve the quality of services provided to society (Wechsler; Hutz; Primi, 2019; Mendes et al., 2013). Insufficient or inadequate training can lead to consequences in professional practice, affecting clients' needs and quality of services delivered (Borsa, 2016).

Despite advances such as the creation of the Psychological Test Assessment System (SATEPSI) in Brazil, the recognition of Psychological Assessment (PA) as a

specialty by the Federal Council of Psychology (CFP), the establishment of guidelines for conducting Psychological Assessments in professional psychological practice, and the regulation of SATEPSI (Resolution 009/2018 of the Federal Council of Psychology, dated April 25, 2018), the full development of this training still seems far from reaching maturity (Soligo et al., 2020; Bueno; Peixoto, 2018; Nunes, 2012). The concerns raised regarding the training of professionals in PA generally also apply to training in School Psychological Assessment (SPA): due to the complex and multifaceted nature of school psychologists' work, professionals are required, from their initial training, to have in-depth knowledge of various assessment methods and approaches. These include identifying signs of risk for neurodevelopmental disorders in schools, detecting self-injurious or suicidal behavior, assessing students from diverse cultural backgrounds, evaluating situations involving violence/bullying/cyberbullying, screening for dyslexia, among other abilities (Cardoso; Ferreira; Freitas, 2023; Hutz et al., 2022).

With specific focus on School Psychological Assessment (SPA), weaknesses related to training have also been reported in France (Guillemard, 2007), Germany (Dunkel, 2007), and Canada (Montreuil, 2016), showing that deficiencies in SPA training among psychology professionals have been a concern in several countries. In the United States, a survey with undergraduate psychology students indicated that they are not adequately exposed to school psychology, and it was suggested that specific disciplines should be created for this area (Bocanegra et al., 2019). Deficiencies in aspects of school psychology were also found in graduate programs (Stein; Abritton, 2022). A survey on the attitudes and practices of American school psychologists regarding the validity of responses to diagnostic tests, as reported by students, caregivers, and teachers, found that few respondents used formal measures for this evaluation, which they attributed to insufficient exposure to the topic during undergraduate studies (Lovett et al., 2022). In an analysis of American course syllabi related to a more specific aspect of school psychology assessment—cognitive assessment—it was found that the objectives included in these syllabi varied in quantity, complexity, and content, but mainly focused on low-complexity skills, failing to reflect the diversity of practices required of school psychologists (Bumpus et al., 2022).

In Brazil, studies on initial training in Psychological Assessment (PA) have been scarce and have indicated serious problems in this type of training (Bandeira; Andrade; Peixoto, 2021). Training generally has a technician character, with an emphasis on the centrality of psychodiagnosis and classical test theory, on procedures for administering and interpreting instruments, and on traditional constructs such as intelligence and personality tests (Ximenes; Rocha; Costa, 2024; Freires et al., 2017). An analysis of initial training in PA, based on 478 course syllabi from 133 sampled undergraduate psychology programs across five Brazilian regions, concluded that the workload

dedicated to this subject was considered insufficient, with the programs focusing mainly on the purely technical application of psychological tests (Ambiel et al., 2019).

In the state of Minas Gerais, with the second largest population in Brazil (estimated population of over 21 million in 2023), there are records of 134 active undergraduate (bachelor's) programs in Psychology (Brasil, 2017), offered by both private and public higher education institutions (HEIs). Of these, only 60 had graduating students and participated in the course evaluation conducted by the Ministry of Education in 2018 (the others were created after 2015 or are still in the implementation phase). There are no current systematic studies on the status of these sets of programs, nor information on their approaches to the initial training of future psychologists in Psychological Assessment (PA), particularly in School Psychological Assessment (SPA).

Given the aforementioned issues related to PA training, the main objective of this study is to analyze the initial training in psychological assessment, and particularly the training in school psychological assessment, in undergraduate (bachelor's) psychology programs in Minas Gerais. The research questions guiding this study were: a) What are the current characteristics of undergraduate psychology programs in the state of Minas Gerais?; b) What content is currently covered in psychological assessment disciplines in HEIs in Minas Gerais?; c) What is the current state of specific initial training in school psychological assessment in these programs?

2 METHOD

This study comprises a documentary research, in which factual pedagogical-institutional variables from Psychology programs at Higher Education Institutions (HEIs) in the state of Minas Gerais were collected, along with variables related to training in psychological assessment, such as course matrices, names, number, workload, and syllabi of psychological assessment disciplines.

2.1 Sample Selection

Initially, we identified 60 undergraduate Psychology programs (bachelor's degree) in the state of Minas Gerais, registered on the e-MEC portal and listed as participants in the National Student Performance Exam (ENADE), conducted by the Ministry of Education (MEC) in its 2018 edition for Psychology programs.

The decision to use ENADE data was based on the fact that it is a quality index for Higher Education that mandatorily includes selected graduating students from various undergraduate programs across Brazil. Performance in ENADE rankings appears to have become a quality indicator for society, and, as a result, competition among Higher Education Institutions for higher ENADE scores has increased (Bertolin; Marcon, 2015). ENADE evaluates the performance of graduating students in relation to

the curricular content outlined in the course guidelines, to the development of their competencies and skills necessary for a more adequate general and professional training, and their level of awareness regarding Brazilian and global realities (Brasil, *s. d.*). Registration is mandatory for eligible incoming and graduating students in bachelor's and technological degree programs within the evaluation areas of that edition of the exam. The student's compliance status is recorded in their academic transcript.

Data were collected from 59 of these Psychology bachelor's programs (52 from private institutions, 5 from federal public institutions, and 2 from state public institutions), and one program (from a private institution) was excluded for having only one single graduating student. Some of these programs belonged to different campuses or to different schedule (morning, afternoon, night) terms of the same HEI. Data on the number of PA disciplines were obtained from 42 of these programs, 36 of which also provided their respective course workloads.

2.2 Procedure for Retrieving Curriculum Matrices, Discipline Syllabi, and Workload Information

For most programs, syllabi and/or curriculum matrices were obtained from the official websites of the sampled Higher Education Institutions (HEIs). In cases where this information was not available online, emails were sent to the coordinators of the respective psychology programs, explaining the objectives of the study and requesting syllabi for their undergraduate psychology disciplines—especially those related to psychological assessment—along with their workloads and curriculum matrices. Confidentiality and anonymity of the information provided were guaranteed, and the participating HEIs were not identified.

