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Conteúdos e Metodologias de Ensino de Avaliação Psicológica: um Estudo com Professores

Contents and Methods of Psychological Assessment Teaching: a Study Involving Professors

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Abstract: The aim in this study was to verify the contents taught and teaching methods used by undergraduate Psychology teachers, specifically in the subjects related to psychological assessment. A two-part questionnaire was used: the first part served to characterize the participants, and the second the subjects taught. Twenty-two teachers participated. Among the respondents, 72.7% were female, 77.3% were psychological assessment teachers and 45.5% had graduated from public universities. For the open question, about the subjects taught, analysis and expert analysis categories were established. About the subjects taught, most respondents teach the techniques and theoretical foundations of tests. In contrast, the history of assessment and the elaboration principles of psychological documents were the topics taught least.

Keywords: psychological assessment, course evaluation, psychometrics

Conteúdos e Metodologias de Ensino de Avaliação Psicológica: um Estudo com Professores

Resumo: O presente estudo teve como objetivo verificar os conteúdos ministrados e as metodologias de ensino utilizadas por professores de graduação em Psicologia, especificamente nas disciplinas relacionadas à avaliação psicológica. O instrumento utilizado foi um questionário com duas seções, a primeira com o objetivo de caracterizar os participantes, e a segunda abordando as disciplinas ministradas. Participaram do estudo 22 professores. Dos respondentes, 72,7% eram do sexo feminino, 77,3% eram docentes de avaliação psicológica e 45,5% se formaram em universidades públicas. Para a questão aberta, sobre as disciplinas ministradas, foram estabelecidas categorias de análise e análise de juízes. Pôde-se constatar que, quanto ao conteúdo ministrado, as técnicas são ensinadas pela maior parte dos respondentes, ao lado dos fundamentos teóricos dos testes. Em contrapartida, o histórico da avaliação e os princípios da elaboração de documentos psicológicos foram os menos contemplados.

Palavras-chave: avaliação psicológica, avaliação de curso, psicometria

Contenidos y Métodos de Enseñanza de Evaluación Psicológica: un Estudio con Maestros

Resumen: Este estudio tuvo como objetivo verificar el contenido y la metodología de enseñanza utilizada por profesores de grado en psicología, específicamente en las disciplinas relacionadas con evaluación psicológica. El instrumento utilizado fue un cuestionario con dos partes, la primera con objeto de caracterizar a los participantes y la segunda tratando de las asignaturas enseñadas. Participaron del estudio 22 profesores. De los respondientes, el 72,7% era mujer, 77,3% era profesor de evaluación psicológica y 45,5% era capacitado en universidades públicas. Para la pregunta abierta sobre las materias enseñadas, fueron establecidas categorías de análisis y de análisis de los jueces. Se encontró que, respecto al contenido ministrado, las técnicas son enseñadas por la mayoría de los encuestados, junto con los fundamentos teóricos de las pruebas. En contrapartida, la historia de la evaluación psicológica y los principios de la preparación de documentos fueron los menos enseñados.

Palabras clave: evaluación psicológica, evaluación de curso, psicometría

For some decades, studies have been published that discuss psychological education in Brazil, revealing that, as early as in the 1970's, educational agents were concerned with this issue (Pereira & Carellos, 1995). In accordance with Bettoi and Simão (2000), the fundamental aspect in this discussion is the question about which professional

one wants to prepare. In different fields of Psychology, the interest in more comprehensive education is observed, so as to enhance efficient multidisciplinary actions; with social commitment, so as to establish further communication between knowledge production and practice; and favorable to a change in stereotypes perceptions (Figueiredo & Rodrigues, 2004; Martins, Rocha, Augusto, & Lee, 2010; Romagnoli, 2006; Tonetto & Gomes, 2007). In line with this perspective, Nascimento, Manzini and Bocco (2006) affirmed that the reconstruction of *psi* practice would

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only be possible through resistance against technical and compartmentalized activity logic, produced by the consumption society professionals and teaching institutions are inserted in. Nevertheless, Hutz and Bandeira (2003) highlighted that the lack of consensus about what it means to be a psychologist does not favor the search for an answer to the above problem.

Authors suggest that psychologists should be permanent analysts of the situations their practice is linked with, not as experts, but as professionals capable of perceiving the contradictions inherent in their practice and having a view of the whole, and that they could also develop projects aiming for commitment to social change. Undergraduate Psychology programs, however, prepare specialized professionals for practice in private offices (Meira & Nunes, 2005; Nunes et al., 2012), maintaining a perception of psychologists as autonomous professionals and clinicians, as reflected in newly graduates' preference of this activity area and in the maintenance of a traditional professional profile (Bardagi, Bizzarro, Andrade, Audibert, & Lassance, 2008; Meira & Nunes, 2005).

