

Scientific production in psychological evaluation in the school/educational context

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Abstract

The present study investigated the scientific production in psychological evaluation in the school / educational context between 2005 and 2015. We analyzed 94 articles from 11 scientific journals classified as A1 and A2. The results showed that the journals Psico-USF, Psychology: Reflection and Criticism, and Brazilian Journal of Professional Orientation, stood out. Researches developed in partnership and, by both sexes, were the most frequent, as well as the thematic psychometric properties / instrument construction. It had also observed that 36.6% of the work involved up to 200 participants and that the studies had carried out predominantly with Higher Education and based on psychometric / factorial type evaluations. The articles used a great variability of techniques in the evaluations carried out, and the most used instrument was the Professional Counseling Scale (EAP).

Keywords: Psychological evaluation; school environment; scientific research.

Produção Científica em avaliação psicológica no contexto escolar/educacional

Resumo

O presente estudo investigou a produção científica em avaliação psicológica no contexto escolar/educacional entre 2005 e 2015. Foram analisados 94 artigos de 11 periódicos científicos classificados como A1 e A2. Os resultados evidenciaram que as revistas Psico-USF, Psicologia: Reflexão e Crítica e Revista Brasileira de Orientação Profissional, se destacaram. Pesquisas desenvolvidas em parceria e, por ambos os sexos, foram as mais frequentes, assim como a temática propriedades psicométricas/construção de instrumentos. Observou-se, ainda, que 36,6% dos trabalhos envolviam até 200 participantes e que os estudos foram realizados predominantemente com o Ensino Superior e com base em avaliações do tipo psicométrica/fatorial. Os artigos empregaram uma grande variabilidade de técnicas nas avaliações realizadas, sendo que o instrumento mais utilizado foi a Escala de Aconselhamento Profissional (EAP).

Palavras-chave: Avaliação psicológica; ambiente escolar; pesquisa científica.

Producción científica en evaluación psicológica en el contexto escolar/educacional

Resumen

En el presente estudio se investigó la producción científica en evaluación psicológica en el contexto escolar/educacional entre 2005 y 2015. Se analizaron 94 artículos de 11 periódicos científicos clasificados como A1 y A2. Los resultados evidenciaron que las revistas Psico-USF, Psicología: Reflexión y Crítica y Revista Brasileña de Orientación Profesional, se destacaron. Investigaciones desarrolladas en alianza y, por ambos sexos, fueron las más frecuentes, así como la temática propiedades psicométricas/construcción de instrumentos. Se observó, aún, que el 36,6% de los estudios abarcaban hasta 200 participantes y que los estudios se realizaron predominantemente con la Enseñanza Universitaria y con base en evaluaciones del tipo psicométrica/factorial. Los artículos emplearon una gran variabilidad de técnicas en las evaluaciones realizadas, siendo que el instrumento más utilizado fue la Escala de Asesoramiento Profesional (EAP).

Palabras clave: Evaluación psicológica; ambiente escolar; investigación científica.

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Introduction

Researchers driven by the will and / or need to know what has already been produced, to devote more and more attention to the studies carried out, to evaluate and reflect on the accumulated knowledge and to disseminate it to society have used the methodological option called the state of art (Ferreira, 2002). Systematic research on scientific production goes beyond the usefulness and needs of researchers, as they also contribute to raising possible guidelines for new themes of study and distribution of fomentation (Witter, 2005). The periodical evaluations provide qualitative information that has given support to the establishment of scientific management policies.

The study that addresses only one type of publication on the subject analyzed has called the "state of knowledge". This methodology differs from the state of the art, according to Romanowski and Ens (2006), since to be considered as such the study must cover an entire area of knowledge, in the different aspects that generated productions. For this reason, it is not enough just studying the abstracts of dissertations and theses, but also works on the productions in congresses in the area and the publications in periodicals of the area, as in the case of this research that will analyze only the latter type.

The analysis of scientific production is relevant in all areas of knowledge, since, according to Witter (1999), this analysis makes it possible to verify the quality of what has published, being possible to visualize changes in knowledge sub-areas and, even subjects. This has repercussions on the psychological evaluation, since it can apply to the different contexts of professional performance in psychology, for example, organizational, traffic and school, the latter chosen to have its publication analyzed. In this study, all forms of evaluation has accepted, even with tests in the health area, for example, but used in the school context.