In some cases, when it was not possible to obtain the information directly from the program coordinator, a second contact was made, requesting that the coordinator forward the request to the professor or person responsible for the discipline(s), or, in some cases, to the psychology program's academic board. Factual data related to training in psychological assessment were collected: the number and names of disciplines strictly related to psychological assessment, their workloads, and the corresponding syllabi.

2.3 Procedure for Content Analysis of Course Titles and Syllabi of Psychological Assessment disciplines in Psychology Programs in Minas Gerais

Contacts were made with program coordinators, academic boards, and/or professors, as well as searches conducted on the websites of 59 psychology programs in the state of Minas Gerais, to obtain their respective curriculum matrices. The data

obtained regarding the names of Psychological Assessment (PA) disciplines, in the Portuguese language, were subjected to inductive word content analysis using the software MAXQDA® (Maxqda, *s. d.*). Subsequently, the software Wordclouds (Wordclouds, *s. d.*) was used to generate a graphical word cloud representation of word frequency. The course syllabi were similarly subjected to inductive content analysis using MAXQDA® (Maxqda, *s. d.*), employing thematic categorical analysis (Gades Solutions, *s. d.*).

2.4 Descriptive Statistics of Undergraduate Psychology Programs in Minas Gerais

Collected data were organized into spreadsheets using Microsoft Excel®, which were used to obtain descriptive statistics regarding the number of graduating students (participants in ENADE) and the Psychological Assessment (PA) disciplines taken in each program analyzed. Additionally, factual data related to quality indicators of the Psychology bachelor's programs were collected, based on information available on the website of the National Institute for Educational Studies and Research Anísio Teixeira (INEP). The quality indicators include, in addition to ENADE, the Preliminary Course Concept (CPC) and the Performance Difference Index (IDD).

The Preliminary Course Concept (CPC) considers, in addition to student performance, factors such as faculty qualifications, infrastructure, and teaching-learning resources, among other items. The IDD is a quality indicator that aims to measure the value added by the program to the development of graduating students, considering their performance in ENADE and in the National High School Exam (ENEM) as a proxy measure of their developmental improvement upon entering the evaluated undergraduate program. In the evaluation scales used for the ENADE, IDD, and CPC indices, scores of 1 and 2 indicate that the program or institution does not meet the basic quality requirements established by the Ministry of Education (MEC). A score of 3 indicates that the required quality standards are met, while scores of 4 and 5 indicate institutions or programs considered above average or excellent in meeting MEC requirements.

3 RESULTS

3.1 Descriptive Statistics of Undergraduate Psychology Programs in Minas Gerais

The undergraduate (bachelor's) Psychology programs in the state of Minas Gerais comprised an average of 4,147 hours of academic activities, with a range between 4,000 (the minimum required by the Ministry of Education) and 4,912 hours. The 59 programs sampled registered a mean of *circa* 78 concluding students for the 2018 ENADE exam, which would represent around 4,600 newly qualified professionals in the state that year.

On the ENADE, CPC, and IDD rating scales, the programs generally approached a score of 3 (Table 1), which indicates compliance with the quality standards required by the Ministry of Education (MEC), although there was a wide range of variation among them: from 1 to 5 for ENADE, from 2 to 5 for IDD, and from 2 to 4 for CPC. None of the Psychology programs in Minas Gerais achieved the maximum CPC score of 5 (Table 1).

The topic of Psychological Assessment is taught in an average of 3.57 disciplines per program (a slightly lower figure than that reported by Freires et al. (2017) in Brazil's North region), although there was a wide range of variation (between 1 and 7 disciplines) (Table 1). The average workload for these disciplines was 222.25 hours (about 5.3% of the total workload of the Psychology bachelor's degree), with the median and mode close to this value, although the range was also wide (minimum of 80 and maximum of 336 hours) (Table 1). Training in Psychological Assessment typically begins between the third and fourth academic semesters (most frequently in the third), although this varies by program, with some starting as early as the second semester and others as late as the sixth. Training is most often completed around the sixth semester, but depending on the program, it may extend to the eighth (Table 1).

Table 1 – Descriptive statistics of undergraduate Psychology programs in the state of Minas Gerais participating in ENADE 2018

	No. of Sampled Courses	Mean	Standard Error	Median	Mode	Minimum	Maximum
Total workload of the Psychology program	60	4147	34	4008	4000	4000	4912
No. of Psychology graduates enrolled in ENADE / IDD 2018	59	77.97	6.2	66	66	12	236
ENADE Score (Psychology)	59	2.92	0.12	3	3	1	5
IDD (Psychology)	59	3.05	0.07	3	3	2	5
CPC (Psychology)	59	3.39	0.07	3	3	2	4
No. of Psychological Assessment courses	42	3.57	0.17	3	3	1	7
Total workload in Psychological Assessment (hours)	36	222.25	9.56	232.5	240	80	336
Psychological Assessment: Initial semester	36	3.5	0.18	3	3	2	6

Psychological Assessment: Final semester	36	6.56	0.16	6	6	5	8
--	----	------	------	---	---	---	---

Source: Author's data collection.

3.2 Content Analysis of the Names and Syllabi of Psychological Assessment disciplines in Psychology Programs in Minas Gerais

Curricular programs were obtained from 36 out of 59 undergraduate courses (66.10%), and were individually examined to select and extract the names and workloads of the Psychological Assessment (PA) disciplines. A total of 179 PA disciplines were identified and named in the 39 sampled programs, which represents a mean of 8.28% of the total number (2,159) of disciplines offered in these programs.

The full names of the 179 disciplines were subjected to qualitative data content analysis using the MAXQDA® software (Brites, 2021), in order to identify the most frequent words in the respective Portuguese-language titles (excluding words with two letters or fewer), applying the lemmatization criterion. Figure 1 presents a word cloud representation of the word frequencies obtained, showing the expected predominance of words such as "avaliação" (=assessment), "psicológico" (=psychological), as well as others related to associated areas ("psicodiagnóstico" = psychodiagnosis, "psicometria" = psychometrics, "teste" = test). Notably absent from the word cloud are terms more directly related to school psychological assessment (such as "escola" (=school), "educação" (=education"), "educacional" (=educational), suggesting the virtual absence, among the programs analyzed, of disciplines specifically focused on this area.