Bock (1999) criticizes this education based on 'Traditional psychology', characterized by distancing from the Brazilian reality, and which does not use in-class debate and does not demand academic work and exercise. The author appoints the teaching of many techniques, the lack of research development, the absence of space for criticism and experience exchange and the non-valuation of teaching other than psychological knowledge as the main factors responsible for insufficient education. In addition, the distancing between theory and practice is highlighted, which can be explained by the classical psychological education model, in which no articulation exists between scientific education, aimed at knowledge production, and technological education, focused on service delivery (Francisco & Bastos, 1992).

Specifically related to psychological education and assessment, difficulties get more intense. According to Hutz and Bandeira (2003), the social demand for psychological assessment has increased, but ignores the peculiarities in the area. In addition, undergraduate programs have not addressed the education that is both necessary and desirable to work with psychological assessment. Thus, the prerequisite to practice this activity is an undergraduate degree in psychology, which could suggest further highlight on teaching in the area, as using tests is an exclusive competence of psychologists.

In a historical perspective, one important factor in Brazil and around the world was the crisis in the 1960's, due to the growth of paradigms against test use and against the unjustified expectations attached to psychological test results. Non-compliance with the objectives the instruments proposed, as their constructions were still limited and normally destined for other cultures, entailed disillusion with their use. The crisis started to be overcome in the USA in the 1980's, and in Brazil in the mid-1990's. Since then, an increase in the number of laboratories was observed, as well as the creation of laboratories and research areas in graduate programs and the valuation of scientific publications (Custódio, 2007; Hutz & Bandeira, 2003; Urbina, 2007).

Besides these actions, as from 2001, the Federal Board of Psychology (CFP) launched a movement to improve the quality of the psychological instruments traded in Brazil. It should be highlighted, however, that the reflexes of the so-called "1960's crisis" continue until today, in view of the above described concerns that psychologists have not received appropriate professional preparation for the psychological assessment area (Alves, 2009; Hutz & Bandeira, 2003).

In that sense, Simões (1999) discusses psychological assessment-related teaching and learning and argues that academic education is general, insufficient, reduced and incompatible with psychological assessment demands. The author proposes that teaching on psychological tests should address theoretical and practical contents referent to psychological assessment methods, techniques and instruments, besides the elaboration of psychological reports.

Good professionals, according to Wechsler and Guzzo (2006), understand the meaning of psychological assessment. The authors consider that this is a complex area, due to its organization in different important dimensions with a view to its scientific and practical development. Aspects like the problem definition, ways to solve or understand it, elaboration of diagnostic synthesis and intervention planning do not always figure among psychologists' knowledge and competences though. The lack of elaboration on these issues in the educational context makes this a vulnerable field of professional education.

In an analysis of recent data from the National Student Performance Survey (Enade) by Souza, Bastos and Barbosa (2011), psychology students' performance in Brazil was shown. With regard to specific knowledge, five structural axes exist, which are: Historical and epistemological fundamentals, Research and measures, psychological processes, Interfaces and Professional practices, which permit identifying what has been emphasized in psychology teaching. Findings referent to Enade 2006 indicate greater knowledge on basic processes but little knowledge on research and measures, revealing that education prioritizes knowledge about the main psychological constructs, while measures and the research process have been hardly explored.

As regards generalist education, Bock (1999) suggests changes that are not only aimed at the curriculum; the author defends the promotion of changes in the conception of the professional profile, including reviews of mental health concepts, the concept of the subject, the social model

and the view of science and the research methods used. If these elements were attended to, professionals could be prepared who are capable of undertaking pluralistic, critical and transformative practice.

Almost two decades ago, Francisco and Bastos (1992) affirmed they believe that Brazil was characterized as a consumer or adapter of scientific knowledge produced in the first world, as Brazilian production was limited and inferior to the demands the cultural context imposed. Explanatory factors are incipient research and its inappropriate distribution across the Brazilian territory, so that uniform growth is lacking. Also, the presence of research in undergraduate programs remains limited and in many cases absent, contributing to low Brazilian production levels. Although the author's text is not recent, the considerations have not become obsolete. According to Noronha and Alchieri (2004), regarding scientific production in the area, the current scenario is very expressive, but faculty who teach psychological assessment still use classical materials, such as tests and books, while few professionals get hold of up-to-date papers in their teaching practice.