Through psychological evaluation it is possible to investigate, describe and / or measure psychological characteristics and processes, such as emotion, affection, cognition, intelligence, motivation, personality, attention, memory, perception, among others (CFP, 2013; Urbina, 2007). A flexible process aims to achieve a consideration of one or more psychological questions. The educational psychology evaluation contributes to the development and improvement of measures that allow verification of student performance and, subsequently, if necessary, intervention programs can implement to improve the quality of teaching and learning.

However, the subject of evaluation in the field of Educational Psychology raised questions about the use of measurement instruments, such as scales and tests, which generated mistrust regarding its use in the school environment. The claims, in general, were that the tests served only a classificatory resource (Oliveira et al., 2007). According to Oliveira and Marinho-Araújo (2009), this view has been modified with the increase of research in the educational area, the critical review of the impact of the use of instruments, the focus of School Psychology for preventive actions, and the

withdrawal of the individual's emphasis, taking into account other variables of the teaching and learning process.

Several researches have conducted on scientific production in the area of educational psychological assessment. In this paper we present the results of a study carried out in: databases (Barroso, 2010, Joly et al., 2010, Polydoro et al., 2016, Schelini et al., 2016, Silva & Wechsler, 2014, Silva et al., 2013, Suehiro & Lima, 2016); (Silva and Nakano, 2011). The results of the analysis of the events (Campos et al., 2014; Cosmo & Urt, 2009; Piovezan & Cardoso, 2015); specific magazines such as School and Educational Psychology (Cosmo & Urt, 2009; Polydoro & Freitas, 2010); and dissertations or theses (Joly et al., 2010; Silva et al., 2013).

As for the search criteria in the studies, there was the theoretical approach (Cosmo & Urt, 2009; Nunes, Alves, Raiminho, & Aquino, 2014); (1998), and the use of meta-research criteria, such as authorship, thematic, discourse and analysis of the types of evaluations (Barroso, 2010; Silva et al., 2010; Silva and Nakano, such as metacognitive monitoring (Schelini et al., 2016). Also, cognitive styles (Silva & Weschler, 2014), social and emotional variables (Ambiel, Pereira, & Moreira, 2015) (Piovezan & Cardoso, 2015), creativity and innovation (Campos et al., 2014). As well as, the use of evaluation tools in the research involving graduate students of Brazilian higher education (Polydoro et al., 2016); the use of instruments in cognitive evaluation in the context of elementary education between 2005 and 2014 (Suehiro & Lima, 2016).

Specifically on the scientific production in the school context, Oliveira et al. (2007) collected 234 articles from seven indexed scientific journals, published in the period from 1995 to 2004. The analysis followed some of the meta-research criteria, such as authorship, thematic, discourse and analysis of types of evaluations. The results showed that: in some journals, there was a greater concentration of publications on the topic, marked in the last years of this interval. Female participation prevailed in the authorship of the articles and there was wide diversification in the purposes for which the psychological tests had used. The authors also found that psychometric instruments were the most used, but interviews and observation were frequent. In addition, they verified that the projective technique had used in only 2.3% of the investigations.

The objective of this study is to continue the research on the scientific production of the use of psychological evaluation in the various stages of formal education in the period subsequent to that of the previous research, that is, between 2005 and 2015. The year 2016 was not included, since many of the journals surveyed had not yet made available all the year numbers at the time of the survey. For this purpose, the same methodological parameters had used for the perception of possible alterations as the previous results.

Method

The study had conducted in three stages. The first one focused on all the scientific journals in the area of Psychology classified as A1 and A2 by the Qualis web (triennium

Results

2013-2016) and with all its collection available in the Scientific Electronic Library Online (SciELO) and in the Electronic Periodicals in Psychology (PEPSIC). The second involved only those in whom articles that focused on psychological assessment had found. The third, however, involved only journals in which the articles involved psychological evaluation in the school and educational contexts.