Figure 1 – Word cloud of the most frequent (lemmatized) Portuguese-language words in the titles/names of Psychological Assessment disciplines in undergraduate Psychology programs in the state of Minas Gerais

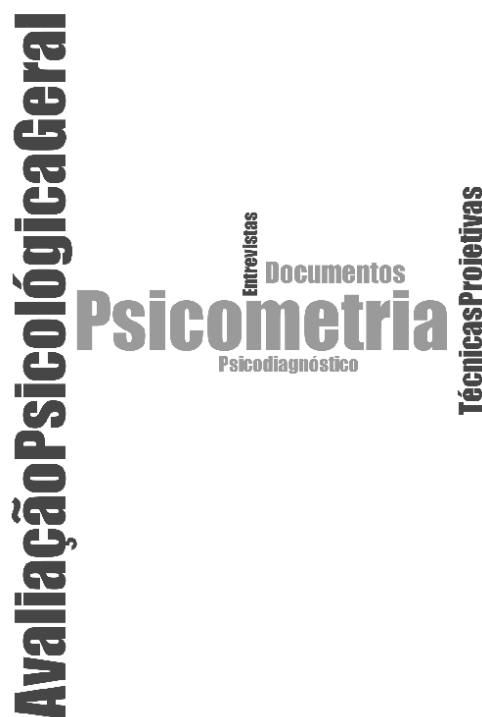


Source: Author's data collection.

An additional content analysis of the course syllabi could reveal the existence of disciplines more directly focused on school psychological assessment. Accordingly, through contact with program coordinators, academic committees, and/or professors, as well as research on the websites of the 59 Psychology programs considered, it was possible to obtain full syllabi from 21 of these programs (35.59% of the total), which comprised 80 syllabi of different disciplines related to Psychological Assessment, which were then subjected to content analysis using the MAXQDA® software.

A preliminary examination of the texts of these syllabi led to the definition, in MAXQDA®, of a list of codes composed of six categories - "Documentos" (=Documents), "Técnicas Projetivas" (=Projective Techniques), "Psicodiagnóstico" (=Psychodiagnosis), "Entrevistas" (=Interviews), "Psicometria" (=Psychometrics), and "Avaliação Psicológica Geral" (=General Psychological Assessment) (Figure 2), each comprising two or more subcategories (Table 2). The themes related to the categories "Psychological Assessment" and "Psychometrics" were by far the most predominant (Figure 2).

Figure 2 – Word cloud map of the most frequent content categories in the syllabi of Psychological Assessment disciplines in undergraduate Psychology programs in the state of Minas Gerais



Source: Author's data collection

Table 2 – List of codes (categories and subcategories of Psychological Assessment) associated with excerpts from discipline descriptions in undergraduate Psychology programs in the state of Minas Gerais

Categories/Subcategories	Frequencies
Documents	
Documents\ Reports	22
Documents\ Certificates, Reports, Opinions	18
Projective Techniques	
Projective Techniques\ Graphic Techniques	6
Projective Techniques\ General_Projective Tests	14
Projective Techniques\ History	2
Projective Techniques\ Personality	13
Projective Techniques\ Application, Correction	6
Psychodiagnosis	
Psychodiagnosis\ Process and Stages	25
Psychodiagnosis\ Psychometric	0
Psychodiagnosis\ Projective	6
Interviews	
Interviews\ General	21
Interviews\ Feedback, Communication of Results	9
Psychometrics	
Psychometrics\ Tests	8
Psychometrics\ History	15
Psychometrics\ Psychometric Properties	12
Psychometrics\ Intelligence	19
Psychometrics\ Personality	14
Psychometrics\ Applications, Corrections and Interpretations	8
Psychometrics\ Psychometric Theories	13
Psychometrics\ Instrument Construction	7
Psychological Assessment	
Psychological Assessment (General)\ Psychoeducational Assessment	2
Psychological Assessment (General)\ Contexts and Uses	14
Psychological Assessment (General)\ Vocational and Professional Guidance	1
Psychological Assessment (General)\ Neuropsychological Assessment	2
Psychological Assessment (General)\ Ethics	15
Psychological Assessment (General)\ Testing	3
Psychological Assessment (General)\ Elderly	3
Psychological Assessment (General)\ Adult	6
Psychological Assessment (General)\ Adolescence	7
Psychological Assessment (General)\ Childhood	9
Psychological Assessment (General)\ History, Foundations and Concepts	24
TOTAL FREQUENCY OF THEMES IN SYLLABI	324

Source: Author's data collection

The text document composed of the syllabi from the 80 PA disciplines was examined in order to associate relevant codes (categories and subcategories) with portions of the text, using MAXQDA®, a procedure that resulted in a total of 324 associations. The analysis of the subcategories within each category shows that there are few explicit references to the topic of school-based Psychological Assessment. There are only two references, among the 324 associations, to 'Psychoeducational Assessment' (Table 2), and the topic is absent from the other categories

4 DISCUSSION

The results suggest that, in the initial training of psychologists in Minas Gerais higher education institutions (HEIs) undergraduate Psychology programs, there is no specific emphasis on School Psychological Assessment (SPA). A generalist approach to Psychological Assessment (PA) prevails, centered on traditional psychodiagnosis and in the technical routine application of psychometric tests—mainly intelligence tests, personality tests, behavioral scales, and symptom checklists (Ximenes, Rocha, & Costa, 2024; Bandeira, Andrade, & Peixoto, 2021). This reality overlooks recommendations for initial training, which include the evaluation of the theoretical foundations of tests and, in particular, evidence and updates regarding their psychometric properties (Simões et al., 2024). It is important to highlight that this generalist focus on the application of various tests has negative implications for initial training in school-based PA, as it disregards the specificities of this type of assessment context (Hutz et al., 2022; Wechsler, Hutz, & Primi, 2019; Elias, 2021; Farmer et al., 2021).

The lack of specific emphasis on training in Psychological Assessment (PA) can negatively impact professional practice, particularly for early-career psychologists. When called upon to work in school settings, they may lack the skills to adequately identify developmental disorders, learning difficulties, influence of emotional disorders, types of violence, or abuse (Borsa, 2016). This can also lead to negative consequences for professional practice, seriously affecting clients' needs and perpetuating stigmas and stereotypes in children and adolescents. The professionals may commit ethical violations by taking on cases for which they are not professionally or technically prepared, thereby compromising the validity of the information obtained (Elliott & Resing, 2015; Gresham & Vellutino, 2010). Regarding ethical violations in PA, a study showed that poorly written or biased reports accounted for nearly one-third of all ethical violations reported by the Federal Council of Psychology (Costa et al., 2021).