Considering the teaching of assessment techniques, according to Pereira and Carellos (1995), students are prejudiced towards the desire to learn; although the authors acknowledge that precarious theories and technical production, to the detriment of theoretical production, also favors stagnation in the area as a whole. In most schools, the modern perspective of psychometrics is not used and, in most cases, test manuals are inconsistent, leaving little material for faculty updates and recycling.

According to Alchieri and Bandeira (2002), there seems to be no concern with the theoretical fundamentals of psychological assessment techniques and instruments; consequently, students almost exclusively start to master the technique, without the critical reasoning needed for its administration. Hutz and Bandeira (2003) highlight two problems in education, the lack of qualified faculty and the lack of consensus about how undergraduate psychology education should take place. As for psychological assessment, the situation is particularly severe, considering the lack of consensus on the understanding that this is actually a field of psychology, or that training in this field is fundamental. For the sake of final consideration, the authors indicate the need to establish basic contents to be offered at undergraduate level and to develop faculty qualification programs.

In this respect, the recent initiative by a group of psychological assessment faculty and researchers should be highlighted, who elaborated a document "Guidelines for psychological assessment teaching" (Nunes et al., 2012), in which a proposal is presented of desirable components for inclusion in psychological assessment subjects offered throughout the psychology program. The document covers four aspects, that is, minimum competences to be reached in psychological assessment; suggested subjects and program contents, aligned with the expected competences; teaching structure, involving the infrastructure needed, teaching methods, teacher education and other important orientations and, finally, a list of bibliographic references for use in subjects in the area. This document is expected to serve as a reference for course coordinators and faculty teaching psychological assessment subjects.

A clear relation exists between problems in psychological instruments and problems in professional education for psychologists, who build and use these tests. In that sense, professional education should be improved, as the technical knowledge gained in this process is considered the main cause of inappropriate practices (Alves, 2009). Other authors consider that a five-year education program in psychology cannot qualify professionals in all knowledge area, including psychological assessment, thus evidencing the need to keep up studying after obtaining an undergraduate degree (Hays & Wellard, 1998).

Sbardelini (1991) had already appointed the importance of teaching on psychological tests, focusing on three basic aspects, which are: when to teach psychological tests, what to teach and how to teach psychological tests. The author highlights that the teaching of psychological test techniques is premature, as they are taught as from the second year of college, when students get in touch with specific Psychology subjects and have no basic knowledge yet that is fundamental to understand the techniques. Regarding what to teach, the discussion emerges about the number vs. quality of the tests. In response, it is proposed that students be trained to think and research about tests, limitations, ranges, depths and extents of their applicability. In inquiries about how to teach, the importance is highlighted of not detaching the teaching method from the view one holds of man and the world, as well as the need to get to know the theories underlying the different instruments. Concerning the problems raised in psychological test teaching, it is concluded that teaching is directly linked with the professionals who teach and requires their involvement.

As highlighted by Pasquali (2001), increased concerns with the quality of psychological instruments could be observed, with a view to reliable information collection for the advancement of psychological knowledge. Professional competition has been closing in on the quality of the service delivered to society, demanding service quality guarantees from professionals, also for their survival. In a globalized world, quality requirements have increased; appeals seem to focus on the assessment of individual skills, competences and qualifications to guarantee this quality in advance.

In the field of past research to reflect on psychological assessment in general or teaching about tests in particular, some will be highlighted, which reveal to be more coherent with the present research. Vendramini and Lopes (2008) attempted to identify the difficulties 30 professionals and

30 psychology students experienced to read statistical information in psychological test manuals. The findings revealed that less than half of the psychologists and students read information about validity and precision evidence, and that the topics both samples take the least interest in also relate to psychometric properties. The findings show a contradiction, as 29.2% of the professionals consider reading these data important to remain up-to-date and 39.1% of the students justify that this information is useful with a view to safe test use.

Primi (2010) outlined a panorama of the main issues in the psychological assessment area in Brazil since 1985. In this documents, the author establish epistemological fundamentals for the area, drew a historical picture of events and productions and described the production of instruments and the creation of SATEPSI. Finally, four future perspectives were appointed, namely: methodological and technological advances, integration among approaches and advances of their methods, consequential validity and social relevance, and encouragement for education and the creation of a specialty area in psychological assessment.