In this phase, the following periodicals analyzed: the Brazilian Archives of Psychology (there is no information on its periodicity on its website), Psychology Studies - Natal (quarterly publication), Psychology Studies - Campinas (quarterly publication), Studies and Research in Psychology (there is information on its website about the periodicity of its publication), Paideia (quarterly publication), Psico (quarterly publication), Psico-USF (there is information on its website about the periodicity of its publication), Psychology: Science and Profession (quarterly publication); School and Educational Psychology (biannual publication), Psychology: Organizations and Work (quarterly publication); Psychology: Reflection and Criticism (quarterly publication); Psychology: Theory and Research (quarterly publication), Psychology: Theory and Practice (four-monthly publication), Psychology USP (four-monthly publication), Brazilian Journal of Professional Guidance (biannual publication) and Themes in Psychology (quarterly publication).

Source

The study sample consisted of 101 articles, found in 14 journals, classified as A1 and A2, which focused on the psychological evaluation in the school and educational contexts between 2005 and 2015.

Procedures

The total of articles collected on psychological evaluation was 226. However, only 101 specifically dealt with publications related to psychological evaluation in the school / educational context in the eleven year period-analyzed (2005-2015). The articles published by the journals had analyzed in full, respecting some criteria established in the studies carried out by Witter (1999). Thus, the items considered were, Authorship, the nature of authorship (individual or multiple) had identified, as well as the authors' gender. Thematic, the quantity and the distribution had analyzed by evaluation themes. Speech, the words contained in the title of the work and number and schooling of the participants had evaluated. Analysis of the Assessments, the classification of the type of instruments used in the evaluations had carried out, as well as the instruments used.

The authors of the research collected all the data, separately and concomitantly, to give reliability to the evaluation. The concordance index, verified by Pearson's correlation, was above 85%.

The data had organized in spreadsheet and submitted to descriptive statistics. In order to evaluate the general universe of publications, the number of articles published per periodical has counted in the last 11 years. Table 1 presents the results. The data showed that 2007 was the year with the highest number of articles in the educational context, as well as an oscillation in the publications from this period. The journals that presented the highest number of published articles were Psico-USF (n = 20, 19.8%), Psychology: Reflection and Criticism (n = 16, 15.8%) and Brazilian Journal of Professional Guidance (n = 11; 10.9%).

Regarding the authorship evaluation, it was observed that 98% (n = 99) were performed with multiple authorship and 2% (n = 2) with individual authorship. Most of the studies were written in partnership by authors of both sexes (n = 52, 51.5%), followed by female subjects (n = 39, 38.6%) and, in smaller percentage, only by authorship male (n = 10, 9.9%). The Chi-square test showed that the distribution was not equitable, considering $[\chi^2 (2,101) = 27, 46, p \leq 0.001]$. As a result, it had verified that authorships in partnerships of both sexes presented more publications in the area than women and men, respectively.

The analysis of the Thematic revealed the quantity and the distribution of the articles, considering the themes implied in the evaluation. Table 2 illustrates such distribution. However, it had emphasized that some articles dealt with two or more subjects at the same time. In this sense, all the topics researched had computed totaling 115 occurrences. The analysis of the Chi-square test showed that the distribution of the themes was not equitable, considering $[\chi^2 (5,115) = 147, 07, p \leq 0.001]$. In this sense, it was observed that 'psychometric properties / instrument construction' (n = 65; 56.5%) were the most investigated subjects, followed by 'vocational orientation, professional, labor market, professional interests' (n = 12, 10.4%) and 'cognitive aspects' (n = 12, 10.4%).

In the Discourse category, the words contained in the articles titles, number and schooling of the participants had evaluated. Regarding the title words, the analysis of the 101 manuscripts showed that a large number of papers (n = 73; 72.3%) did not exceed the defined limit of twelve words in the title. Tables 3 and 4 show the analyzes performed due to the number and schooling of the sample. It is necessary to clarify, however, that in the case of the analysis of the number of participants / subjects in the researches and respective schooling, the number of articles evaluated went from 101 to 100. This decrease was because an article did not work with subjects search. This publication was of documentary nature and, therefore, the research had done based on the analysis of records of a clinic-school.