The relative insufficiency of initial training in Educational Psychological Assessment (EPA) is also reported by authors from other countries (Bumpus et al., 2022; King, Khalil, & McGonnell, 2022; Lovett et al., 2022; Bocanegra et al., 2019; Montreuil, 2016), who generally suggest peer/faculty supervision and the implementation of 'on-site training' to acquire good EPA practices (Stein & Abritton, 2022). In the United

States, after reviewing research and training programs in school psychology, four major challenges were identified to improve the training of school psychologists: a) integrating multicultural perspectives with the philosophical foundations of training programs; b) adapting multicultural methodologies to redefine educational and psychological theory; c) defining the scope of multiculturalism in training; and d) articulating and implementing multicultural competencies through criteria defined by the National Association of School Psychologists, 2013 (Lopez & Bursztyn, 2013).

In Canada, it has been suggested that school psychologists would benefit from more direct instruction in supervision, even after initial psychology training (King, Khalil, & Mcgonnell, 2022). Supervision and training appear, according to international literature, to be viable ways of compensating for deficiencies in education (Bonfá-Araujo & Farias, 2020). However, in this current study involving higher education institutions (HEIs) in Minas Gerais, it was not possible to determine whether supervision in Psychological Assessment (PA)—sometimes referred to as supervised internship—holds any significant weight in psychology training, as it did not even appear in the content analyses of disciplines. In a study involving 93 faculty members across five regions of Brazil on PA training, 47 respondents reported not having extra hours available for PA supervision (Bardagi et al., 2015).

International experiences may help establishing a starting point for structuring the curriculum in Educational Psychological Assessment (EPA). In Germany, the basic requirement to become a school psychologist is a general degree in psychology (equivalent to a master's degree), which, from the first of its two phases, emphasizes a methodological foundation in statistics, computerized assessment, and experimental design (Dunkel, 2007)—all subjects being fundamental to EPA. This reality still seems distant from the training offered by the HEIs in Minas Gerais investigated in this study, which, on the contrary, appear to focus on technical and automatic instruction and the decontextualized application of various tests, disregarding important theoretical and methodological aspects (Ximenes, Rocha, & Costa, 2024; Hutz et al., 2022; Elias, 2021; Farmer et al., 2021).

In Canada, efforts are being made to improve school psychology training by incorporating knowledge of the biological bases of behavior, by advanced research training, as well as by clinical and professional training. This includes advanced psychological/educational assessment, consultation, psychotherapy, and advanced clinical diagnosis of learning difficulties and disorders in childhood, composing a clinical child school psychology model (Montreuil, 2016).

In Brazil, the suggested guidelines for more specific complementary training in school psychology include an additional 800 hours of specific content in Education, as well as additional hours of supervised internships (Resolution No. 5, March 15, 2011. Brasília, DF: Ministry of Education). However, these guidelines do not appear to be reflected in the content analysis conducted in the present study. Quite often, the

training offered by the Psychology programs investigated includes only one discipline on Psychological Interviewing, one on Psychodiagnosis, and another on Psychological Assessment—understood here as general or non-specialized training. The institutions that offered an average of three disciplines typically added a discipline akin to Psychometrics to the aforementioned ones.

One likely reason for the limited emphasis on initial training in Educational Psychological Assessment (EPA) may be the insufficient number of hours dedicated to general Psychological Assessment (PA) disciplines, which represent, on average, just over 5.3% of the total course load. The wide range of variation (from a minimum of 80 to a maximum of 336 hours) reveals significant inconsistency in initial PA training across institutions. In a similar study conducted in the state of Ceará, an average of 202 hours of PA training was found, with a minimum of 120 and a maximum of 380 hours (Ximenes, Rocha, & Costa, 2024).

Although the present study found an average of 3.57 PA-related disciplines in initial training—only slightly lower than the 3.7 disciplines reported by Ximenes, Rocha, & Costa (2024) and the 3.82 disciplines reported by Freires et al. (2017)—the significant discrepancy in all cases between the proportion of time dedicated to PA instruction and the overall Psychology training in Minas Gerais seems insufficient to ensure the development of the skills and competencies required for adequate professional practice. This may have implications for EPA training specifically (Hutz et al., 2022; Bandeira, Andrade, & Peixoto, 2021; Elias, 2021; Ribeiro & Soligo, 2020). In addition to the inconsistencies in PA training, some authors point to a lack of consensus regarding the type of professional that should be trained (Noronha et al., 2013).

There is often a predominance of testing techniques and theoretical foundations of testing, while the principles of test construction and of Psychometrics are, in practice, rarely discussed (Simões et al., 2024; Wechsler, Hutz, & Primi, 2019). The results of the present study show that, as pointed out by Ambiel et al. (2019), the teaching of Psychological Assessment (PA) in higher education institutions in Minas Gerais tends to emphasize the mechanical application of tests, to the detriment of disciplines aimed at a broader understanding of the process—such as the use of assessment techniques (interviewing, behavioral observation, psychometrics, and instrument development, among others). This issue becomes even more critical in the specific area of Educational Psychological Assessment (EPA), given the limited emphasis placed on this area within PA disciplines.

The inadequate application of tests in EPA has been the subject of criticism in several countries. Authors have pointed out practical issues related to the validity of test applications due to the inappropriate use of instruments (Simões et al., 2024; Elliot & Resing, 2015; Gresham & Vellutino, 2010). One example is the frequent, yet inappropriate, use of IQ tests to assess reading problems in children. An additional obstacle to PA training may stem from the very nature of its foundations, which are

based on quantitative methods, measurement theory, and statistics—subjects that psychology students in initial training often tend to avoid (Gouveia, 2018).

In Brazil, studies have pointed to an insufficient number of hours dedicated to the teaching of Psychological Assessment (PA), as well as to an 'uncritical automatism' as taught in universities—a mechanistic and minimally reflective approach (Bandeira, Andrade, & Peixoto, 2021; Ambiel et al., 2019; Freires et al., 2017; Bardagi et al., 2015). The results of the present study on initial training in Educational Psychological Assessment (EPA) in Minas Gerais appear to corroborate these authors' criticisms. It is worth noting that the decontextualized practice of PA, along with psychologists' limited mastery of testing conditions, has been one of the main criticisms of the field in Brazil. These criticisms seem to reflect and reinforce the insufficient initial training provided by Brazilian higher education institutions (Ambiel et al., 2019; Freires et al., 2017; Noronha et al., 2013).