To investigate the influences of practicums developed in the subject Psychological Test Techniques, specifically on personally tests, Lima (2001) collected answers from 150 Psychology students from a private university in São Paulo. The data were collected through a questionnaire, which contained six questions about the concern and time spent on rules from the Applied Psychology Sector, application techniques, assessment and interpretation of the tests studies, understanding of the collaborator, application technique, interpretation and adherence to the test studied, considerations about psychological test practicums, among others. In general, the students displayed average knowledge levels about the application techniques of the tests studied and also about the theoretical background; greater concerns with the test aspects (including application, assessment, interpretation and time) and less understanding about the client; low knowledge levels about the meanings of the items to interpret the tests; good understanding about the meaning of the test and few learning resources. It was concluded that the quality of teaching about techniques precedes the quantity, and that practicums should be dosed as, the greater the burden of these activities, the lesser the understanding about the theoretical background and the greater the probability of decoration.

Noronha, Nunes and Ambiel (2007) researched on the importance granted and the perceived mastery of psychological assessment competences among 112 students in Mato Grosso. Less importance was granted to notions of statistics and knowledge on a wide range of tests, while ethical principles, communication of results, knowledge on psychopathology and use and interpretation of tests were considered more important. In the domains, the highest mean scores were found for ethical principals, complete reading of manuals, appropriate test conditions and use of tables from manuals, while lower scores were found for knowledge on a wide range of tests, psychopathology, elaboration of opinions, notions about the construction of instruments and knowledge about the constructs assessed.

Padilha, Noronha and Fagan (2007) investigated the use of psychological assessment instruments. Participants were 85 psychologists from Santa Catarina, 49.4% of whom held an undergraduate and 47.2% a specialist degree. Half of the participants (50.6%) worked in Clinical psychology and 28.2% in Organizational psychology, among others. Most professionals ($N = 50$) declared they did not use psychological tests, due to a lack of mastery and knowledge about the instruments, mainly because of educational gaps. In fact, 52.3% of the participants assessed their psychological assessment background as unsatisfactory and 40.7% as quite satisfactory.

Applying a Psychological Assessment knowledge test, Noronha, Baldo, Barbin and Freitas (2003) compared knowledge levels among 180 students in the first and fifth year of a psychology program. The instrument addressed questions about the psychological assessment concept, learning and instrument use. The worst results were related to the items that involved aspects the instrument assessed, like the assessment and instrument concepts, use and learning of instruments. The authors highlighted that all subjects left 37.8% of the items unanswered and that, in general, fifth-year students obtained better averages than first-graders, as expected. Surprisingly, however, first-year students scored better on approximately 20% of the test.

In a similar study, Noronha et al. (2004) compared Psychological Assessment knowledge levels among 146 psychology and 47 engineering students. The same instrument was applied as in the previous study. The results showed that the psychology students performed better on 20 questions. Engineering students, however, performed better on questions that addressed learning about tests and psychological assessment concepts, specifically linked with the importance of psychological assessment and assessment objectives. In these studies, conclusions related to incongruent results and academic education gaps, considering that first-year students and students from another program scored better than students who were graduating from the psychology program, if not on most parts of the domains assessed, then definitely on basic psychological assessment aspects (Noronha et al., 2003, 2004).

A study by Noronha et al. (2005) was aimed at analyzing 39 summaries of psychological assessment subjects taught at 14 Brazilian universities. Sixteen analysis categories were established, referent to types of tests studied, theoretical contents, techniques and psychological

assessment, ethical issues and elaboration of expert opinions. The findings indicated that the most identified categories were projective techniques, personality test, psychological tests and intelligence tests, while the least frequent categories relate to psychometric instruments, situational tests and psychomotor assessment. The authors appoint the existing diversity among universities as relevant, as well as the exaggerated number of components taught, which according to them indicates the lack of understanding about the best route towards appropriate education.

In view of the above, investigating what is taught and how this teaching is processed is considered a starting point to address the problem of psychological assessment teaching. Therefore, the aim in this study was to verify the components and teaching method used by undergraduate faculty members in Psychology, specifically in the subjects related to psychological assessment.

Method

Participants

Psychological assessment faculty members were invited to participate in the research. Thirty-five faculties agreed to participate, but only 22 fully answered the questionnaire. The remainder answered by justifying their impossibility to answer, quoting reasons like not teaching the psychological assessment subject in that semester or not teaching at the time of the research for example. Among the respondents, 72.7% were female, 77.3% were psychological assessment teachers, with a mean 13.8 years of education ($SD = 8.87$). The respondents' average age was 38.8 years ($SD = 9.96$). As regards their educational background, 45.5% graduated from public and 45.5% from private universities; in addition 63.6% were involved in other professional activities besides teaching.

