



**INSTITUTO NACIONAL DE CIÊNCIA E TECNOLOGIA SOBRE COMPORTAMENTO,
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RESEARCH PROGRAM

Relational Learning and Symbolic Functioning: Basic and Applied Research

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Deisy das Graças de Souza (Coordinator)
Olavo de Faria Galvão (Vice-Coordinator)

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¹ Seat of the Institute: Universidade Federal de São Carlos. Details of the original project with regard to the scientific program and organizational structure are presented in Annual Report #1 (www.ufscar.br/ecce).

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GOALS³

The *National Institute of Science and Technology on Behavior, Cognition, and Teaching* focuses on behavioral science and technology to address symbolic functioning and functional deficits, particularly in children (e.g., dysfunctional communication skills, delayed language development attributable to congenital deafness, failure to achieve basic competencies in reading and mathematics, etc.). Functional deficits in symbolic functioning represent a substantial challenge for affected individuals, their families, and their larger communities. The primary approaches to prevent and remediate deficits in symbolic functioning include behavioral intervention, enhanced educational support, and other interventions to reduce their impact.

Our network currently integrates basic, translational, and applied research in a multi-institutional program that addresses numerous aspects of symbolic functioning in children. In continuity with previous work conducted by the same group, the primary research objectives of the Institute's activities are the scientific analysis of symbolic functioning and their determinants.

Other objectives of the Institute include mentoring to accelerate the professional development of young scientists within the program and disseminating the findings of the work to the general public in a form that will be readily understandable for individuals without formal training in or experience with science and technology.

THE RESEARCH PROGRAM

Relational Learning and Symbolic Functioning: Basic and Applied Research

Stimulus Equivalence is an experimental model to simulate symbolic functioning in the laboratory. This model provides procedures to establish symbolic relations and operational criteria to assert that relations are indeed symbolic. Arbitrary relations between stimuli are symbolic if they have the properties of reflexivity, symmetry, and transitivity.

³ This introductory section is intended to contextualize the project's partial results in the third year; it is the same presented in the Annual Report #12.

If equivalence is a model of meaning, then a series of implications can be experimentally evaluated. For example, a meaningful stimulus should transfer its meaning to abstract stimuli that are equivalent to it. This is what is required in learning tasks that involve arbitrary relations, such as those that are typical of language acquisition (e.g., oral language, sign language, picture exchange communication systems [PECS], etc.) or reading with comprehension (text only acquires meaning when the student learns to relate the symbols to the word sounds that, in turn, are symbols of other meaningful stimuli).

In the pursuit of behavioral science and technology goals that address symbolic function and functional deficits, three major components of the program are under development: Basic Science, Translational Science, and Applied Science (for a more detailed description, see Annual Report #1, 2009/2010, <http://www.ufscar.br/ecce>).

Overview of Scientific Topics Addressed by the Institute's Programs

(1) The **Basic Science component** is charged with the development of new knowledge and new methodologies relevant to the understanding and potential prevention or amelioration of symbolic function deficits. Targets of the Basic Science component include the following:

(a) Investigations of the necessary and sufficient conditions for the development of symbolic functioning, its components, and its precursors;

(b) Investigations of attentional processes (e.g., observing behavior) that are necessary for the development of symbolic functioning;

(c) Further development and refinement of animal models that may inform the analysis of the determinants of symbolic behavior and development of remedial procedures for individuals with deficits in symbolic functioning.

(2) The **Translational Science component** is charged with effecting the validation of new principles or new procedures derived from basic studies in initial clinical/educational trials under quasi-controlled conditions.

(3) The **Applied Science component** is charged with developing feasible and cost-effective solutions to widely disseminate evidence-based educational and therapeutic procedures to typical service settings (e.g., schools, hospitals, clinics, etc.).

SUMMARY OF MAIN RESULTS

This section summarizes the main results of the scientific investigation, including methodological solutions and conceptual issues.

The most advanced contribution of the symbolic behavior approach is the demonstration and control of the processes by which a person can respond to new stimuli as if they were already known, a process long referred to as generativity. The approach has allowed the investigation of the conditions under which a repertoire of responding under the control of symbolic relations evolves to new situations not previously experienced.

Considering the ongoing status of the research program, some specific projects were completed, some are already well developed, and others are underway and have generated preliminary results. Some projects for which we had to acquire new equipment are currently being implemented. The results are cumulative. In this sense, some overlap can be found with the results already presented in Annual Reports #1 and #2.

We will comment on the status of each project by following the sequential structure with transitions from basic (Projects 1-3) to translational (Projects 4-6) to applied (Project # 7) research listed in Table 1. When necessary, references to published work will be indicated. Appendix I presents a complete list of publications, papers *in press*, and papers *submitted* during the 2011-2012 period.

BASIC RESEARCH

1A: Categorical-Dimensional Interactions in Symbolic Categories

The major goals of this subproject are to (a) increase the validity of stimulus equivalence as a model of meaning using well-established measures of meaning together with equivalence assessments and (b) investigate whether and to what extent stimuli that comprise equivalence classes, determined by matching-to-sample tests, can vary in their degree of relatedness. Work during the initial 2 years of the INCT provided affirmative answers to the questions contained in both objectives (Bortoloti & de Rose, 2009, 2011, 2012). Further work has investigated the parameters that can affect such degrees of relatedness. The semantic differential provided quantitative assessments of relatedness, showing that the degree of relatedness increases when training is conducted with delayed matching-to-sample compared with simultaneous matching-to-sample, and the degree of relatedness decreases with nodal distance. Recent results showed that another factor that increases relatedness is overtraining (Bortoloti, de Rose, & Rodrigues, *submitted*). A recent development was the psychometric validation of the semantic differential used to quantitatively assess the degree of relatedness between stimuli (Almeida, Bortoloti, Ferreira,

Table 1
Scientific programs and research projects

| SCIENTIFIC PROGRAMS | RESEARCH PROJECTS |
|------------------------------|--|
| BASIC SCIENCE | LABORATORY INVESTIGATIONS OF BASIC PREREQUISITES FOR SYMBOLIC FUNCTIONING |
| | 1: Complex Relational Learning Methodologies 1A: Categorical-Dimensional Interactions In Symbolic Categories 1B: Recombinative Generalization of Symbolic Repertoires Development of Automaticity and Fluency of Symbolic Repertoires ⁴ |
| | 2: Selective Attending and Observing in Symbolic Task Procedural Control of Observing Behavior in Matching-to-Sample Tasks Procedural Control of Observing Behavior in Go/No-Go Tasks |
| | 3: Animal Models of Symbolic Behavior and its Prerequisites 3A: Relational Learning in Cebus apella 3B: Relational Learning in Dogs 3C: Relational Learning in Bees 3D: Relational Learning in Pigeons ⁵ 3E: Relational Learning in Rats ⁷ |
| TRANSLATIONAL SCIENCE | POPULATIONS WITH DEVELOPMENTAL AND/OR ACQUIRED LIMITATIONS IN SYMBOLIC FUNCTIONING |
| | 4: Perception, Discrimination, and Equivalence 4A: Development of Symbolic Function in Infants 4B: Fast Mapping Strategies in Toddler-Age Children 4C: Relational Learning in Newly Hearing Children 4D: Promoting Symbolic Function in Preverbal Populations |
| | 5: Relational Learning in Basic Academics 5A: Basic and Remedial Instruction in Reading 5B: Basic and Remedial Instruction in Mathematics and Related Skills |
| | 6: Extensions to Neurobehavioral Science Laboratory-Derived Neuropsychological Methodology Translational Studies of Neurobehavioral Effects of Mercury Exposure |
| APPLIED SCIENCE | DISSEMINATION OF METHODS FOR DELIVERING EFFICIENT, COST-EFFECTIVE, EVIDENCE-BASED BEHAVIORAL TECHNOLOGY |
| | 7: Behavioral Technology Delivery Systems 7A: Reading, Writing, and Mathematics in the Classroom 7B: Computer-assisted Instruction 7C: Augmentative Communication (CI, AAC, etc.) 7D: Motivational Analyses in Instructional Environments 7E: Virtual Reality Applications |

⁴ Canceled (Jorge Mendes O. Castro, responsible for the project, left the Institute in 2010).

⁵ Projects 3D and 3E are additions to the original proposal; their objective is to generate data for inter-species comparisons.

Schelini, & de Rose, *submitted*). The indication that equivalent stimuli may differ in their degree of relatedness raises questions about the very concept of equivalence that has been addressed in recent papers (Bortoloti & de Rose, 2011; Bortoloti, de Rose, & Rodrigues, *submitted*).

The most important advance in this line of research, however, was the establishment of a new laboratory at UFSCar for the electrophysiological investigation of event-related potentials (ERPs) that can detect symbolic relations. Our preliminary work, performed at the E.K. Shriver Center, indicated that the N400 component (called the “semantic” component) may quantitatively vary as a function of the parameters that affect the degree of relatedness. The new laboratory is now becoming functional. Equipment calibration and procedural adjustments are underway, and it is expected to start generating new data around the end of the first semester of 2012.