In the specific area of EPA, publications have revealed a predominance in the use of psychometric instruments (Lima, Cunha, & Suehiro, 2019; Oliveira et al., 2007). While Psychometrics is consistently present in psychology training curricula, the way it is taught appears to be less than satisfactory (Bonfá-Araújo, Farias, & Miranda, 2020), with emphasis on the precarious and decontextualized application of various tests. Future studies could focus on investigating the teaching/training in Psychometrics as an assessment paradigm, to determine whether or not this is a prevailing trend in PA. Furthermore, when (re)designing PA curricula and instruction, psychology programs should take into account the warning issued 25 years ago about the psychometric robotization of PA (Gutkin & Curtis, 1999).

Insufficient training in quantitative research methods, in psychometric properties of measurement instruments, and in processes of validation/adaptation of psychological tests compromises the development of fundamental skills for the proper practice of Psychological Assessment (PA) (Simões et al., 2024; Bandeira, Andrade, & Peixoto, 2021; Freires et al., 2017; Noronha et al., 2013). Psychologists with inadequate training may interpret PA data in a naïve or flawed manner, which, in school settings, can lead to harmful consequences for users of psychological services (Steege et al., 2019) and undermine subsequent psychological interventions.

It is possible—and even quite likely—that PA courses taught in higher education institutions in Minas Gerais address the topic of Educational Psychological Assessment (EPA) within more broadly defined subjects such as "Childhood and Adolescence", "Intelligence", "Tests", or even "Projective Tests" (Table 2). The lack of specialization or emphasis in the initial training therefore shapes the EPA training provided to psychologists. The absence or scarcity of explicit references to school psychological assessment—whether in course titles or syllabi—seems to reflect the limited or nonexistent emphasis placed on this area by the programs.

Specific issues reported in the field of School/Educational Psychology—such as school dropout, assessment of behavioral problems including bullying and cyberbullying, violence, and learning difficulties, as highlighted in the literature (Elbedour et al., 2020; Callan & Cleary, 2018; Maki, Burns, & Sullivan, 2018; Sullivan, Sadeh, & Hourri, 2019; Sprague & Bradshaw, 2018; Sharp et al., 2016; Watson Junior, Simon, & Nunnley, 2016)—appear to be essential in the routine of researchers aiming to produce knowledge and improve EPA practices, yet they seem to be underexplored in the curricula of the institutions analyzed.

Ideally, EPA training should also include, within university curricula, topics such as developmental assessment, cognitive and learning assessment, mental health evaluations, and the assessment of behavioral and learning problems. It should also emphasize cross-cutting issues such as life project evaluation, career guidance, school and academic adaptation, online training programs in PA, assessment of deaf individuals and those with severe hearing impairments, assessment of transgender and gender non-conforming students, and training through internships or academic mentoring (Souza Filho et al., 2023; Hidayah et al., 2022; Hutz et al., 2022; Wilkins et al., 2022; Chen et al., 2022; Bonfá-Araújo & Farias, 2020). These approaches would be important because they could facilitate access to high-quality, credible information for students, families, and communities involved in the educational process. Moreover, they would ensure that training development includes cross-cultural topics, which are of great importance in the practices of Brazilian psychologists due to the country's significant regional and cultural diversity (Ambiel et al., 2019; Freires et al., 2017; Bardagi et al., 2015).

However, judging by the course syllabi evaluated in the present study and the insufficient number of hours dedicated to PA-related subjects, undergraduate Psychology programs in Minas Gerais are still far from achieving this ideal. This points to an initial training quality that remains below the standards found in European or North American countries (Simões et al., 2024; Souza Filho et al., 2023; Bandeira, Andrade, & Peixoto, 2021; Wechsler, Hutz, & Primi, 2019).

5 FINAL CONSIDERATIONS

The results of this study made possible to gather significant and useful elements regarding the training in school psychological assessment (EPA) offered by higher education institutions (HEIs) in Minas Gerais. Gaps were identified that may hinder EPA training, such as the absence of a specific training focus, limited curricular hours dedicated to assessment, and a small number of specific PA courses in proportion to the overall psychology curriculum. This study provided suggestions, grounded in international literature, for the development of training and practice for school psychologists. Additionally, it outlined guidelines for the design/improvement of

undergraduate psychology curricula with a focus on EPA. It is important that faculty responsible for psychology programs have reliable and accurate information to support the (re)design of their curricular structures and the appropriate allocation of content and instructional hours. It seems evident that the quality of intervention in school settings directly depends on the quality of EPA training.

6 LIMITATIONS

This study has some limitations. A non-probabilistic convenience sampling method was used, meaning that the programs selected for this investigation were chosen based on the availability of syllabi and curricular matrices of interest, rather than through a statistical criterion. There were difficulties in collecting syllabi due to the limited availability of updated documents on the websites of higher education institutions, as well as a low response rate to direct requests sent to professors, coordinators, and academic boards of psychology programs. The research focused on a sample limited to psychology programs in Minas Gerais, and therefore, caution is advised when generalizing the findings of this study to other contexts.

REFERENCES

AMBIEL, R. A. M. *et al.* Análise de ementas de disciplinas de avaliação psicológica: novos tempos, velhas questões. **Avaliação Psicológica: Interamerican Journal of Psychological Assessment**, Campinas, v. 18 n. 1, p. 21-30, 2019. Available at: <http://dx.doi.org/10.15689/ap.2019.1801.15229.03>. Access at: 27 jan. 2023.

AMERICAN Psychological Association (APA). **APA principles for undergraduate education in psychology**. Washington, DC: American Psychological Association, 2023. Available at: <https://www.apa.org/about/policy/undergraduate-psychology-major.pdf>. Access at: 27 aug. 2024.

BANDEIRA, D. R.; ANDRADE, J. M. ; PEIXOTO, E. M. O uso de testes psicológicos: Formação, avaliação e critérios de restrição. **Psicologia: Ciência e Profissão**, São Paulo, v. 41, p. e252970, 2021. Available at: <https://www.scielo.br/j/pcp/a/KpjTyTLtxKG6s4wjDBvdHfr/>. Access at: 27 aug. 2024.

BARDAGI, M. P. *et al.* Ensino da avaliação psicológica no Brasil: levantamento com docentes de diferentes regiões. **Avaliação Psicológica**, Campinas, v. 14, n. 2, p. 253-260, 2015. Available at: <https://www.redalyc.org/pdf/3350/335042986011.pdf>. Access at: 27 aug. 2024.

BERTOLIN, J. C. G.; MARCON, T. O (des) entendimento de qualidade na educação superior brasileira—Das quimeras do provão e do ENADE à realidade do capital cultural dos estudantes. **Avaliação: Revista da Avaliação da Educação Superior**, Campinas, Sorocaba, v. 20, p. 105-122, 2015. Available at: <https://www.scielo.br/j/aval/a/LrGpqqyhTVmnw4Vds75bYTN/>. Access at: 30 aug. 2022.