It was observed that 44 studies (44%) involved up to 200 subjects and 9 (9%) were performed with samples greater than 1000 people were. When verifying the schooling of the participants, the distribution was not again equitable, considering $[\chi^2 (6,100) = 41, 68, p \leq 0.001]$. In this aspect, a concentration had observed in the accomplishment of stu-

Table 1. Distribution of the publication on psychological evaluation in the school context by scientific journal.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total articles
Brazilian Archives of Psychology	0	0	0	0	1	0	0	0	0	1	0	2
Psychology Studies - Natal	1	0	0	1	0	0	0	0	0	0	0	2
Psychology Studies Campinas	0	1	1	1	0	1	2	3	0	0	1	10
Studies and Research in Psychology	0	0	2	1	0	0	0	2	2	0	0	7
Paidéia	0	0	2	1	0	0	0	2	2	0	0	7
Psico	0	0	0	0	1	0	0	0	0	3	1	5
Psychology: Science and Profession	0	0	1	2	1	0	0	0	2	0	0	6
School and Educational Psychology	0	1	1	1	1	0	0	0	0	0	0	4
Psychology: Organizations and Work	0	0	0	0	0	0	0	0	0	0	1	1
Psychology: Theory and Research	0	2	0	0	0	0	0	0	0	0	1	3
Psychology: Theory and Practice	0	1	1	1	2	0	1	1	0	2	1	10
Psico-USF	1	2	3	2	3	0	3	4	0	2	0	20
Psychology: Reflection and Criticism	1	0	3	0	0	1	1	2	4	3	1	16
Brazilian Professional Guidance	0	1	1	1	2	1	2	0	0	0	3	11

Table 2. Distribution of the frequency of articles considering the research topic (n = 115).

Categories	F	%
Reading-Writing / Strategies	2	1,7
Phonological awareness	1	0,9
Cognitive aspects	11	9,6
Emotional aspects	12	10,4
Social skills/behavioral interactions	3	2,6
Vocational orientation, professional, job market, professional interests	12	10,4
About teaching and learning	1	0,9
Creativity	3	2,6
Domain, knowledge, psychological evaluation	3	2,6
Psychometric Properties / Instrument Construction	65	56,5
Academic experience	1	0,9
School performance	1	0,9

dies with participants enrolled in higher education, followed by middle and then mixed schooling, that is, subjects from different stages of schooling, ranging from pre-school, basic education, high school up to university.

Table five presents the Analysis of Evaluations, in which the classification of the resource (type of instrument) used in the evaluations, had performed. It should note that again the number of articles focused changed, from 101 to 100 in the analysis of this modality. This is justified because the documentary article did not work with the analysis of a measuring instrument. The Chi-square was again used

to analyze the distribution [$\chi^2(4,100) = 225.70, p \leq 0.001$], and there was a statistically significant difference. From the analysis, it had verified that there is a trend in the use of instruments of the psychometric / factorial type to the detriment of other evaluation resources.

A great variability of the techniques used in the analyzed evaluations (n = 169) was observed. The most used technique was the Professional Counseling Scale (EAP) (n = 9; 5.33%), followed by Self-Directed Search Career Explorer (SDS) (n = 6; 3.6%); Reasoning (BPR-5) (n = 5, 2.9%) and Bender's Test - Gradual Punctuation System (B-SPG) (n =

Table 3. Analysis of the number of participants / subjects in the surveys (n = 100).

Number of participants categories	F	%
Less than 20	1	1
From 21 to 30	3	3
From 31 to 50	4	4
From 51 to 100	13	13
From 101 to 200	23	23
From 201 to 300	9	9
From 301 to 400	12	12
From 401 to 500	9	9
From 501 to 700	11	11
From 701 to 1000	6	6
More of 1000	9	9

Table 4. Distribution of the work due to the schooling stage of the participants (n = 100) medium to upper.

Schooling	F	%
Elementary school (general)	10	10
Elementary school (from 1 ^a to 4 ^a year)	11	11
Elementary school (from 5 ^a to 8 ^a year)	4	4
High School	16	16
Higher education	35	35
Mixed schooling	15	15
Indefinite schooling	9	9

Table 5. Analysis of the articles by resource used in the evaluation (n = 100).