Instrument

A questionnaire was elaborated for data collection, organized in two sections. The first was aimed at characterizing the participants, while the second addressed the subjects taught. Information was requested regarding gender, age, time since graduation, university of graduation, whether the faculty teaches psychology, whether (s)he teachers psychological assessment subjects, and whether (s)he is involved in other professional activities besides teaching. The second part was related to the components and methods applied in the subjects the faculty teaches or has taught.

Procedure

Data collection. Participants were contacted by e-mail, complying with the necessary ethical guidelines.

The e-mail addresses were collected through information available on the websites of Brazilian universities that offer Psychology programs. E-mails from the authors' personal network were also used.

Data analysis. For open questions, addressing the contents taught in class and the method applied, analysis categories were established, in accordance with Bardin (2009). For the analysis, five independent experts participated, who were Ph.D. students from a graduate Psychology program and corrected four randomly chosen protocols. The 11 analysis categories are described in the Results section. Then, the data were analyzed through non-parametric statistics, using SPSS software.

Ethical Considerations

This paper derives from a broader project by the first author, aimed at analyzing psychology students, professionals and faculty members' knowledge about psychological assessment. Therefore, authorization was sought and obtained from the Research Ethics Committee at Universidade São Francisco. All ethical guidelines for scientific research were respected.

Results

To comply with the proposed objectives, first, the categorization of answers will be explained, followed by the presentation of descriptive statistics. The analysis of the two open questions on the contents taught in class and the method applied was based on content analysis (Bardin, 2009). Eleven analysis categories were established, described next.

From the *Contents Taught*, the following categories were organized: (1) History of Psychological Assessment and/or Psychometrics, which joined arguments about the start of test construction; (2) Fundamentals of Psychometrics, which included answers about the psychometric characteristics of instruments, such as standardization, normalization, validity, precision and statistical principles; (3) Theoretical Fundamentals of Tests addressed basic theories about the tests taught in the subjects; (4) Psychological Assessment techniques focused on the teaching of interview, observation and testing techniques; (5) Elaboration of Documents like Opinions and Reports involved contents related to the elaboration of diagnostic opinions and reports, like "elaboration of psychological opinion" for example; and, (6) Ethics in Psychological Assessment included answers related to the ethical and deontological principles of Psychological Assessment.

As regards the second question, *Teaching Method used during the subjects,* the following categories were considered: (7) Lectures; (8) Group Activities, a category that joined arguments mentioning seminars, directed study,

among others; (9) Practicums, a category that includes the application of tests, interviews, observation and psychodiagnosis; (10) Elaboration of Opinions, Reports, among others; and, (11) Simulated Application, a category that refers to the application of tests among course students and similar activities.

The five independent experts, who corrected four randomly chosen protocols, analyzed the 11 categories. Categories 4 (Psychological Assessment Techniques) and 11 (Simulated Application) obtained the lowest inter-rater agreement levels, with 70 and 75%, respectively, although both were considered reasonable. On the other hand, agreement levels were satisfactory (higher than 85%) for categories 1 (90%), 2 (95%), 3 (85%), 5 (90%), 6 (95%), 7 (100%), 8 (100%), 9 (90%) and 10 (95%). Then, three experts re-examined and rewrote categories 4 and 11, resulting in: (4) Psychological Assessment Techniques (teaching on interview, observation and psychological test application and correction techniques), and (11) Simulated Application (application of psychological tests among

course students, without involving external collaborators like patients or people not linked to the psychology program).

After the re-elaboration, a new expert analysis took place, only focusing on the categories that had been rewritten, resulting in satisfactory inter-rater agreement levels for category 4 (80%) and 11 (90%). To illustrate the categories, some answers will be listed: History of Psychometrics and Psychological Assessment in Brazil (category 1), Psychological Assessment resources and instruments (category 4), Dialogued lectures (category 7), Seminars on themes related to course contents (category 8).

Thus, 11 analysis categories remained. Then, three experts assessed all protocols. It was defined that the presence of the category would be scores as 1 and its absence as 0. In those cases when the experts attributed different scores, a consensus was sought.

After the categorization, the data were analyzed through specific statistical tests. Table 1 displays data on the frequency of analysis categories in the questionnaires.