BOCANEGRA, J. O. *et al.* A lack of exposure to school psychology within undergraduate psychology coursework. **Teaching of psychology**, Washington, DC, v. 46, n. 3, p. 208-214, 2019. Available at: <https://doi.org/10.1177/0098628319848876>. Access at: 27 aug. 2024.

BONFÁ-ARAUJO, B.; FARIAS, E. S. Avaliação psicológica: a monitoria como estratégia de ensino-aprendizagem. **Psicologia Escolar e Educacional**, São Paulo, v. 24, 2020. Available at: <https://doi.org/10.1590/2175-35392020208998>. Access at: 27 aug. 2024.

BONFÁ-ARAUJO, B.; FARIAS, E. S.; MIRANDA, J. C. Avaliação psicológica: definição de aspectos psicométricos segundo alunos de graduação em psicologia. **Interação em Psicologia**, Curitiba, v. 24, n. 2, 2020. Available at: https://www.researchgate.net/profile/Bruno-Bonfa-Araujo/publication/343794003_Avaliacao_Psicologica_Definicao_de_aspectos_psicometricos_segundo_alunos_de_graduacao_em_psicologia/links/5f3fd654a6fdcccc43e0850b/Avaliacao-Psicologica-Definicao-de-aspectos-psicometricos-segundo-alunos-de-graduacao-em-psicologia.pdf. Access at: 27 aug. 2024.

BORSA, J. C. Considerações sobre a formação e a prática em avaliação psicológica no Brasil. **Temas em Psicologia**, Ribeirão Preto, v. 24, n. 1, p. 131-143, 2016. Available at: <https://doi.org/10.9788/TP2016.1-09>. Access at: 27 aug. 2024.

BRASIL. Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira (INEP). **Enade**. Brasília: Enade, [s. d.]. Available at: <https://www.gov.br/inep/pt-br/areas-de-atuacao/avaliacao-e-exames-educacionais/enade>. Access at: 25 june 2025.

BRASIL. Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira (INEP). **Conceito Preliminar de Curso (CPC)**. Brasília: Inep, 2020. Available at: <https://www.gov.br/inep/pt-br/areas-de-atuacao/pesquisas-estatisticas-e-indicadores/indicadores-de-qualidade-da-educacao-superior/conceito-preliminar-de-curso-cpc>. Access at: 25 June 2025.

BRASIL. Ministério da Educação. **e-MEC – Cadastro Nacional de Cursos e Instituições de Educação Superior**. Brasília: e-Mec, 2017. Available at: <https://emec.mec.gov.br/>. Access at: 25 June 2025.

BRASIL. Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira (INEP). **Enade**. Brasília: Enade, [s. d.]. Available at: <http://enade.inep.gov.br/enade/>. Access at: 25 June 2025.

BRITES, R. **Análise de Conteúdo com MAXQDA**. Lisboa: Gades Data Analysis Solutions, 2021. 68p.

BUENO, J. M. H.; PEIXOTO, E. M. Avaliação psicológica no Brasil e no mundo. **Psicologia: Ciência e Profissão**, Brasília, v. 38, n. especial, p.108-121, 2018. Available at: <https://doi.org/10.1590/1982-3703000208878>. Access at: 27 Aug. 2024.

BUMPUS, E. C. *et al.* The consistency of expectations: an analysis of learning objectives within cognitive assessment course syllabi. **Teaching of Psychology**, Thousand Oaks, v. 49, n. 1, p. 30-36, 2022. Available at: <https://doi.org/10.1177/0098628320965248>. Access at: 27 Aug. 2024.

CALLAN, G. L.; CLEARY, T. J. Multidimensional assessment of self-regulated learning with middle school math students. **School Psychology Quarterly**, Washington, DC, v. 33, n. 1, p. 103-111, 2018. Available at: <https://doi.org/10.1037/spq0000198>. Access at: 27 Aug. 2024.

CARDOSO, H. S. P.; FERREIRA, F. O.; FREITAS, P. M. Propriedades psicométricas da escala de rastreio dos sinais da dislexia para o professor. **Avaliação Psicológica: Interamerican Journal of Psychological Assessment**, Porto Alegre, v. 22, n. 1, p. 10-21, 2023. Available at: <https://dialnet.unirioja.es/servlet/articulo?codigo=9560620>. Access at: 27 Aug. 2024.

CHEN, F. Y. *et al.* Psychoeducational assessment of transgender and gender nonconforming (TGNC) Individuals: recommendations for best practices. **Journal of Applied School Psychology**, Philadelphia, v. 38, n. 1, p. 39-57, 2022. Available at: <https://doi.org/10.1080/15377903.2021.1895398>. Access at: 27 Aug. 2024.

COSTA, T. M. *et al.* Formação e ética em avaliação psicológica: análise das infrações de profissionais de psicologia. **Interação Psicológica**, Curitiba, p. 269-279, 2021. Available at: <https://pesquisa.bvsalud.org/portal/resource/pt/biblio-1512191>. Access at: 27 aug. 2024.

DUNKEL, L. School psychology in Germany. *In*: JIMERSON, Shane R.; OAKLAND, Thomas D.; FARRELL, P. T.(eds). **The handbook of international school psychology**. Thousand Oaks: Sage Publ., 2007. p. 123-133.

ELBEDOUR, S. *et al.* Cyberbullying: roles of school psychologists and school counselors in addressing a pervasive social justice issue. **Children and Youth Services Review**, Amsterdam, v. 109, e104720, 2020. Available at: <https://doi.org/10.1016/j.childyouth.2019.104720>. Access at: 27 aug. 2024.

ELIAS, E. Muddled measurement: a historical perspective on questionable practices in school psychology's assessment of learning disabilities. **Canadian Journal of School Psychology**, Thousand Oaks, v. 36, n. 2, p. 142-152, 2021. Available at: <https://journals.sagepub.com/doi/abs/10.1177/0829573521999946>. Access at: 27 aug. 2024.

ELLIOTT, J. G.; RESING, W. C. M. Can intelligence testing inform educational intervention for children with reading disability? **Journal of Intelligence**, Basel, v. 3, n. 4, p. 137-157, 2015. Available at: <https://doi.org/10.3390/jintelligence3040137>. Access at: 27 aug. 2024.