1B: Recombinative Generalization of Symbolic Repertoires

Studies conducted at the Human Learning Laboratory at Universidade de Brasília sought to identify similarities and differences in symbolic processes involved in musical and textual reading. These studies investigated the variables that affect stimulus class formation and recombinative reading (i.e., reading novel words derived from combinations of behavioral units previously learned in a regular and predictable way). For both textual and musical reading, overlapping stimuli components used in training are a critical feature of the development of stimulus control by the same components when embedded in novel stimuli (Hanna et al., 2011; Perez & de Rose, 2010).

Recent results confirmed that visual-visual relations are easier to teach than auditory-visual relations that involve musical stimuli. Teaching a productive response (i.e., touching keyboard notes) was more effective than teaching receptive responses in a matching-to-sample procedure. Finally, teaching visual-visual matching relations between musical notations and keyboard positions showed transfer to playing the keyboard without direct teaching. These results, together with previous findings, may suggest parameters for a program to teach musical reading.

2A: Procedural Control of Observing Behavior in Matching-to-Sample Tasks

Performance in discriminative and conceptual learning tasks critically depends on how participants look at particular stimuli and the stimulus display. Failures of children in these tasks, particularly children with intellectual disabilities, often result from insufficient or incorrect observation of the stimuli. Even when participants look at the stimuli, their behavior may be controlled by stimulus features or relations between stimuli that may be detrimental to the intended performance. Participants may acquire a baseline that is a prerequisite for conceptual or symbolic behavior, and yet they may perform the behavior under stimulus control that is incompatible with the emergence of the intended conceptual and symbolic behavior. In experiments of conceptual and symbolic behavior, verifying the stimulus relations that control baseline performance and ensuring that the stimulus control of baseline

performance will not interfere with the intended emergent performance are important. A study by de Rose, Hidalgo, & Vasconcellos (*in press*) used a procedure to ensure that two-choice matching-to-sample baseline would be controlled by both sample- S^+ and sample- S^- relations, in which children knew both that the selected stimulus was the correct one for a particular sample and that the other stimulus was the incorrect one. With this procedure, children showed the immediate formation of equivalence classes. When only sample- S^- relations were formed, however, classes were not formed, suggesting that both controlling relations are necessary. Grisante, de Rose, & McIlvane (*submitted*) adapted this procedure to establish both sample- S^+ and sample- S^- relations in preschool children and participants with Down Syndrome and found a high “yield” of equivalence relations. Tomanari and students developed an effective procedure to monitor and manipulate controlling relations in a matching-to-sample procedure that allowed corrections of undesired controlling relations at the moment they arose. This will potentially increase the yield of equivalence classes, with promising applications for teaching individuals with intellectual deficiencies.

2B: Procedural Control of Observing Behavior in Go/No-Go Tasks

Earlier results (e.g., Debert, Matos, & McIlvane, 2007; Debert, Huziwara, Faggiani, de Mathis, & McIlvane, 2009) showed that a go/no-go procedure is a promising alternative to generating equivalence relations. New results confirmed the potential of the go/no-go procedure, showing that positive outcomes with human adults are independent of training directionality (Debert et al., *in press*). These results suggest that differences in the “yield” of equivalence relations with human adults may be related to the successive or simultaneous discriminations established during baseline and testing. The results of studies with typically developing children after simple successive discriminations also showed the formation of functional classes (Canovas, Debert, & Pilgrim, *submitted*; Canovas, de Souza, & Barros, *in press*) and the formation of symbolic relations after a go/no-go procedure with compound stimuli (Debert et al., *submitted*). In go/no-go procedures with compound stimuli, the elements to be related are displayed together, side by side. This may simplify the requisites of observing and scanning the stimulus display. Therefore, the procedure may be helpful in teaching applications with young children and learners with intellectual disabilities who may have difficulties observing and scanning more complex displays, such as those involved in matching-to-sample procedures. Go/no-go procedures have also shown promise in research with capuchin monkeys (see 3A).

3A: Relational Learning in *Cebus apella*

Recent studies that searched for equivalence class formation in capuchin monkeys (*Cebus apella*) confirmed that performance is highly sensitive to interference from procedural variables, particularly when the standard matching-to-sample procedure is used (e.g., Brino et al., 2011). Alternative procedures that appear to be more successful than MTS include the following:

a) Go/no-go procedures (see 2B) that appear to have solved difficulties in baseline training;

b) Experimental simulations that reproduce critical features of natural settings (a clear indication of functional class formation was obtained in a three-dimensional apparatus that simulated food search, taking advantage of monkeys' natural foraging skills);

c) The careful arrangement of multiple trial types in a sequence of experimental tasks (the property of the symmetry of conditional relations in capuchins could be inferred from a comparison between the acquisition of relations that could emerge by symmetry and other relations that could not; see Velasco, Huziwara, Machado, & Tomanari, 2010);

d) Exclusion procedure (conditional choices by exclusion, a component of "fast mapping") was demonstrated in two capuchins.

The methodology for teaching discriminative repertoires to capuchin monkeys has recently been used for the assessment of color discrimination in this species (Makiama, Goulart, & Galvão, 2011; see 2A).

3B: Relational Learning in Dogs

Several studies have been performed with dogs. Effective procedures to establish matching-to-sample baselines in dogs have been developed. These procedures permitted the investigation of several skills with this species, such as temporal control, learning by exclusion, and joint attention. The high sensitivity of dogs to human behavior (i.e., to survive, dogs must comprehend human signals) is probably attributable to their co-evolution, raising the question of whether this would facilitate the acquisition of arbitrary relations, a subject not well explored in the field and that could shed light on the precursors of symbolic behavior.

3C: Relational Learning in Bees

New-world bees (*Melipona quadrifasciata* and *Melipona rufiventris*) learned simple discriminations and identity matching-to-sample but not arbitrary matching-to-sample. Old-world bees (*Apis*), in contrast, showed above-chance performance in arbitrary matching but no indication of symmetry. The difference in performance may be related to foraging conditions in the environments of these species that may require *Apis* to change their preference for flowers because the amount of nectar they provide may vary during the year. *Meliponas* that learned a simple discrimination were subjected to exclusion trials with new stimuli that substituted for the S^- on some trials and S^+ in other trials. They exhibited indications of control by selecting the S^+ and rejecting the S^- . Given the relevance of these stimulus control topographies (see 2A) for the emergence of novel relations and the fact that *Meliponas* did not show restricted stimulus control (Moreno et al., *submitted*), this species could provide a suitable model of the precursors of symbolic behavior.

Animal models (e.g., in monkeys, dogs, bees, and recently pigeons and rats) are a relevant component of the Institute's research program, not only in terms of conceptual and

methodological developments but also because of the substantial work designing effective procedures to teach these species. Developing methods of investigating and teaching these species may uncover critical variables for basic learning processes. These variables can then be incorporated into methods for evaluating and teaching individuals with disabilities (e.g., alternative and augmentative communication, assessment of non-verbal humans, etc.).

TRANSLATIONAL RESEARCH

4A: Development of Symbolic Function in Infants

Institute researchers have already made significant advances in methods to work with this challenging population (e.g., Gil, Oliveira, & McIlvane, 2011). Recent advances include methods that allow the investigation of discrimination learning in infants as young as 10 months (Gil, de Sousa, & de Souza, 2011). With adequate procedures, infants who are 12 months old and older acquired simple and conditional discriminations (i.e., arbitrary matching). The literature in the field typically shows this performance only in children aged 24 months or more. Infants who are 15 months old or older, with and without developmental risk, responded consistently by exclusion (See 4B). We also found, for the first time, the clear emergence of untrained visual-visual relations. Intermixing auditory-visual matching trials (i.e., a receptive language task) with trials that required echoic behavior (i.e., vocal imitation) led to the oral naming of objects in 19- to 29-month-old infants, a promising procedure for language development in at-risk infants.

4B: Fast Mapping Strategies in Toddler-Age Children

Several recent studies investigated matching-to-sample by exclusion and emergent mapping with names, adjectives, and verbs in 24- to 36-month-old children. A large pool of more than 80 children virtually always responded by exclusion, either with names, adjectives, or verbs, thus extending fast mapping (usually investigated with object-name relations) to other kinds of verbal relations. A single exclusion trial, however, does not necessarily lead to learning the relations between words and referents. Our recent studies showed that the probability of learning markedly increases with the number of exclusion trials (e.g., Grisante, Costa, Domeniconi, de Rose, & de Souza, *submitted*).