Types of Evaluation	F	%
Psychometric	80	80
Questionnaires / Interview	7	7
Uses multiple features at once	5	5
Situations / Problems proposed on the computer	2	2
Projective	6	6

4); The complete list of all instruments used in the articles is shown in Table 6.

Discussion and final considerations

This study of the state of knowledge (Romanowski & Ens, 2006) used meta-research criteria and aimed to continue the research carried out by Oliveira et al. (2007), which found 234 articles with the theme of psychological evaluation in the school context. This continuity was due to the belief that periodic evaluations provide qualitative information that supports the establishment of scientific management policies (Witter, 2005). In addition, it has known that educational psychological evaluation contributes to the development and improvement of measures that allow verification of students' performance, serving as a basis for possible intervention programs that need has implemented.

In the study by Oliveira et al. (2007), the concentration of publications occurred in the last years of the interval from 1995 to 2004. Already in this study, between 2005 and 2015, 101 articles had collected, less than half of what had previously found. More articles with an oscillation in the publications from then on. This result corroborates those of Piovezan and Cardoso (2015), who indicated a decrease in the representativeness of the area, in an analysis based on the scientific production in the area "Evaluation, methods and measures in Psychology" in annals of a congress of great representatively in the area of psychology.

As for the journals that presented the greatest number of published articles, in the previous research was the Psychology: Reflection and Criticism, which was in this study with the second place, because the Psico-USF came first. Regarding the authorship of these articles, the prevalence of multiple authorship (Oliveira et al., 2007) continues to increase, from 75.2 to 98% of the cases. Suehiro and Lima (2016) also found that this type of authorship was predominant in articles presented in their study that investigated the instruments used in cognitive evaluation in the context of elementary education between 2005 and 2014.

With regard to the subject, reading and writing had the most investigated previously, already in this study it had observed that the psychometric properties / construction of instruments stood out, with 56.5% of the total. This fact evidences a change of focus that reveals the investment in the elaboration and validation of the measurement instruments; however, Schelini et al. (2016) found in their research a small number of articles that had proposed to the elaboration or adaptation of instruments and the investigation of their evidences of validity and precision.

In the previous research, it had observed that only seven works of the total presented samples with more than 1000 participants. In this study, 44 studies (44%) involved up to 200 subjects and 9 (9%) were performed with samples

Table 6. *Evaluation Techniques used (n = 169).*

Valuation techniques used	F	%
Anxious Thoughts Inventory (AnTI)	1	0.6
Self-Efficacy for Occupational Activities	1	0.6
Evaluation of Creativity by Figures and Words (Version A)	1	0.6
Evaluation of students-therapists according to their supervisors -AAS	1	0.6
Holland Professional Types Assessment (ATPH)	2	1.2
Personality Factor Battery (BFP)	2	1.2
Computerized Oral Language Battery (Bilo)	1	0.6
Multidimensional Child Intelligence Battery	1	0.6
Battery for High Abilities Assessment	2	1.2
Wide of Reasoning Tests (BPR-5)	5	2.9
Center for Epidemiological Studies of Depression (CESD)	1	0.6
Human Figure Drawing (DFH-III)	1	0.6
Human Figure Drawing - Koppitz	2	1.2
Human Figure Drawing (DFH – Sisto Scale)	2	1.2
Baptist Depression Scale - Adult Version (EBADEP-A)	1	0.6
Professional Counseling Scale (EAP)	9	5.3
Career Adaptability Scale (EAC)	1	0.6
Zanon Affect Scale (EAZ)	2	1.2
Aggression Scale for Children and Young People	1	0.6
Social Anxiety Scale for Children - revised form (SASC-R)	1	0.6
Anxiety Scale (RCMAS)	1	0.6
Sherer's Overall Self-Efficacy Scale (GSES)	1	0.6
Self-efficacy Scale for Professional Choice	1	0.6
Self-Efficacy Scale for Occupational Activities (EAAOc)	1	0.6
Impulsivity Assessment Scale (EsAvI)	1	0.6
Assessment Scale of Body Dysmorphic Disorder (AE-TDC)	1	0.6
Perceived Competence Scale in Learning (ECPA)	1	0.6
Depression Scale (EDEP)	3	1.8
Employability Scale	1	0.6
Perceived Choice Learning Scale (EEPA)	1	0.6
Scale of Hope for Children (EEC)	1	0.6
Scale of Social Skills in University Students (HSUE)	1	0.6
Locus of Control Scale	1	0.6
Levenson Control Locus Scale (ELCL)	1	0.6
Social Support Perception Scale - adult version (EPSUS-A)	1	0.6
Satisfaction Scale for Basic Psychological Needs in Relationship (ESNPBR)	1	0.6
Scale of Sensitivity to Different Achievement Goals	1	0.6
Labor Support Scale (ESUL)	1	0.6
Personality Trait Scale for Children (ETPC)	1	0.6
Scale of Values (WIS)	1	0.6
Workplace Stress Vulnerability Scale	2	1.2
Raven's Progressive Matrix Special Scale	2	1.2
Factorial Scale of Opening to Experience (EFA)	1	0.6
Factorial Extroversion Scale (EFEx)	3	1.8
Factorial Scale of Neuroticism (EFN)	2	1.2
Factorial Scale of Socialization (SAI)	3	1.8
Vocational Exploitation Scales	1	0.6