FARMER, R. L. *et al.* Why questionable assessment practices remain popular in school psychology: instructional materials as pedagogic vehicles. **Canadian Journal of School Psychology**, Thousand Oaks, v. 36, n. 2, p. 98-114, 2021. Available at: <https://journals.sagepub.com/doi/abs/10.1177/0829573520978111>. Access at: 27 aug. 2024.

FREIRES, L. A. *et al.* Ensino da avaliação psicológica no Norte brasileiro: analisando as ementas das disciplinas. **Avaliação Psicológica: Interamerican Journal of Psychological Assessment**, Porto Alegre, v. 16, n. 2, p. 205-214, 2017. Available at: <https://doi.org/10.15689/AP.2017.1602.11>. Access at: 27 aug. 2024.

GADES SOLUTIONS. **Análise de dados qualitativos com MAXQDA**. Berlim, [s. d.]. Available at: <https://gades-solutions.com/analise-de-dados-qualitativos-com-maxqda/>. Access at: 25 june 2025.

GOUVEIA, V. Formação em avaliação psicológica: situação, desafios e diretrizes.

Psicologia: Ciência e Profissão, Brasília, v. 38, p. 74-86, 2018. Available at:

<https://doi.org/10.1590/1982-3703000208641>. Access at: 27 aug. 2024.

GRESHAM, Frank M.; VELLUTINO, Frank R. What is the role of intelligence in the identification of specific learning disabilities? Issues and clarifications. **Learning Disabilities Research & Practice**, Thousand Oaks, v. 25, n. 4, p. 194-206, 2010.

Available at: <https://doi.org/10.1111/j.1540-5826.2010.00317.x>. Access at: 27 aug. 2024.

GUILLEMARD, Jean-Claude. School Psychology in France. *In*: JIMERSON, Shane R.; OAKLAND, T. D.; FARRELL, P. T. (eds). **The Handbook of International School Psychology**. Thousand Oaks: Sage Publ., 2007. p. 113-122.

GUTKIN, T. B.; CURTIS, M. J. School-based consultation theory and practice: the art and science of indirect service delivery. **The handbook of school psychology**, Hoboken, v. 3, p. 598-637, 1999.

HIDAYAH, N. *et al.* Conceptual development of online psychological assessment training design for guidance and counseling teachers on the academic life of high school students. **International Journal of Interactive Mobile Technologies**, Kassel, v. 16, n. 6, p. 81-91, 2022. Available at: <https://doi.org/10.3991/ijim.v16i06.28965>. Access at: 27 aug. 2024.

HUTZ, C. S. *et al.* **Avaliação psicológica no contexto escolar e educacional**. Porto Alegre: Artmed, 2022.

KING, S.; KHALIL, M.; MCGONNELL, M. School psychology practice in nova scotia: an update and implications for role diversification. **Canadian Journal of School Psychology**, Thousand Oaks, v. 37, n. 2, p.189-203, 2022. Available at: <https://doi.org/10.1177/08295735211037810>. Access at: 27 aug. 2024.

KUSUMI, Takashi *et al.* A national survey of psychology education programs and their content in Japan. **Japanese Psychological Research**, Tokyo, v. 58, n. supl. 1, p. 4-18, 2016. Available at: <https://doi.org/10.1111/jpr.12111>. Access at: 27 aug. 2024.

LIMA, T. H. D.; CUNHA, N. D. B.; SUEHIRO, A. C. B. Produção científica em avaliação psicológica no contexto escolar/educacional. **Psicologia Escolar e Educacional**, São Paulo, v. 23, e178897, 2019. Available at: <https://doi.org/10.1590/2175-35392019018897>. Access at: 27 aug. 2024.

LOCKWOOD, A. B. *et al.* The course on norm-referenced academic assessment: a survey of special education faculty. **Psychology in the Schools**, Hoboken, v. 59, n. 2, p. 398-412, 2022. Available at:

<https://onlinelibrary.wiley.com/doi/abs/10.1002/pits.22616>. Access at: 27 aug. 2024.

LOPEZ, Emilia C.; BURSZTYN, Alberto M Future challenges and opportunities: toward culturally responsive training in school psychology. **Psychology in the Schools**, Hoboken, v. 50, n. 3, p. 212-228, 2013. Available at:

<https://doi.org/10.1002/pits.21674>. Access at: 27 aug. 2024.

LOVETT, B. J. *et al.* Response Validity in psychoeducational evaluations: results from a national survey of school psychologists. **Psychology in the Schools**, Hoboken, 2022. Available at: <https://doi.org/10.1002/pits.22696>. Access at: 27 aug. 2024.

MAKI, K. E.; B., Matthew K.; SULLIVAN, A. L. School psychologists' confidence in learning disability identification decisions. **Learning Disability Quarterly**, Thousand Oaks, v. 41, n. 4, p. 243-256, 2018. Available at:

<https://doi.org/10.1177/0731948718769>. Access at: 27 aug. 2024.

MAXQDA. **Software de análise qualitativa de dados**. Berlim, [s. d.]. Disponível em: <https://www.maxqda.com/brasil/software-analise-qualitativa>. Access at: 25 June 2025.

MENDES, L. S. *et al.* Conceitos de avaliação psicológica: conhecimento de estudantes e profissionais. **Psicologia: ciência e profissão**, Brasília, v. 33, n. 2, p. 428-445, 2013. Available at: <https://doi.org/10.1590/S1414-98932013000200013>. Access at: 27 aug. 2024.

MONTREUIL, T. C. The practice of school and educational psychology in Canada: the best is yet to come. **Canadian Journal of School Psychology**, Thousand Oaks, v. 31, n. 3, p. 155-159, 2016. Available at: <https://doi.org/10.1177/0829573516655231>. Access at: 27 aug. 2024.

MUÑIZ, J. *et al.* Testing practices in European countries. **European Journal of Psychological Assessment**, Göttingen, v. 17, n. 3, p. 201-211, 2001. Available at: <https://doi.org/10.1027//1015-5759.17.3.201>. Access at: 27 aug. 2024.

NOLAN, S. A.; HAKALA, C. M.; LANDRUM, R. **Assessing undergraduate learning in psychology**: strategies for measuring and improving student performance. Washington, DC: American Psychological Association, 2021. Available at: <https://doi.org/10.1037/0000183-000>. Access at: 27 aug. 2024.

NORONHA, A. P. P. *et al.* Conteúdos e metodologias de ensino de avaliação psicológica: um estudo com professores. **Paidéia**, Ribeirão Preto, v. 23, n. 54, p. 129-139, 2013. Available at:

<https://www.scielo.br/j/paideia/a/mh4k69GdFDqHrjYDbsX5k7x/?lang=pt>. Access at: 27 aug. 2024.