Table 1
Frequency of Analysis Categories

	M	*SD*	Presence		Absence	
			f	%	*f*	%
Contents Taught						
History of Psychological Assessment and/or Psychometrics	0.32	0.48	7	31.8	15	68.2
Fundamentals of Psychometrics	0.59	0.50	13	59.1	9	40.9
Theoretical Fundamentals of Tests	0.68	0.48	15	68.2	7	31.8
Psychological Assessment Techniques	0.73	0.46	16	72.7	6	27.3
Elaboration of Documents	0.36	0.49	8	36.4	14	63.6
Ethics in Psychological Assessment	0.36	0.49	14	63.6	8	36.4
Teaching Method						
Lectures	0.86	0.35	19	86.4	3	13.6
Group activities	0.68	0.48	15	68.2	7	31.8
Practicums	0.73	0.46	16	72.7	6	27.3
Elaboration of expert Opinions, Reports, Documents	0.32	0.48	7	31.8	15	68.2
Simulated Application	0.45	0.51	10	45.5	12	54.5

The results indicated that, as regards the contents taught, most respondents teach the techniques, as well as theoretical fundamentals of the tests. On the opposite, the history of assessment and the elaboration principles of psychological documents were the least taught. The preferred teaching method is the lecture, to the detriment of the elaboration of opinions and reports. It should be highlighted that four participants mentioned the analysis of test manuals as a proposed student activity.

When answering the questionnaire, the participants could define themselves as faculty in the field of psychological assessment or not. Seventeen respondents declared teaching in the area and five did not. The latter group includes faculty members who have taught related

subjects but do not focus on this area, as well as those who do not teach in the area, but include some contents, like executive function assessment in the subject "Neuroscience of Behavior" for example. In Table 2, possible differences between these groups are analyzed in the categories studied.

Four analysis categories showed significant differences between faculty members who declared they belonged to the psychological assessment areas and those who did not, which are Fundamentals of Psychometrics, Theoretical Fundamentals of Psychological Tests, Assessment Techniques and Practicums, with higher means for faculty from the psychological assessment area. In the categories History of Psychological Assessment, Ethics in Psychological Assessment, Simulated Application and

Document Elaboration, faculty from the area obtained higher mean scores, although the Mann-Whitney test indicated no significant differences between the groups. Except for Simulated Application, in the other categories, the frequencies for faculty members who do not belong to the Psychological Assessment area are equal to zero.

The participants also indicated the nature of the institution they graduated from. Ten of them graduated from public colleges, 11 from private institutions and one did not answer. Based on this information, differences were investigated between these two groups' mean scores (Table 3).

Table 2

Difference of Means in Relation to Being or Not a Psychological Assessment Teacher

	area	N	presence f	presence %	M	SD	Median	U	p
Contents Taught									
History of Psychological Assessment and/or Psychometrics	yes	17	7	41.2	0.41	0.51	0	25.00	0.090
	no	5	0	-	-	-	0		
Fundamentals of Psychometrics	yes	17	12	70.6	0.71	0.47	1.00	21.00	0.048
	no	5	1	20.0	0.20	0.45	0		
Theoretical Fundamentals of Tests	yes	17	14	82.4	0.82	0.39	1.00	16.00	0.010
	no	5	1	20.0	0.20	0.45	0		
Psychological Assessment Techniques	yes	17	15	88.2	0.88	0.33	1.00	13.50	0.003
	no	5	1	20.0	0.20	0.45	0		
Elaboration of Documents	yes	17	8	47.1	0.47	0.51	0	22.50	0.060
	no	5	0	-	-	-	0		
Ethics in Psychological Assessment	yes	17	8	47.1	0.47	0.51	0	22.50	0.060
	no	5	0	-	-	-	0		
Teaching Method									
Lectures	yes	17	14	82.4	0.82	0.39	1.00	35.00	0.323
	no	5	5	100.0	10.00	0.00	1.00		
Group activities	yes	17	11	64.7	0.65	0.49	1.00	36.00	0.528
	no	5	4	80.0	0.80	0.45	1.00		
Practicums	yes	17	15	88.2	0.88	0.33	1.00	13.50	0.003
	no	5	1	20.0	0.20	0.45	0		
Elaboration of expert Opinions. Reports. Documents	yes	17	7	41.2	0.41	0.51	0	25.00	0.090
	no	5	0	-	-	-	0		
Simulated Application	yes	17	9	52.9	0.53	0.51	1.00	28.50	0.204
	no	5	1	20.0	0.20	0.45	0		

The sole analysis category that revealed significant differences was Practicums, indicating that faculty members who graduated from private colleges more frequently used assessments as a methodological teaching resource when compared to those who graduated from public institutions. In this case, only 40% of faculty from public institutions declared they propose such activities to their students, against 100% of faculty from private colleges. Frequencies in the other categories were very low in both groups.