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Female and Male Self-Control Scales	1	0.6
Self-Concept Piers-Harris Child Scale	1	0.6
Beck Anxiety Inventory	2	1.2
Beck Depression Inventory	2	1.2
Anxiety and Social Phobia Inventory for Children (SPAI-C)	1	0.6
Romantic Jealousy Inventory	2	1.2
Beck Depression Inventory (BDI-II)	1	0.6
Child Depression Inventory (CDI)	1	0.6
Young's Parenting Styles Inventory (YPI) - reduced version	1	0.6
Curiosity and Exploration Inventory – CEI	1	0.6
Spiritual Intelligence Inventory (PSI)	1	0.6
Angelini Interests Inventory	1	0.6
Family Support Perception Inventory (IPSF)	2	1.2
Factorial Personality Inventory (IFP)	1	0.6
Typological Inventory of Professional Interests (ITIP-96)	1	0.6
Youth Self-Report Inventory (YSR)	2	1.2
Search Questions with Various Figures Game (Pbfd)	1	0.6
Kidscreen-27	1	0.6
Professional Interest Survey (LIP)	1	0.6
Reduced Personality Markers	1	0.6
Raven's Colored Progressive Matrices	1	0.6
Raven's Advanced Progressive Matrices	1	0.6
Mayer, Salovey e Caruso Emotional Intelligence Test (MSCEIT)	3	1.8
Penn State Worry Questionnaire	1	0.6
Pfister Colored Pyramids	3	1.8
Professional Drawing with Story Procedure - DP-E	1	0.6
Professional Interest Survey (LIP)	1	0.6
Computerized Strategic Reading Program (PILE)	1	0.6
Evaluation Protocol for Children with Suspected Autism Spectrum Disorders (PRO-TEA)	1	0.6
Socio-metric Indication Protocol	1	0.6
Phonological Awareness by Oral Production Test (PCFO)	2	1.2
Word Recognition Test (PRP)	1	0.6
Organizational Support Perception Questionnaire (QPSO)	1	0.6
Unpredictability Readiness Questionnaire	1	0.6
Rumination and Reflection Questionnaire (QRR)	2	1.2
Social Support Questionnaire (SSQ)	1	0.6
Academic Experience Questionnaire (QVA)	1	0.6
Basic Values Questionnaire - Behavioral Reports (QVB-RC)	1	0.6
Questionnaire elaborated by the authors on personal data and attitudes regarding the career	1	0.6
Psychological Assessment Questionnaire at the undergraduate level, with emphasis on the use of tests	2	1.2
Questions about knowledge in psychological assessment	1	0.6
Questions about training, therapeutic approach, professional activities and instruments used in the evaluation	1	0.6
Phonological Awareness Assessment (RACF)	2	1.2
Self-Directed Search Career Explorer (SDS)	6	3.6
Social Skills Assessment System (SSRS-BR)	1	0.6
Situational Humor Response Questionnaire (SHRQ)	1	0.6