NUNES, M. F. O. Diretrizes para o ensino de avaliação psicológica. **Avaliação Psicológica: Interamerican Journal of Psychological Assessment**, Porto Alegre, v. 11, n. 2, p. 309-316, 2012. Available at: https://scholar.google.com.br/scholar?hl=pt-BR&as_sdt=0%2C5&q=Diretrizes+para+o+ensino+de+avalia%C3%A7%C3%A3o+psicol%C3%B3gica&btnG. Access at: 28 aug. 2024.

OLIVEIRA, K. L. D. *et al.* Produção científica em avaliação psicológica no contexto escolar. **Psicologia Escolar e Educacional**, São Paulo, v. 11, n. 2, p. 239-251, 2007. Available at: <https://doi.org/10.1590/S1413-85572007000200005>. Access at: 27 aug. 2024.

RIBEIRO, M. E.; SOLIGO, Â. F. Diretrizes curriculares e formação do psicólogo brasileiro: avanços, retrocessos e desafios. **Revista Integración Académica en Psicología**, Ciudad de México, v. 8, n. 22, p. 36-49, 2020. Available at: <https://www.integracion-academica.org/attachments/article/262/04%20Directrices%20curriculares%20MERibeiro%20AFSoligo.pdf>. Access at: 28 aug. 2024.

SHARP, K. *et al.* The relationship between RTI implementation and reading achievement: a school-level analysis. **Preventing School Failure: Alternative Education for Children and Youth**, Philadelphia, v. 60, n. 2, p. 152-160, 2016. Available at: <https://doi.org/10.1080/1045988X.2015.1063038>. Access at: 27 aug. 2024.

SIMÕES, M. R. *et al.* Testes psicológicos mais usados em Portugal: resultados de um inquérito a psicólogos portugueses. **Revista iberoamericana de diagnóstico y evaluación psicológica**, Madri, v. 2, n. 72, p. 91-110, 2024. Available at: <https://dialnet.unirioja.es/servlet/articulo?codigo=9643405>. Access at: 27 aug. 2024.

SOLIGO, A. F. *et al.* Formação em psicologia: estágios e avaliação psicológica. **Psicologia: Ciência e Profissão**, Brasília, v. 40, e243432, p. 1-18, 2020. Available at: <https://doi.org/10.1590/1982-3703003243432>. Access at: 27 aug. 2024.

SOUZA FILHO, J. A. *et al.* Notas sobre a formação do psicólogo escolar/educacional: revisão sistemática de 2009-2019. **Psicologia Escolar e Educacional**, São Paulo, v. 27,

2023. Available at: <https://www.scielo.br/j/pee/a/PxVnFFJ5WdbG5mRr9sZwRdS/>.
Access at: 27 aug. 2024.

SPRAGUE, J. R; BRADSHAW, C.. Closing in on discipline disproportionality: we need more theoretical, methodological, and procedural clarity. **School Psychology Review**, Bethesda, v. 47, n. 2, p.196-198, 2018. Available at: <https://doi.org/10.17105/SPR-2018-0017.V47-2>. Access at: 27 aug. 2024.

STEEGE, M. W. *et al.* **Conducting school-based functional behavioral assessments: a practitioner's guide**. New York: Guilford Publications, 2019.

STEIN, R.; ALBRITTON, K. Early childhood-focused training in school psychology. **Training and Education in Professional Psychology**, Washington, DC, v. 16, n. 1, p. 36–43, 2022. Available at: <https://doi.org/10.1037/tep0000350>. Access at: 27 aug. 2024.

SULLIVAN, A. L.; SADEH, S.; HOURI, A. K. Are school psychologists' special education eligibility decisions reliable and unbiased? A multi-study experimental investigation. **Journal of School Psychology**, Amsterdam, v. 77, p. 90-109, 2019. Available at: <https://doi.org/10.1016/j.jsp.2019.10.006>. Access at: 27 aug. 2024.

WATSON JUNIOR, M. D.; SIMON, J. B.; NUNNLEY, L. SLD Identification: a survey of methods used by school psychologists. **Learning Disabilities: A Multidisciplinary Journal**, Allison Park, v. 21, n. 1, p. 57-67, 2016. Available at: <https://doi.org/10.1866/LDMJ-2016-V21-I1-6392>. Access at: 27 aug. 2024.

WECHSLER, S. M.; HUTZ, C. S.; PRIMI, R. O desenvolvimento da avaliação psicológica no Brasil: avanços históricos e desafios. **Avaliação Psicológica: Interamerican Journal of Psychological Assessment**, Porto Alegre: v. 18, n. 2, p. 121-128, 2019. Available at: <http://dx.doi.org/10.15689/ap.2019.1802.15466.02>. Access at: 27 aug. 2024.

WILKINS, A. M. *et al.* Characteristics of psychologists assessing deaf and hard of hearing clients. **The Journal of Deaf Studies and Deaf Education**, Oxford, v. 27, n. 2, p.115-124, 2022. Available at: <http://doi.org/10.1093/deafed/enab039>. Access at: 27 aug. 2024.

WORDCLOUDS.COM. **Wordclouds – Gerador de Nuvem de Palavras**. Holanda, [s. d.]. Available at: <https://www.wordclouds.com/>. Access at: 25 june. 2025.

XIMENES, Jocélia Medeiros; ROCHA, André Sousa; COSTA, Maria Suely Alves.

Formação em avaliação psicológica no Ceará: uma análise sobre as ementas.

Scientia. Revista de Ensino, Pesquisa e Extensão, Bento Gonçalves, v. 7, p. 1-12, 2024. Available at: <https://publicacoes.flucianofejao.com.br/scientia/article/view/13>.

Access at: 27 aug. 2024.

Authors' contributions

Rafael Gustavo Maluf – Principal author of the article, responsible for the methodology, data compilation and analysis, interpretation and discussion of the results, and drafting of the manuscript.

João Arménio Lamego Lopes – Provided input on the methodology and critically reviewed the results, their interpretation, and the discussion section.

Célia Regina Gomes Oliveira – Provided input on the methodology and critically reviewed the results, their interpretation, and the discussion section.

Declaration of conflict of interest

The authors declare that there is no conflict of interest with the article "Analysis of initial training in school psychological assessment at higher education institutions in the state of Minas Gerais."

Reviewed by: Rafael Gustavo Maluf
E-mail: rafmaluf@gmail.com