Discussion

The aim in this study was to assess how psychological assessment has been taught in Psychology program at Brazilian institutions. Concerns with the quality of psychological education in Brazil date back to the 1970's (Pereira & Carellos, 1995). In other words, the problem has

accompanied psychologists ever since the profession was first regulated in the country.

In a more global context, criticism against Brazilian psychologists' educational background appoint that education is distanced from the Brazilian reality (Bock, 1999) and incapable of preparing future psychologists for the true demands of their profession, due to the reproduction of a model that does not enhance the relation between scientific background and praxis (Bock, 1999; Francisco & Bastos, 1992; Simões, 1999; Souza et al., 2011; Wechsler & Guzzo, 2006).

As regards psychological assessment teaching, the view is more pessimistic. On the one hand, the increased social demand for psychological assessment is discussed, as an exclusive activity of psychologists (Hutz & Bandeira, 2003). On the other hand, it is evidenced that newly graduates lack competency to execute it, due to a deficient

educational background, with emphasis on traditional Psychology, in which psychological assessment has been neglected (Alves, 2009; Blanco, 1998; Book, 1999; Hutz & Bandeira, 2003; Meira & Nunes, 2005; Pasquali, 2001). The same picture reflects a crisis in psychological assessment that goes back to the 1960's (Custódio, 2007; Hutz & Bandeira, 2003; Urbina, 2007) and has not been fully overcome yet, despite the efforts made.

Table 3
Difference of Means in Relation to the Type of University where the Faculty Teaches

	Type of university	N	Presence		M	SD	Median	U	p
			f	%					
Contents Taught									
History of Psychological Assessment and/or Psychometrics	public	10	4	40.0	0.40	0.52	0	43.00	0.281
	private	11	2	18.2	0.18	0.40	0		
Fundamentals of Psychometrics	public	10	5	50.0	0.50	0.53	0.50	47.50	0.538
	private	11	7	63.6	0.64	0.50	1.00		
Theoretical Fundamentals of Tests	public	10	7	70.0	0.70	0.48	1.00	51.50	0.763
	private	11	7	63.6	0.64	0.50	1.00		
Psychological Assessment Techniques	public	10	6	60.0	0.60	0.52	1.00	43.00	0.281
	private	11	9	81.8	0.82	0.40	1.00		
Elaboration of Documents	public	10	4	40.0	0.40	0.52	0	48.00	0.546
	private	11	3	27.3	0.27	0.47	0		
Ethics in Psychological Assessment	public	10	2	20.0	0.20	0.42	0	41.00	0.228
	private	11	5	45.5	0.45	0.52	0		
Teaching Method									
Lectures	public	10	9	90.0	0.90	0.32	1.00	50.50	0.602
	private	11	9	81.8	0.82	0.40	1.00		
Group activities	public	10	7	70.0	0.70	0.48	1.00	53.50	0.893
	private	11	8	72.7	0.73	0.47	1.00		
Practicums	public	10	4	40.0	0.40	0.52	0	22.00	0.003
	private	11	11	100.0	1.00	0.00	1.00		
Elaboration of expert opinions. reports. documents	public	10	2	20.0	0.20	0.42	0	41.00	0.228
	private	11	5	45.5	0.45	0.52	0		
Simulated application	public	10	5	50.0	0.50	0.53	0.50	52.50	0.839
	private	11	5	45.5	0.45	0.52	0		

The results found in this research reflect these opinions. The most cited contents were related to psychological assessment instruments, that is, assessment techniques, practicums and theoretical foundations of the tests, in that order. On the opposite, categories related to the context of psychological assessment were less mentioned as a study area in psychology. The same is true for its relation with society, like in ethical issues and the elaboration of documents. Other studies have already appointed a trend towards technical education on psychological assessment, with emphasis on its instruments and limited mastery of ethical aspects, elaboration of expert opinions and consequences of the assessment process (Lima, 2001; Noronha & Alchieri, 2004; Noronha et al., 2003, 2004, 2007), although these competences are appointed as necessary with a view to a broader understanding about psychological assessment and are desirable for good professionals (Nunes et al., 2012; Wechsler & Guzzo, 2006).