4C: Relational Learning in Newly Hearing Children

The development of useful technologies for auditory rehabilitation in children who have received cochlear implants has been possible because of the collaboration with the Center for Audiological Research at the Rehabilitation Hospital of Craniofacial Anomalies (CPA/HRAC/USP) in Bauru. To benefit from the implant, prelingually deaf children must learn the meaning of environmental sounds, including speech sounds. Our studies have documented the learning process step-by-step under rigorous experimental control. The

methodologies that are being developed can contribute to the generation of rehabilitation technologies for this population and elucidation of the causes of failure or only partial success of some implants. A preliminary study showed the formation of auditory-visual equivalence classes, hence symbolic behavior, in 12 prelingually deaf children after cochlear implantation (Almeida-Verdu et al., 2008). Recent research extended the sample to 30 prelingually deaf children (Bataglini, Almeida-Verdu, & Bevilacqua, *accepted*). Another study showed that orofacial cues inserted into matching-to-sample training facilitated learning and increased accuracy in equivalence tests. The vocalizations of such children are often imperfect. Our studies showed improved speech intelligibility after shaping verbal topographies. Moreover, speech intelligibility increased for words that children were capable of reading. Cochlear implant users also learned auditory-visual matching-to-sample with dictated sentences as samples and video-clips as comparison stimuli, with the scene expressed in the sentence as the correct choice (Golfeto & de Souza, *submitted*). Additionally, the development of an operant procedure to measure auditory threshold has been useful in the preliminary stages of implant fitting (da Silva et al., 2011a, b).

The laboratories at UFMG and UFPA have recently joined this research program, and other studies with implant users are currently underway.

4D: Promoting Symbolic Function in Preverbal Populations

The most important result in this line of research was the demonstration of auditory-visual equivalence class formation with autistic children with only visual-visual matching relation training. Specific consequences were used with compound visual-auditory stimuli. The auditory members of the compounds became members of the classes, and children showed emergent auditory-visual relations, overcoming a barrier to language development in many autistic children, which is the formation of equivalence classes that comprise spoken words and their referents.

In terms of preverbal populations, colleagues from UNCISAL identified a population of deaf persons with no formal language, either vocal or sign language. This population is particularly important for the study of the first instances of the acquisition of language and thus the study of symbolic processes.

5: Relational Learning in Basic Academics

Projects in this translational program address a longstanding interest of this group, namely the application of laboratory-derived methods to establish very early instances of reading printed words and relating them to their visual referents (e.g., objects, pictures, etc.) and auditory counterparts in children at risk for or already exhibiting protracted failure in school. The Institute has been working to further develop and refine a model research curriculum and investigate extensions of the methodology to the realm of basic mathematic skills. This translational research effort is intended to serve as an ongoing and expanding conduit of new or refined methodology for the Institute's Applied Science Programs, in which

laboratory-derived and validated instructional technology is exported for use in regular and special education classrooms and other rehabilitation settings.

5A: Basic and Remedial Instruction in Reading

Research continued on the instructional program to teach basic reading and spelling skills to elementary school children who fail in initial reading acquisition. Several studies expanded both the scope of the program and the populations it could benefit. Adaptations of the program have been successfully implemented with illiterate adults (Bandini, Bandini, & de Souza, *submitted*), individuals with intellectual disabilities, deaf children with hearing aids (with words transmitted through frequency modulation systems), deaf children using sign language, and children with cochlear implants. The program has also been adapted for implementation by the family members of children with intellectual disabilities (Benitez & Domeniconi, *submitted*). Some investigations addressed new programs to teach more advanced reading skills, including the reading of sentences and short books (Felippe, Rocca, Postalli, & Domeniconi, 2011), and sentence construction under conditional control (Correa, Assis, & Brino, *in press*). A particularly challenging population for reading and spelling acquisition comprises individuals with Fetal Alcohol Spectrum Disorder (FASD) who may have severe difficulties sequencing items, such as letters. A program to teach letter sequencing to children with FASD showed promising results (Ferrari, Giacheti, & de Rose, *submitted*).

5B: Basic and Remedial Instruction in Mathematics and Related Skills

This subproject made significant progress. Important advances included the following: development and application of tests for arithmetic repertoires in elementary school children and pre-arithmetic repertoires in preschool children (Gualberto, Aloi, & Carmo, *in press*); the construction of a scale to measure mathematical anxiety, applied to over 1100 elementary school children for its validation; and the development and systematization of equivalence-based procedures to teach mathematical operations of addition and subtraction to elementary school children (Henklain & Carmo, *submitted*). Equivalence-based procedures were also successfully used to teach proportion (Santos, Cameschi, & Hanna, 2012) and monetary skills to an elderly person with Alzheimer's disease (Cavaleti & Carmo, *submitted*).

6A: Laboratory-Derived Neuropsychological Methodology

Discrete-trial choice experiments on spatial location remembering, delayed identity and arbitrary matching-to-sample, and feature matching-to-sample have been conducted to develop techniques to assess cognitive behavior and executive function in *Cebus apella* (see 3A). The studies developed procedures to teach monkeys to remember sequences of up to 9 stimulus locations, show greater than 90% accuracy in 20 s delayed matching, and match stimuli by category. These non-verbal methods are currently being adapted as a battery of non-verbal tests to assess cognitive impairment produced by mercury poisoning. For verbal

populations, recent advances include a new procedure to assess deficits in speech perception in children with language disorders (Ferrari, *in press*). Ongoing research is also investigating an assessment battery for patients with aphasia.

APPLIED RESEARCH

Dissemination of Methods for Delivering Efficient, Cost-Effective, Evidence-Based Behavioral Technology

One of the main goals of this Institute is the development of cost-effective solutions to demands for the ample dissemination of evidence-based procedures to teach symbolic repertoires. Procedures, instructions, and materials for professionals (e.g., teachers, psychologists, speech-pathologists, and parents) are also very important to assure the intended dissemination and should be considered along with the development of teaching procedures for the target populations.

The specific research projects have focused on three major problems: difficulties in the acquisition of academic behaviors (i.e., reading, writing, and mathematics), difficulties related to deafness (users of cochlear implants or other devices) that require habilitation/rehabilitation of auditory function, and difficulties in the acquisition of basic relational repertoires in persons with more severe disabilities (e.g., intellectual disabilities and autism).

7A: Reading, Writing, and Mathematics in the Classroom

The scientific knowledge about the teaching of reading and spelling has informed the development of instructional programs to solve or alleviate difficulties in reading and writing (see 5A). The format of the teaching programs was well suited for computerized application. Initially, this application was conducted in Computerized Classrooms for Beginning Readers (Unidades de Iniciação à Leitura) at UFSCar, UnB, UFPA, and UNCISAL that operate in collaboration with public schools (the classroom at UFSCar, for example, has been operative since 1998 and has received more than 800 children since then). The instructional programs comprise a series of teaching units or lessons (20 in Module 1 and 80 in Module 2) and are applied in an extensive regimen (from three to five teaching sessions per week) across several months. These classrooms and their instructional programs attracted the interest of many schools that decided to implement the programs to all of the students with difficulties in reading and writing. Table 2 presents a summary of this extension to schools. The direct application of these teaching programs to solve everyday educational problems confirmed previous results obtained in experimental situations, provided additional support to the claim that the programs can contribute to a decrease in school failure in concrete situations (e.g., de Souza et al., 2009; Reis, de Souza, & de Rose, 2009), and impacted public policies regarding municipal education. Since the second semester of 2010, the feasibility of the application of the programs via the Internet has been under evaluation. The program, adapted

for implementation via the Internet, has been applied to more than 1,300 students. Preliminary results are encouraging but also suggest the need for some adjustments in the task flow and management of the criteria for transitions from one lesson to the next (this is not a problem in the instructional program but in its management by the software for implementation through the Internet).

Table 2

Sites of computerized classrooms for beginning readers: time period, total number of participants, average number of sessions/week, and average number of teaching sessions/year

| Site | Time Period | Participants | Sessions/Week (average) | Teaching Sessions/Year |
|----------------------|-------------|--------------|----------------------------|---------------------------|
| UFSCar | 1998-2011 | 840 | 3 | 7,200 |
| Boa Esperança do Sul | 2006-2011 | 2,256 | 3 | 45,120 |
| Limeira | 2006-2011 | 801 | 2 | 20.640 |
| Muzambinho | 2006-2008 | 432 | 2 | 13,280 ^a |
| Ibaté | 2009-2010 | 339 | 3 | 13,760 |
| Brasília | 2010-2011 | 80 | 3 | 1,127 |
| TOTAL | | 4,668 | | 86,700 |

^a Note included in the total: The work was discontinued when the Secretary of Education was replaced at the beginning of a new administration term.

Also underway is research on the evaluation of the effectiveness and transportability of instructional technology to promote symbolic function and auditory competency in users of cochlear implants. With the same strategy used for the reading program, we are elaborating a systematic sequence of tasks to build a curriculum for listening comprehension and the improvement of speech intelligibility. Under some circumstances (e.g., for children who are beginning to read in elementary school), the reading program could be used in association with other teaching modules. The ultimate goal will be to implement a “virtual” laboratory for auditory rehabilitation, through which teaching procedures will be readily accessed through the Internet for application supervised by speech pathologists or parents.

In the near future, programs for teaching pre-mathematics and basic mathematics should be available using the same platform. These programs are currently being evaluated experimentally as part of the Translational Research Program (see 5B).

7B: Computer-Assisted Instruction

The remote application of the programs requires supervision of the students while they work on the computers. Thus, we have been preparing teachers and proctors to go through this instructional technology, assisted by the computer. For this purpose, we elaborated Application Manuals: one on the instructional programs and another on how to use the software platform. The manuals, together with some video clips and PowerPoint presentations, have been used in workshops to prepare participants to use the programs. The manuals are available at <http://geic.dc.ufscar.br:8080/GEICsite/documentacao.jsp>. The software can be used to elaborate programs tailored to individual students' specific needs. Future developments in this project include the preparation of a videotaped tutorial. This resource will improve the workshops and could be used remotely for teachers who cannot attend the workshops.