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Ten-Item Personality Inventory (TIPI)	1	0.6
Creating Metaphors Test	1	0.6
Children's Apperception Test (CAT-A)	1	0.6
Bender Test - Gradual Scoring System (B-SPG)	4	2.4
Cloze Test	1	0.6
Cloze Basic Test (MAR)	1	0.6
Children's Figural Creativity Test	2	1.2
School Performance Testing (TDE)	3	1.8
Photos of Professions Test (Berufsbild Test, BBT-Br)	2	1.2
Social Skills Test	1	0.6
Non-Verbal Intelligence Test TONI 3 - Form A	1	0.6
Nonverbal Intelligence Test - Form A (INV)	1	0.6
Inferential reasoning test (RIn)	1	0.6
Word Recognition Test	1	0.6
Zulliger Test	1	0.6
Fairy Tale Test (TCF)	1	0.6
G-36 Test	1	0.6
Non-verbal intelligence test - Form B (R-1)	1	0.6
Pictorial Memory Test (Tepic-M)	2	1.2
Torrance Test of Creative Thinking	1	0.6
Universal Nonverbal Intelligence Test (UNIT)	1	0.6
WISC 3	2	1.2
Total	169	100

more than 1000 people, revealing a discrete increase in this category. Still in relation to the participants, the concentration of students of higher education had previously found and this situation had not altered in this study. Schelini et al. (2016) consider this to be because there is greater access to this population. One can also consider that there is an investment.

Another situation that had not altered from the previous research for this study was the tendency in the use of instruments of the psychometric / factorial type in detriment of other evaluation resources. It is worth noting the use of the Professional Counseling Scale (PCS) (5.33%), however, Ottati and Noronha (2016), who used this scale in their study, emphasized that Brazilian Psychology is rudimentary about the instruments that facilitate choice professional.

The fact that there is a greater production in construction and validation of psychometric scales may show, on the one hand, that one has thought about the production of qualified material for the evaluation of possible educational

problems. On the other hand, it would be interesting that intervention studies had also published, in order to show that these scales could generate data that seek to provide better conditions for students.

One limitation of the study, which may justify the reduction of the articles found, is that the authors do not use the terms psychological evaluation in articles that deal with this, even in the school context. It has believed that some articles may address the topic in question, but has not retrieved for not using the terms in the title or keyword.

Finally, it has suggested that new studies have carried out with the theme in other databases, as well as with specific elements of the school / educational context, so that the researchers have more information about the publications in this area. As well as, in a few years, other research like this has repeated with future publications in order to compare with the data obtained here and those pointed out by Oliveira et al. (2007).