The nature of the institution where the faculty members graduated does not seem to be related to the contents they teach or the method used. This is the case for practicums only, a category that exactly represents psychological assessment practice in real-life diagnostic situations, which showed a significant difference between faculty who graduated from private and public colleges, with higher frequencies for the former.

On the opposite, teaching in the psychological assessment area or not is a variable that interferes more strongly in the contents addressed and teaching method. In this case, practicums, psychological assessment techniques, theoretical foundations of tests and psychometrics were more frequent categories for faculty members who teach psychological assessment.

This fact is very coherent and partially positive as, in all categories, the frequencies found were high for 'expert' faculty. This suggests that these faculty members, independently from their educational background, are concerned with the

basic contents needed for professional practice. Diagnosis documents and ethical care in psychological assessment, however, were declared as activities and contents only about half of the sample addressed. These categories were also the least frequent, together with simulated test application.

When analyzing the general frequency of the categories, however, practicums, psychological assessment techniques and theoretical fundamentals of tests were the most cited categories, as opposed to ethical care and fundamentals of Psychometrics. Noronha and Alchieri (2004) found similar results in their assessment of course summaries related to psychological assessment.

The more limited concern with the fundamentals of psychometrics is also in accordance with studies that evidenced psychology students' difficulties with basic psychological assessment concepts (Noronha et al., 2003, 2004) and professionals and students' devaluation of psychometric information in test manuals (Vendramini & Lopes, 2008). It is highlighted that four faculty members specifically affirmed that they proposed the assessment of test manuals as a classroom activity, which seems to be very positive. The fact that students tend to read test manuals (Vendramini & Lopes, 2008) and the presence of teachers who encourage this practice can result from discussions and efforts to improve the area (Hutz & Bandeira, 2003; Pasquali, 2001), indicating favorable perspectives. Although research involving Psychology students and psychologists have demonstrated gaps in psychological assessment teaching, it would be interesting to compare students and professionals who graduated before the revitalization process of the area in Brazil, with a view to checking for possible differences in terms of competences and knowledge.

Although the study of test fundamentals, the assessment process in practice and knowledge about assessment techniques should be a concern in psychologists' education (Nunes et al., 2012; Pereira & Carellos, 1995; Sbardelini, 1991), these findings point towards education focused on technique, without any broader reflection on the psychological assessment process (Bock, 1999; Noronha et al., 2005; Pereira & Carellos, 1995; Souza et al., 2011). In fact, the decontextualization of psychological assessment practice, besides the limited mastery of test conditions, has been one of the main sources of criticism against the area in Brazil (Noronha & Alchieri, 2004; Primi, 2010; Sbardelini, 1991). In accordance with Simões (1999), psychological assessment teaching is still insufficient to prepare professionals who are competent to respond to psychological assessment demands.

Despite the growing pressure towards the preparation of socially committed professionals with competences to critically analyze their practice and scientific production (Figueiredo & Rodrigues, 2004; Martins et al., 2010; Nunes et al., 2012; Romagnoli, 2006; Tonetto & Gomes, 2007), in general, authors who discuss education in psychology indicate a lack of consensus on the type of professional desired. This is no different in the field of psychological assessment (Bettoi & Simão, 2000; Hutz & Bandeira, 2003; Primi, 2010). This lack of definition creates difficulties to determine what contents and technical methods need to be prioritized in basic education, which does not permit the establishment of skills and competences expected from newly graduates.

Final Considerations

Despite intense discussions and efforts to improve psychological assessment teaching in Brazil, with a view to preparing professionals with a broad and contextualized understanding of the assessment process, who master basic concepts, techniques and assessment instruments, and who are aware of the ethical consequences of their work, practical results still seem incipient. In this study, the ongoing emphasis of psychological assessment instruments was verified, with little effort to construct a critical attitude.

These conclusions should be analyzed with caution though, because of the small number of participants who cooperated with the research. This fact can be understood as an important sign, which may reflect faculty members' lack of interest in the theme. Anyway, with a view to a greater power of inference, this study should be broadened *a posteriori* and perhaps associated with other variables, such as the degree of importance faculty members attribute to each component taught.

Therefore, investigating the state of the art of psychological assessment teaching, professionals' competency level and the relation among praxis, scientific production and social demand is fundamental to clarify the weak and strong points of this area in Brazil. In addition, this information can help to set a standard of excellence for psychologists and the means to achieve it.

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