In conclusion, during the 3 years of this project, the Institute has been integrating behavioral sciences and other disciplines, especially audiology/speech pathology and computer sciences, in the search for knowledge and solutions for human problems related to symbolic functioning and functional deficits. Efforts to validate the model of symbolic functioning that sustains and directs the development of teaching technologies based on rigorous experimental investigations resulted in significant advances and evolved into studies that use electrophysiological techniques, thus integrating the project in the field of neurosciences. The studies on animal models of precursors of symbolic functioning have produced interesting results. The Experimental School of Primates continues to lead this research program with *Cebus apella*, but research has also been extended to other species (e.g., dogs, bees, pigeons, and rats) and laboratories (e.g., USP and UFSCar). Basic, translational, and applied research has contributed to the maximization of the effects of recovered auditory sensitivity (cochlear implants and other devices). With improved sensitivity to environmental sounds, a person needs to learn to "listen" to comprehend what is heard. Conditions that improve and accelerate this process have been investigated, and a new software application was developed especially for this purpose. This work requires intense interactions among psychologists, speech pathologists, and computer science researchers. Basic, translational, and applied research on the promotion of symbolic function in infants and other preverbal populations are underway, with systematic improvements in experimental preparations and positive results in reliably establishing several relevant behavioral repertoires in this population. A very important by-product of the research has been the increase in the number of students involved, thus increasing the pool of competent human

resources in this field. Concerning academic behaviors, while the basic and translational projects continue to investigate important basic behavioral process, the applied effort has reached a large number of students, involving schools, teachers, parents, and other community members. Most laboratories at the Institute have largely assumed this effort, with the important consequence of increasing the number of qualified persons to continue the Institute's programs.

PUBLICATIONS

Details of the research methods and data obtained during the period covered by this report are described in published and *in press* reports, including papers, books, and book chapters, listed in Appendix I. Some unpublished data are described in master's theses and doctoral dissertations. A complete list of theses and dissertations is also presented in Appendix I. The full texts of published papers are available at <http://www.ufscar.br/ecce>, as well as extended abstracts of some selected papers.

Table 3 presents the number of publications during the period of this report and, for comparison purposes, the publications in the first 2 years of the project. During this third year, we had 53 articles published, 32 articles accepted for publication, and 43 papers submitted. The majority of publications (69.4%) were in Brazilian journals, and 18.8% were published in journals indexed by the Institute for Scientific Information (ISI). This trend is changing: 30.2% of the submitted papers were sent to ISI-indexed journals.

Compared with the baseline⁶ of publications for this group, the total number of publications systematically increased across the 3 years, as shown in Figure 1 (journal articles only). The average (articles/researchers)⁷ across the 3 years was, respectively, 2.4, 2.6, and 3.1.

⁶ Baseline was calculated from the list of publications presented in the Institute's project (p. 115).

⁷ Statistics were based on a group of 27 researchers (three more than in the first year; four new members joined the research team, three in the second year and one in the third year, but one left in the second year). Publications of researchers from the foreign institution (UMASS) were included only when in co-authorship with Brazilian members of the Institute.

Table 3

Publications of the INCT-ECCE during 2009-2011 (first 3 years)

| Years | TOTAL | | | | AVERAGE ^a | | |
|-------|----------------------|----------------|----------------|-----|----------------------|---------------|------|
| | 1 Published | 2 In Press | 3 Submitted | 1+2 | 1 Published | 2 In Press | 1+2 |
| | JOURNALS | | | | | | |
| 1 | 32 | 27 | 16 | 59 | 1.3 | 1.1 | 2.4 |
| 2 | 36 | 32 | 22 | 68 | 1.4 | 1.2 | 2.6 |
| 3 | 53 | 31 | 44 | 84 | 2.0 | 1.1 | 3.1 |
| | BOOKS | | | | | | |
| 1 | 5 | 2 | | 7 | 0.2 | 0.1 | 0.3 |
| 2 | 5 | 1 | | 6 | 0.2 | 0.04 | 0.2 |
| 3 | 0 | 1 | 1 | 1 | 0 | 0.04 | 0.04 |
| | BOOK CHAPTERS | | | | | | |
| 1 | 14 | 4 | | 18 | 0.6 | 0.2 | 0.8 |
| 2 | 15 | 6 ^b | | 21 | 0.6 | 0.2 | 0.8 |
| 3 | 0 | 0 | 12 | 0 | 0 | 0 | 0 |
| | TOTAL | | | | | | |
| 1 | 51 | 33 | | 84 | | | 3.5 |
| 2 | 56 | 39 | | 95 | | | 3.7 |
| 3 | 53 | 31 | 67 | 84 | | | 3.1 |

^a n = 27

^b Chapters continue as *in press* (not listed again in the third year)

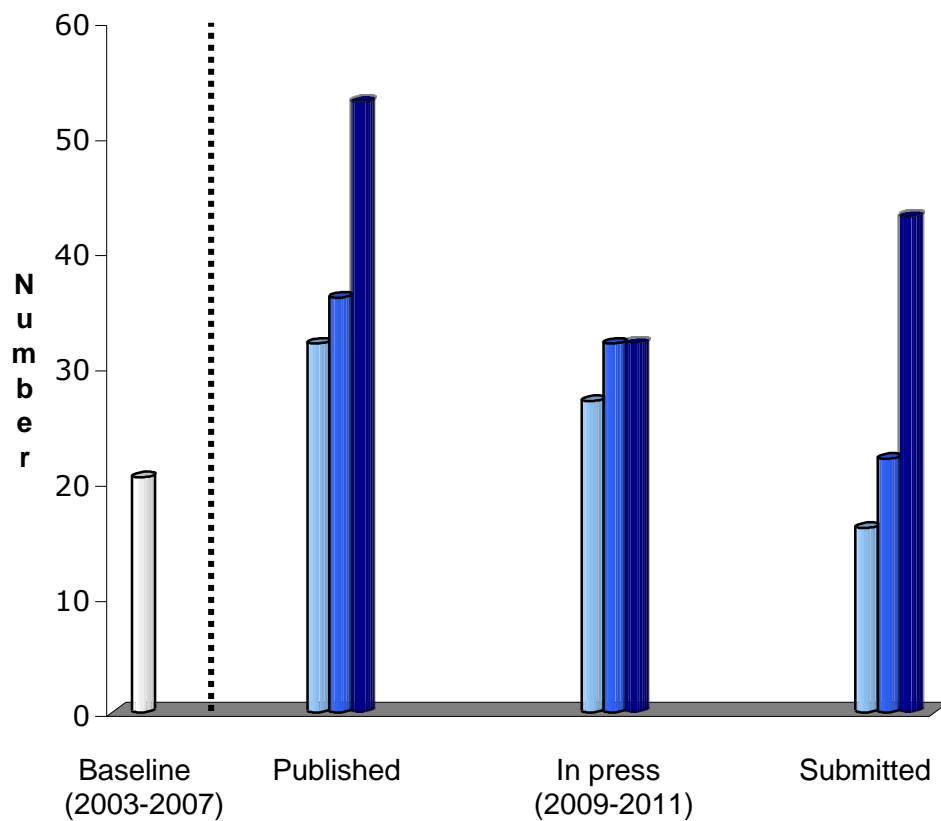


Figure 1. Number of papers published, *in press*, and *submitted* during 2009-2011. Baseline (white bar) is the average (articles/year) during the 5 year period that preceded the beginning of the Institute (2003-2007).

THE ACADEMIC PROGRAM: SHAPING SCIENTIFIC COMPETENCIES

Teaching and supervision in research training

The objectives of the Institute related to the professional development of young scientists within the program have been explored through teaching at the undergraduate and graduate levels, supervising research projects of undergraduate, graduate, and postdoctoral students, and establishing ongoing, well-defined mentor-mentee relationships between senior and mid-career faculty who participate in the program.

At the undergraduate level, disciplines on topics such as learning, behavior analysis, cognition, human development, motivation, research methods, and tactics of scientific research provide the conceptual and methodological foundations for the investigation of basic behavioral processes that are requisites for the students' involvement in research projects and have worked as an important source of student recruitment. These disciplines usually combine a strong emphasis on both teaching and research (basic and applied). Teaching by providing all students enrolled in their disciplines (and not only a few students) with opportunities to participate in research activities has been a systematic practice of this group.

At the graduate level, six of seven nationally affiliated institutions maintain graduate programs in which the members supervise research and teach disciplines directly relevant to the focus of the Institute. There are six programs in Psychology, one in Special Education, two in Speech Therapy, and one in Computer Science. Table 4 lists the programs, relevant concentration areas and research lines (concerning the work developed by the affiliated members), level of the courses, and evaluation of each course by CAPES/Brasil (Coordination for the Improvement of Higher Education Personnel). The INCT-ECCE has given strong support to the investigative efforts in these programs and played a role in the creation of the Speech Therapy Course at UNESP/Marília. The Institute's members at UNCISAL teach only undergraduate students, but they have been involved in planning a graduate course in Speech Therapy.