References

- Ambiel, R. A. M.; Pereira, C. P. S.; Moreira, T. C. (2015). Produção científica em avaliação psicológica no contexto educacional: enfoque nas variáveis socioemocionais. *Avaliação Psicológica*, 14(3), 339-346. <http://dx.doi.org/10.15689/ap.2015.1403.05>
- Barroso, S. M. (2010). Avaliação psicológica: análise das publicações disponíveis na SciELO e BVS-Psi. *Fractal: Revista de Psicologia*, 22(1), 141-154. <http://dx.doi.org/10.1590/S1984-02922010000100011>
- Campos, C. R.; Nakano, T. C.; Ribeiro, W. J.; Silva, T. F. (2014). Criatividade e inovação: uma revisão da produção científica no Brasil. *Revista Faculdades do Saber, Mogi Guaçu*, 1(2), 151-244.
- Cosmo, N. C.; Urt, S. C. (2009). As contribuições da psicologia da educação para a escola: um estudo da produção científica da ANPED e da ABRAPEE. *InterMeio: Revista do Programa de Pós-Graduação em Educação*, 15(30), p.183-201.
- Conselho Federal de Psicologia (2013). *Cartilha avaliação psicológica*. Brasília, DF: Autor.
- Ferreira, N. S. A. (2002). As pesquisas denominadas "estado da arte". *Educação & Sociedade*, 23(79), 257-272.
- Joly, M. C. R. A.; Berberian, A. A.; Andrade, R. G.; Teixeira, T. C. (2010). Análise de teses e dissertações em avaliação psicológica disponíveis na BVS-PSI Brasil. *Psicologia: Ciência e Profissão*, 30(1), 174-187. <http://dx.doi.org/10.1590/S1414-98932010000100013>
- Nunes, L. L.; Alves, S. S.; Ramalho, J. V.; Aquino, F. S. B. (2014). Contribuições da perspectiva crítica de base histórico-cultural para a produção científica em psicologia educacional. *Educação e Pesquisa*, 40(3), 667-682. <http://dx.doi.org/10.1590/s1517-97022014091471>
- Oliveira, C. B. E.; Marinho-Araújo, C. M. (2009). Psicologia escolar: cenários atuais. *Estudos e Pesquisas em Psicologia*, 9(3), 648-663. <http://dx.doi.org/10.12957/epp.2009.9075>
- Oliveira, K. L.; Santos, A. A. A.; Noronha, A. P. P.; Boruchovitch, E.; Cunha, C. A.; Bardagi, M. P.; Domingues, S. F. S. (2007). Produção científica em avaliação psicológica no contexto escolar. *Psicologia Escolar e Educacional*, 11(2), 239-251. <http://dx.doi.org/10.1590/S1413-85572007000200005>
- Ottati, F.; Noronha, A. P. P. (2016). Escala de Aconselhamento Profissional e Teste de Fotos de Profissões: evidências de validade. *Estudos de Psicologia (Campinas)*, 33(4), 655-665. <https://dx.doi.org/10.1590/1982-02752016000400009>
- Piovezan, N. M.; Cardoso L. M. (2015). Metaciência e cientometria da área de avaliação psicológica e educacional. *Educare: Revista Científica de Educação*, 1(1), 33-52. <http://dx.doi.org/10.19141/2447-5432/lumen.v1.n1.p.33-52>
- Polydoro, S. A. J.; Freitas, F. A. (2010). Pesquisas com estudantes do ensino superior: algumas características a partir de periódicos nacionais. *Estudos Interdisciplinares em Psicologia*, 1(1), 26-39. <http://dx.doi.org/10.5433/2236-6407.2010v1n1p26>
- Polydoro, S. A. J.; Oliveira, K. L.; Mercuri, E. N. G. S.; Santos, A. A. A. (2016). Uso de instrumentos de avaliação na produção científica envolvendo universitários brasileiros. *Avaliação Psicológica*, 15(esp), 45-55. <http://dx.doi.org/10.15689/ap.2016.15ee.05>
- Romanowski, J. P.; Ens, R. T. (2006). As pesquisas denominadas do tipo "estado da arte" em educação. *Diálogo Educacional*, 6(19), 37-50.
- Schelini, P. W.; Deffendi, L. T.; Fujie, M. A.; Boruchovitch, E.; Freitas, M. F. R. L. (2016). Avaliação do monitoramento metacognitivo: análise da produção científica. *Avaliação Psicológica*, 15(esp), 57-65. <http://dx.doi.org/10.15689/ap.2016.15ee.06>
- Silva, G. O. L.; Fadel, S. J.; Wechsler, S. M. (2013). Criatividade e educação: análise da produção científica brasileira. *EccoS – Revista Científica*, (30), p. 165-181.
- Silva, I. B.; Nakano, T. C. (2011). Modelo dos cinco grandes fatores da personalidade: análise de pesquisas. *Avaliação Psicológica*, 10(1), 51-62.
- Silva, G. D. O. L.; Wechsler, S. M. (2014). Produção científica sobre estilos cognitivos. *Acta Científica: Ciências Humanas*, 1(18), 9-21.
- Suehiro, A. C. B.; Lima, T. H. (2016). Instrumentos usados na avaliação cognitiva no ensino fundamental: análise da produção científica. *Avaliação Psicológica*, 15(esp), 67-76. <http://dx.doi.org/10.15689/ap.2016.15ee.07>
- Urbina, S. (2007). *Fundamentos da testagem psicológica*. Porto Alegre, RS: Artmed.
- Witter, G. P. (1999). Metaciência e leitura. In: Witter, G. P. (Org.), *Leitura: textos e pesquisas* (pp. 13-22). Campinas: Alínea.
- Witter, C. (2005). Produção científica e educação: análise de um periódico nacional. In: Witter, G. P. (Org.), *Metaciência e psicologia* (pp. 137-154). Campinas: Alínea.

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