Table 5 summarizes the number of students at different levels who participated in research projects during 2010-2011. Eighty-two completed their work during this period, and 159 are participating in ongoing projects (241 total). During the period covered by this report, the faculty supervised the projects of 82 undergraduate students (37 completed and 45 underway), 77 master's theses (18 completed and 59 ongoing), 59 doctoral dissertations (11 approved and 48 ongoing), and 14 postdoctoral fellows (7 completed and 7 underway). Seventeen students had scholarships for technical training. The current number of master's and doctoral students (136; 29 finished during the period, and 107 are in progress) exceeded the proposed goals (a flow of 80 students per year). As shown in Figure 2, the cumulative

number of defended doctoral dissertations and master's theses (heavy blue lines) show an increasing trend and outnumbered the original proposal, represented by the dashed lines (10 dissertations and 15 theses/year). The number of master's theses defended corresponds to the total estimated for the fourth year of this project.

Table 4

Graduate programs/courses, concentration area, course level, and evaluation by CAPES

| Institution | Program/Course | Concentration Area (Research Lines) | Level | CA PES |
|---------------|---------------------------------------|---|-------|--------|
| 1.UFCar | a. Psychology | Behavior and Cognition (<i>Behavioral analysis of cognition</i>) | M D | 5/5 |
| | b. Special Education | Teaching Individuals with Special Needs (<i>Learning and cognition</i>) | M D | 6/6 |
| 2.a. USP/SP | Psychology | Experimental Psychology (<i>The analysis of operant behavior</i>) | M D | 7/7 |
| b. USP/Bauru | Speech Therapy | Speech Therapy (<i>Speech processes and disorders Hearing processes and disorders Voice and oral function Processes and disorders</i>) | M D | 4/4 |
| 3.UFPA | a. Theory and Research on Behavior | Experimental Psychology (<i>Basic psychological processes Development of behavioral technology</i>) | M D | 4/4 |
| | b. Neurosciences and Cellular Biology | Neurosciences (<i>Human vision psychophysics and electrophysiology Neurophysiology and neuroanatomy of primate visual system</i>) | M D | 4/4 |
| | c. Computer Science | Computer systems | M | 3 |
| 4.UNB | Behavioral Sciences | Behavioral analysis Cognition and neurosciences (<i>Basic behavioral processes Experimental analysis of behavior</i>) | M D | 4/4 |
| 5.UFMG | Psychology | Human development (<i>Early language development</i>) | M D | 4/4 |
| 6.UNESP/Bauru | Psychology | Development and learning (<i>Learning and teaching Behavior and health</i>) | M | 3 |
| UNESP/Marília | Speech Therapy | Human Communication Disorders (<i>Bio-psycho-social bases of human communication; Prevention, assessment, and therapy</i>) | M | 3 |

Table 5
Distribution of students who participated in the INCT-ECCE research projects during 2011-2012

| LEVEL | UNIVERSITY | | | | | | | TOTAL |
|---------------------------|------------|-----------|-----------|-----------|-----------|----------|-----------|------------|
| | UFSCar | USP | UFPA | UNB | UNESP | UFMG | UNCISAL | |
| COMPLETED PROJECTS | | | | | | | | |
| Undergraduate | 7 | 7 | 10 | 2 | 5 | 2 | 4 | 37 |
| Master's | 9 | 3 | 2 | 3 | 0 | 1 | 0 | 18 |
| Doctoral | 5 | 1 | 4 | 1 | 0 | 0 | 0 | 11 |
| Postdoctoral | 4 | 1 | 1 | 1 | 0 | 0 | 0 | 7 |
| Technical Training | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 9 |
| SUBTOTAL | 27 | 13 | 18 | 8 | 6 | 4 | 6 | 82 |
| ONGOING PROJECTS | | | | | | | | |
| Undergraduate | 9 | 5 | 7 | 4 | 7 | 1 | 4 | 37 |
| Master's | 18 | 9 | 11 | 11 | 9 | 1 | 0 | 59 |
| Doctoral | 20 | 16 | 10 | 2 | 0 | 0 | 0 | 48 |
| Post-Doctoral | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 7 |
| Technical Training | 2 | 1 | 1 | 1 | 0 | 1 | 2 | 8 |
| SUBTOTAL | 54 | 32 | 30 | 18 | 16 | 3 | 6 | 159 |
| TOTAL | 81 | 45 | 48 | 26 | 22 | 7 | 12 | 241 |

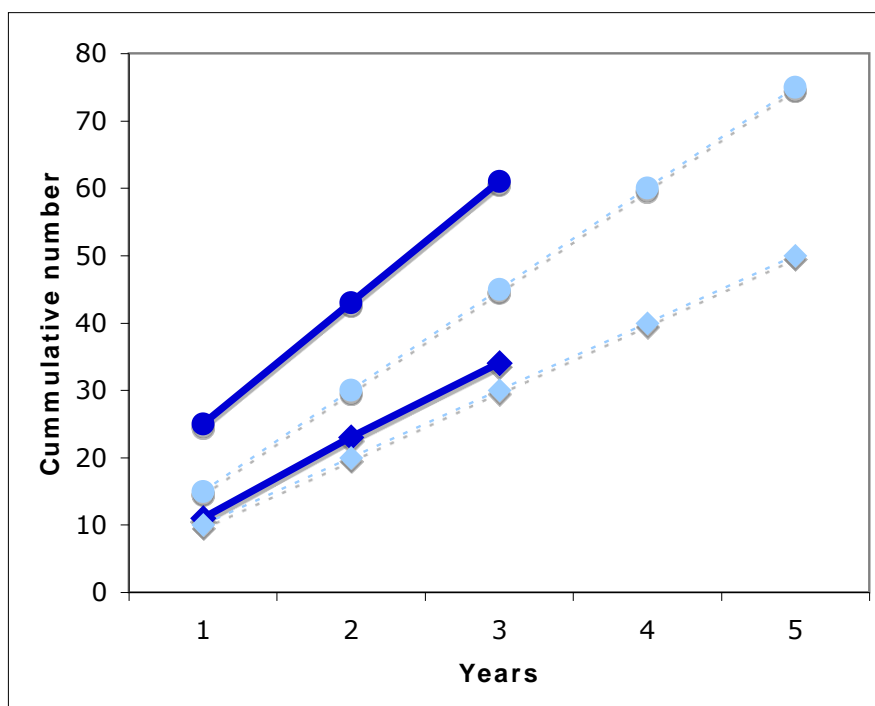


Figure 2. Number of defended doctoral dissertations (filled diamonds) and master's theses (filled circles) in the period 2009-2011. The dashed lines represent the estimates for 5 years (2009-2013).

Table 6 shows the distribution of scholarships from funding agencies that supported the students' scientific development; 201 of the 241 (83.4%) students listed in Table 5 had scholarships under the supervision of members of the INCT-ECCE. The average was higher for projects completed during the year (95.1%; range, 72.7-100%) than for projects in progress (77.4%; range, 64.4-100.0%). Information is not available for scholarships granted or in the process of being granted to graduate students recruited for the first academic semester of 2012.

The participation of students is essential for the development of the scientific program of the INCT and accomplishment of its goals concerning the formation of human resources. Several undergraduate students were accepted to graduate programs. Master's students were accepted to doctoral programs. Similar to the previous period, postdoctoral researchers became faculty teachers (during this past year, Marcelo Benvenuti at USP, Paulo K. Goulart at UFPA, and Edson Huziwara at UFMG).

The Institute's efforts to develop human resources for research has been compatible with the goals we set for this program in terms of not only the number of students in training but also the experience provided by the scientific environment created by the Institute's activities. An important aspect of this work is the opportunity for students at different levels to work together during laboratory routines, in meetings for discussions of ongoing work (i.e., reflections on directions for research and significance of data), and during scientific meetings. These practices produce a circulation of shared knowledge within the broad range of the research issues under investigation, procedures, techniques, and problem-solving strategies, among others, that are fundamental to the preparation of researchers with an open and critical perspective of their research area. At least a portion of these students will maintain symbolic functioning as the focus of their studies or professional careers, thus attaining the Institute's goal to develop future leadership in the area.

A list of doctoral dissertations, master's theses, and undergraduate projects supervised by members of the Institute during this past year (May 2011 to April 2012) are presented in Appendix I. The abstracts of dissertations and theses are available at <http://www.ufscar.br/ecce>.

Table 6

Distribution of scholarships for participation in INCT-ECCE research projects during 2011-2012

| LEVEL (n) | FUNDING AGENCY | | | | | | TOTAL |
|---------------------------|----------------|-----------|----------------|-----------------|----------------|----------|--------------------|
| | CNPq | CAPES | FAPESP (SP) | FAPESPA (PA) | FAPEAL (AL) | Other | |
| COMPLETED PROJECTS | | | | | | | |
| Undergraduate (37) | 29 | 0 | 7 | 0 | 1 | 0 | 37 (100.0%) |
| Master's (18) | 5 | 9 | 3 | 0 | 0 | 0 | 17 (94.4%) |
| Doctoral (11) | 3 | 1 | 4 | 0 | 0 | 0 | 8 (72.7%) |
| Postdoctoral (7) | 2 | 1 | 4 | 0 | 0 | 0 | 7 (100.0%) |
| Technical Support (9) | 9 | 0 | 0 | 0 | 0 | 0 | 9 (100.0%) |
| Subtotal (82) | 48 | 11 | 18 | 0 | 1 | 0 | 78 (95.1%) |
| ONGOING PROJECTS | | | | | | | |
| IC (37) | 20 | 0 | 7 | 0 | 1 | 0 | 28 (75.7%) |
| MS (59) | 8 | 22 | 8 | 0 | 0 | 0 | 38 (64.4%) |
| D (48) | 11 | 13 | 17 | 1 | 0 | 0 | 42 (87.5%) |
| PD (7) | 4 | 1 | 2 | 0 | 0 | 0 | 7 (100%) |
| AT (8) | 8 | 0 | 0 | 0 | 0 | 0 | 8 (100%) |
| Subtotal (159) | 51 | 36 | 34 | 1 | 1 | 0 | 123 (77.4%) |
| TOTAL (241) | 99 | 47 | 52 | 1 | 2 | 0 | 201/83.4% |

SOME IMPACTS OF THE INSTITUTE'S RESEARCH

The main impact of the work recently conducted as part of the INCT-ECCE program will become visible only after a few years. Some current impact is related to research conducted before the formation of the INCT and continued or expanded in the present research program. One aspect of the evaluation of this work is peer-reviewed publication in scientific journals and the impact that results from those publications. Another important aspect is technological development in terms of instructional/educational technology relevant to the promotion of symbolic behavior and remediation of symbolic deficits. Finally, the work has the potential to inform public policies in the areas of education (especially concerning the promotion of symbolic behavior in young children and the teaching of reading and mathematics in the earlier years of elementary school) and health (especially concerning the rehabilitation of persons with auditory disorders).

The number of publications increased substantially in this third year, as shown in Figure 1. The majority of papers were published in well-qualified journals according to CAPES standards: 74% were distributed in the first three higher levels of the QUALIS instrument (A1, A2, and B1). Approximately 20% of the papers were published (or are *in press*) in journals indexed by the ISI. The group is committed to broadening the visibility of the Institute's work in the international literature; 30% of the papers recently submitted were sent to ISI-indexed journals. The goal is to reach 50% in the near future.

The group has contributed to the development of instructional materials and programs for a broad range of repertoires relevant to symbolic functioning and is now developing ways to deliver these technologies outside the laboratory (e.g., the software platform for delivering programs to teach reading and writing and assist teachers and parents in teaching those repertoires; see Results section, item 7A). The reading program has been adapted for different populations (e.g., individuals with intellectual disabilities and illiterate adults), and other adaptations are underway (e.g., for deaf children using LIBRAS, the program will teach relations among signals, pictures, and printed words; for users of cochlear implant, we will take advantage of printed words as the basis to teach picture-name relations and shape speech topographies). As mentioned before, the original work published in *Journal of Applied Behavior Analysis* has been widely cited in national and international journals, dissertations, and theses across the country and is considered a prototypical development for Equivalence Based Instruction (EBI; e.g., the textbook by Cooper, Heron, & Heward, 2007). In Brazil, other research groups have used the teaching methodology (e.g., at Federal University of Santa Catarina and the State University of Londrina) to investigate the effects of other relevant variables. The broad diffusion of the procedures for promoting successful learning and reducing school failure among school teachers will be an important impact of the Institute, but much work still needs to be done before we reach this goal. During this year, we taught many workshops on reading, mathematics, and other general teaching issues, but the scope was restricted to areas in the vicinity of the laboratories. An ongoing doctoral

dissertation (A.M. Lorena) is conducting a remote teaching program for mathematics teachers. After the test of efficiency, the program will be ready for a test of efficacy and necessary adjustments to reach a broader pool of teachers in their schools or homes.

Protocols and written materials are available for parents and caretakers concerning early interventions to promote the development of young children, including cognitive development (e.g., UFSCar has participated in the Babies' Week promoted by the Municipal Secretary of Health in São Carlos in 2011 and 2012, including interviews on television programs).

Recent developments made by doctoral students have the potential to influence the teaching of auditory-visual relations, including teaching reading, in children with autism spectrum disorder, in which some of these children present difficulties learning these kinds of relations.

The interaction among laboratories of the INCT-ECCE and disciplines focused on the symbolic development of persons with auditory deficits and their inclusion in the educational system has resulted in an important effort to evaluate the technology of frequency modulation systems and the impact of their use in resource classrooms on the academic repertoire of the targeted population. Coordinated by teams at UFSCar and USP (Bauru) in collaboration with the Brazilian Association of Audiology, the initial evaluation will focus on 200 children (40 in each geographic region of the country) and 80 teachers, which will be specially prepared to use the devices in the classrooms. The project was recently approved by the Ministry of Education through the National Funding for Development of Education (FNDE), and the results will inform public policies on whether to make frequency modulation systems available in public schools.

NEW FACILITY AND IMPROVEMENTS TO EXISTING FACILITIES

Financial resources for the INCT-ECCE allowed the establishment of a new laboratory for the electrophysiological investigation of event-related potentials (ERPs). Implemented as a sector of the Laboratory for Studies of Human Behavior (LECH-UFSCar), this new facility will add to the quality and scope of research on symbolic functioning. Event-related potentials can detect symbolic relations. Preliminary work performed at the E.K. Shriver Center before the new laboratory was operational indicated that the N400 component, called the “semantic” component, may vary quantitatively as a function of parameters that affect the degree of relatedness. Data in Figure 3 show that the difference between the ERP measured when a pseudo-word was or was not equivalent to another word diminishes with increases in the number of links (i.e., nodes) that associate the stimuli. The correlation between ERP and behavioral data strengthens the notion that the transfer of stimulus properties between equivalent stimuli is stronger with fewer intermediary stimuli. The new laboratory is now becoming functional. Equipment calibration and procedural adjustments are underway, and it is expected to begin generating new data around the end of the first semester of 2012.

For the continuity of the INCT, we propose to extend the use of ERP measurements to the investigation of symbolic learning in persons with cochlear implants (Laboratories in Bauru at USP and UNESP) and genetic disorders (Laboratory in UNESP, Marília).

During this year, we also acquired new equipment for laboratories at USP, UFSCar, and UNB. USP imported (through FAPESP) new equipment for eye-tracking research that is more advanced than the equipment used in previous research. With this equipment, it will be possible to use procedures to monitor behavior during learning tasks and then implement (a) teaching procedures to encourage appropriate topographies of behavior and (b) correction procedures to reduce or eliminate undesired controlling relations at the moment they arise. This will potentially improve the baseline of discrimination learning and formation of equivalence classes, with promising applications for teaching individuals with intellectual deficiencies. New computers, cameras, and touch-screens were acquired for the laboratories at UFSCar, improving the conditions for experimental investigations with human participants. Some resources were used in the construction of equipment for work with dogs (unavailable commercially). The laboratories at UNB (including the computerized reading classroom) were upgraded with desktop and notebook computers, printers, software, and other accessories.

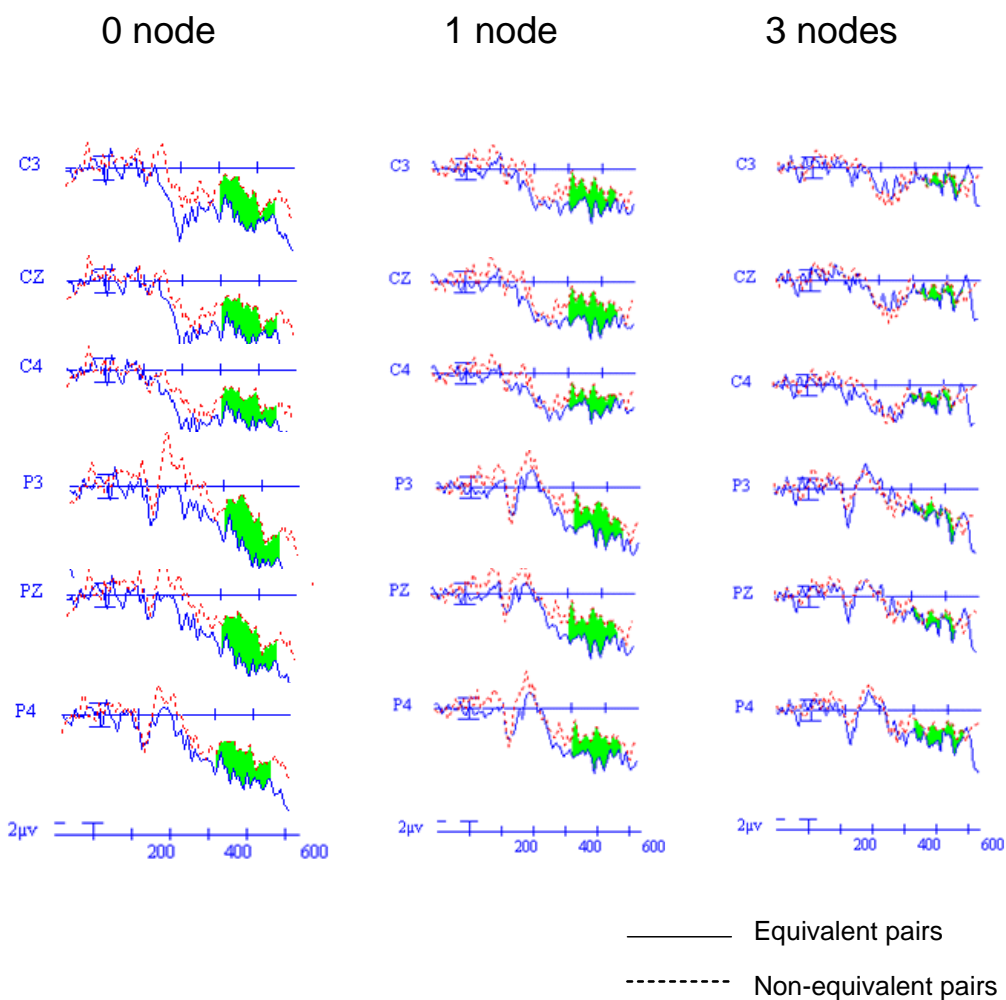


Figure 3. Wave shapes for equivalent and non-equivalent stimulus pairs in a semantic priming task. Notations C3, Cz, C4, P3, Pz, and P4 refer to electrode locations (international system). The green marks correspond to 300-450 ms after the presentation of a pseudo-word.

APPENDIX I

References of Publications, Dissertations, Theses and Scientific Initiation Projects

PUBLICATIONS 2011-2012

PAPERS

PUBLISHED

- Abreu, P., & Hübner, M.M.C. (2011). Efeitos de instruções sobre respostas de checagem [Effects of instructions on checking responses]. *Psicologia: Teoria e Pesquisa*, 27, 301-308.
- Abreu, P.R, Hübner, M.M.C., & Lucchese, F. (2012). The role of shaping the client's interpretations in Functional Analytic Psychotherapy. *The Analysis of Verbal Behavior*, 28, 151-157.
- Állan, S., & Souza, C.B.A. (2011). Intencionalidade em Tomasello, Searle, Dennett e em Abordagens Comportamentais da Cognição Humana [Intentionality in Tomasello, Searle, Dennett, and in behavioral approaches to human cognition]. *Psicologia: Teoria e Pesquisa*, 27, 241-248.
- Almeida-Verdu, A.C.M., Bevilacqua, M.C., de Souza, D.G, & Souza, F.C. (2009 / Publicado em 2012). Imitação vocal e nomeação de figuras em deficientes auditivos usuários de implante coclear: estudo exploratório. [Vocal imitation and picture naming in users of cochlear implant: An exploratory study]. *Revista Brasileira de Análise do Comportamento*, 5, 63-78.
- Alvarenga, K.F., Bevilacqua, M.C., Melo, T.M., Lopes, A.C., & Moret, A.L.M. (2011). Participação das famílias em Programas de Saúde Auditiva: um estudo descritivo [Families participation in Hearing Health Programs: A descriptive study]. *Revista da Sociedade Brasileira de Fonoaudiologia*, 16, 49-53.
- Alves, K.R.S., Assis, G.J., Kato, O.M., & Brino, A.L.F. (2011). Leitura recombinativa após procedimentos de fading in de sílabas das palavras de ensino em pessoas com atraso no desenvolvimento cognitivo [Recombinative reading after procedures for fading in syllables of the teaching words in persons with cognitive development deficits]. *Acta Comportamentalia*, 19, 183-203.
- Antoneli, M.Z., Giacheti, C.M., Genaro, K.F., Zorzetto, N.L., & Richieri-Costa, A. (2011). Frontonasal dysplasia: Clinical evaluation on audiological and brainstem electrophysiological profiles. *Brazilian Journal of Otorhinolaryngology*, 77, 611-615.
- Assis, G.J., Magalhaes, P.G.S., Montero, P.D.S., & Carmo, J.S. (2011). Efeitos da ordem de ensino e da transferência de funções sobre relações ordinais em surdos [Effects of training order and transfer of functions on ordinal relations in deaf persons] . *Acta Comportamentalia*, 19, 43-63.

- Benvenuti, M.F., Hanna, E.S., & Castilho, G.M. (2011). Aprendizagem e comportamento complexo: contribuições para o planejamento do sucesso escolar. [Learning and complex behavior: Contributions for planning school success]. *Parcerias Estratégicas*, 16, 231-235.
- Bevilacqua, M.C., Morettin, M., Melo, T.M, Amantini, R.C.B., & Martinez, M.A.N.S. (2011). Contribuições para análise da política de saúde auditiva no Brasil [Contributions for the Brazilian hearing health policy assessment]. *Revista da Sociedade Brasileira de Fonoaudiologia*, 16, 252-259.
- Bortoloti, R., & de Rose, J.C. (2011). An "Orwellian" account of stimulus equivalence: Are some stimuli "more equivalent" than others? *European Journal of Behavior Analysis*, 12, 121-134.
- Bortoloti, R., & de Rose, J. C. (2011). Avaliação do efeito de dica semântica e da indução de significado entre estímulos abstratos equivalentes [Evaluation of semantic priming effect and induction of meaning among abstract equivalent stimuli]. *Psicologia: Reflexão e Crítica*, 24, 381-393.
- Bortoloti, R., & de Rose, J.C. (2012). Equivalent stimuli are more strongly related after training with delayed matching than after simultaneous matching: A study using the Implicit Relational Assessment Procedure (IRAP). *The Psychological Record*, 62, 41-54.
- Brino, A.L.F., Barros, R.S, Galvão, O.F., Garotti, M., Cruz, I.N., Santos, J.R., Dube, W.V., & McIlvane, W.J. (2011). Sample stimulus control shaping and restricted stimulus control in capuchin monkeys: A methodological note. *Journal of the Experimental Analysis of Behavior*, 95, 387-398.
- Campos, H.C., Debert, P., Barros, R.S., & McIlvane, W.J. (2011). Relational discrimination by pigeons in a go/no-go procedure with compound stimuli: A methodological note. *Journal of the Experimental Analysis of Behavior*, 96, 413-422.
- Cassab, T.V., Zanchetta, S., Giacheti, C.M., Zorzetto, N.L., & Richieri-Costa, A. (2011). Achados audiológicos e eletrofisiológicos de indivíduos com a síndrome G/BBB [Auditory findings and electrophysiologicals in individuals with G/ BBB Syndrome]. *Brazilian Journal of Otorhinolaryngology*, 77, 768 - 774.
- Ceppi, B., & Benvenuti, M.F. (2011). Análise funcional do comportamento autolesivo [Functional analysis of self-injurious behavior]. *Revista de Psiquiatria Clínica*, 38, 247-253.
- Comin, B.C., & Carmo, J.S. (2010/Publicado em 2011). Aprendizagem matemática: aspectos educacionais. [Learning Math: Educational aspects]. *Cadernos da Pedagogia (UFSCar Online)*, 4, 1-12.
- Costa, A.R.A., & Domeniconi, C. (2009 / Publicado em 2012). Análise do responder por exclusão em um cão treinado em tarefas de discriminação simples. [Analysis of

- exclusion responding in a dog trained in simple discrimination tasks]. *Revista Brasileira de Análise do Comportamento*, 5, 49-62.
- da Silva, W.R., de Souza, D.G., Bevilacqua, M.C., Kimura, M.Y.T., & Lopes Jr., J. (2011a). Medidas operantes de limiar auditivo em crianças com surdez pré-lingual, usuárias de implante coclear. I. [Operant measures of auditory threshold in prelingually deaf children with cochlear implant.] *Psicologia: Reflexão e Crítica*, 24, 355-366.
- da Silva, W.R., de Souza, D.G., Bevilacqua, M.C., & Lopes Jr., J. (2011b). Operant measurement of auditory threshold in prelingually deaf users of cochlear implants: II. *Psychology & Neuroscience*, 4, 89-102.
- Danieli, F. Castiquini, E.A.T., Zambonato, T.C.F., & Bevilacqua, M.C. (2011). Avaliação do nível de satisfação de usuários de aparelhos de amplificação sonora individuais dispensados pelo Sistema Único de Saúde [Satisfaction evaluation in users of hearing aid dispensed by the Unified Health System]. *Revista da Sociedade Brasileira de Fonoaudiologia*, 16, 152-159.
- Endemann, P., Pessoa, C.V.B.B., Perez, W.F, & Tomanari, G.A.Y (2011). Identificação de operantes verbais constituintes da leitura por meio da análise dos movimentos dos olhos [Identifying verbal operants in reading by means of eye movement analysis] . *Psicologia: Teoria e Pesquisa*, 27, 139-148.
- Felippe, L., Rocca, J.Z., Postalli, L.M., & Domeniconi, C. (2011). Ensino de palavras retiradas de livros de histórias infantis por meio do procedimento de exclusão. [Teaching words from children story books using the exclusion procedure]. *Temas em Psicologia*, 19, 563-578.
- Ferrari, C., Giacheti, C.M., & de Rose, J.C. (2009/publicado em 2011). Procedimento de emparelhamento com o modelo e possíveis aplicações na avaliação de habilidades de linguagem. *Salusvita*, 28, 85-100.
- Gil, M.S.C.A., Oliveira, T.P., & McIlvane, W.J. (2011). Conditional discriminations by preverbal children in an identity matching-to-sample task. *The Psychological Record*, 61, 327-340.
- Gil, M.S.C.A., Sousa, N.M., & de Souza, D.G. (2011). Dois procedimentos para introduzir reforçamento diferencial no ensino de discriminações simples a bebês [Two procedures for the introduction of differential reinforcement in teaching simple discrimination to infants]. *Acta Comportamentalia*, 19, 163-182.
- Jacob, R.T.S., Monteiro, N.F.G., Molina, S.V., Bevilacqua, M.C., Lauris, J.R.P., & Moret, A.L.M. (2011). Percepção da fala em crianças em situações de ruído [Speech perception in children under noisy settings]. *@rquivos Internacionais de Otorrinolaringologia*, 15, 163-167.

- Jacob, M.M., Souza, G.S., Silveira, L.C.L., & Gomes, B.D., Eletroretinograma de campo total: das origens celulares à aplicação clínica. *Neurociências*, 7, 107-117.
- Lacerda, E.M.C.B., Ventura, D.F., & Silveira, L.C.L. (2011). Avaliação visual de sujeitos expostos de forma ocupacional a solventes orgânicos através de métodos psicofísicos [Visual assessment of subjects occupationally exposed to organic solvents through psychophysical methods]. *Psicologia USP*, 22, 117-144.
- Lacerda, E.M.C.B., Lima, M.G., Rodrigues, A.R., Teixeira, C.E.C., de Lima, L.J.B., Ventura, D.F., & Silveira, L.C.L. (2012). Psychophysical evaluation of achromatic and chromatic vision of workers chronically exposed to organic solvents. *Journal of Environmental and Public Health*, Article ID 7843.
- Lima, M.G., Gomes, B.D., Ventura, D.F., & Silveira, L.C.L. (2011). Métodos utilizados na avaliação psicofísica da visão de cores humana [Methods used in the psychophysical assessment of human color vision]. *Psicologia USP*, 22, 197-222.
- Makiama, S.T., Goulart, P.R.K., & Galvão, O.F. (2011). Comparison of two computerized procedures for the assessment of color discrimination in *Cebus apella*. *Psychology & Neurosciences*, 4, 299-308.
- Martinho-Carvalho, A.C., Bevilacqua, M.C., Sameshima, K., & Costa, O.A. (2011). Auditory neuropathy/ Auditory dyssynchrony in children with cochlear implants. *Brazilian Journal of Otorhinolaryngology*, 77, 481-487.
- Melo, C.M., & de Rose, J.C. (2012). O conceito de sobrevivência das culturas em B. F. Skinner: um diálogo com o materialismo cultural de Marvin Harris [Skinner's survival concept of cultures: A dialogue with Harris' cultural materialism]. *Psicologia: Teoria e Pesquisa*, 28, 119-128.
- Modenesi, R.D., Gercco, V.T., Lourenço, L.L., Parisoto, J.S., & Debert, P. (2009/publicado em 2011). Preferência emergente por bebidas: uma replicação sistemática de Barnes-Holmes, Keane, Barnes-Holmes & Smeets – 2000. [Emergent preference for drinks: A systematic replication of Barnes-Holmes, Keane, Barnes-Holmes & Smeets- 2000]. *Temas em Psicologia*, 17(2), 569-578.
- Oliveira, C.M.C., Souza, H.A., Santos, A.C., Cunha, D., & Giacheti, C.M. (2011). Fatores de risco na gagueira desenvolvimental familiar e isolada [Risk factors in the familial and sporadic developmental stuttering]. *Revista CEFAC*, 13, 205-213.
- Picanço Diniz, C.W., da Rocha E.G., Silveira, L.C.L., Esilton, G.N., & Oswaldo Cruz, E. (2011). Cortical representation of the horizon in V1 and peripheral scaling in mammals with lateral eyes. *Psychology & Neuroscience*, 4, 19-27.
- Porto, T.H., Carmo, M.B.B., Aguiar, R.C., Penna-Gonçalves, V., & Tomanari, G.A.Y. (2011). Efeitos da exposição a estímulos aversivos e apetitivos incontrolláveis sobre o comportamento verbal em contingências de reforço positivo [Effects of exposure to

- uncontrollable, aversive and appetitive stimuli on verbal behavior under positive reinforcement contingencies]. *Estudos de Psicologia*, 28, 337-343.
- Rocha, J.B.A., Martin, W.L.B., & Galvão, O.F. (2011). Relação entre valores e o comportamento de motoristas no trânsito [The relationship between values and drivers's behavior in traffic]. *Temas em Psicologia*, 19, 391-403.
- Rodrigues, C.I., Souza, M.C., & Carmo, J.S. (2010/Publicado em 2011). Transtorno de conduta/TDAH e aprendizagem da matemática: um estudo de caso. [Conduct disorder and Attention Deficit/Hyperactivity Disorder related to mathematics learning: A case-study]. *Psicologia Escolar e Educacional*, 14, 193-201.
- Rossi, N.F., Garayzábal Heinze, E., Giacheti, C.M., Gonçalves, O.F., & Sampaio, A. (2012). Psycholinguistic abilities of children with Williams syndrome. *Research in Developmental Disabilities*, 33, 819-824.
- Rossi, N.F., Sampaio, A., Gonçalves, O.F., & Giacheti, C.M. (2011). Analysis of speech fluency in Williams Syndrome. *Research in Developmental Disabilities*, 32, 2957-2962.
- Santos, A.C.G., Cameschi, C.E., & Hanna, E.S. (2009 / Publicado em 2012). Ensino de frações utilizando o paradigma de equivalência de estímulos [Teaching proportion based on the stimulus equivalence paradigm]. *Revista Brasileira de Análise do Comportamento*, 5, 19-42.
- Silva, M.P., Comerlato Jr., Ademir A., Balen, S.A., & Bevilacqua, M.C. (2012). O uso de um software na (re)habilitação de crianças com deficiência auditiva [The role of a software in the rehabilitation of children with auditory deficits]. *Jornal da Sociedade Brasileira de Fonoaudiologia*, 24, 34-41.
- Schelini, P.W., Almeida, L.S., Duarte, C., Canas, I., & Primi, R. (2011). Efeito Flynn: Estudo com adultos portugueses [Flynn effect: Research with Portuguese adults]. *Psicologia, Educação e Cultura*, 15, 407-415.
- Silva, M.P., Comerlato J., Ademir A., Bevilacqua, M.C., & Lopes-Herrera, S.A. (2011). Instruments to assess the oral language of children fitted with a cochlear implant: A systematic review. *American Journal of Applied Sciences*, 549-553.
- Souza, G.S., Gomes, D.B., & Silveira, L.C.L. (2011). Comparative neurobiology of spatial luminance contrast sensitivity. *Psychology & Neuroscience*, 4, 29-48.
- Tanamati, L.F., Costa, O.A., & Bevilacqua, M.C. (2011). Resultados a longo prazo com o uso do implante coclear em crianças: revisão sistemática [Long-term results by using cochlear implants on children: Systematic review]. *Arquivos Internacionais De Otorrinolaringologia*, 15, 365-375.

Teixeira, C.E.C., Silveira, L.C.L., & Kremers, J. (2011). Lateral interactions in visual perception of temporal signals: Cortical and subcortical components. *Psychology & Neuroscience*, 4, 57-65.

Tomanari, G.Y. (2011). Estímulo discriminativo de extinção produzido por respostas de observação em pombos [Discriminative stimulus of extinction produced by observing responses in pigeons]. *Psicologia: Reflexão e Crítica*, 24, 577-587.

Velasco, S.M., & Tomanari, G.Y. (2011). Aprendizagem de relações simétricas ao longo do treino de discriminações condicionais [Acquisition of symmetrical relations during the training of conditional discriminations]. *Acta Comportamentalia*, 19, 149-162.

Zampieri, M., Schelini, P.W., & Crespo, C.R. (2012). Eficácia de um programa de estimulação de capacidades intelectuais [The efficacy of a program to stimulate intellectual capacities]. *Estudos de Psicologia*, 29, 1-15.

IN PRESS

Abreu, P.R., & Hübner, M.M.C. (In press). O comportamento verbal para B. F. Skinner e para S. C. Hayes: uma síntese com base na mediação social arbitrária do reforçamento [The verbal behavior from the perspectives of B. F. Skinner and S. C. Hayes: A synthesis based on the social mediation by reinforcement]. *Acta Comportamentalia*.

Aggio, N.M., & Domeniconi, C. (In press). Formação e manutenção de classes de estímulos equivalentes: um estudo com participantes da terceira idade. [Formation and maintenance of equivalent stimulus classes: A study with elderly participants]. *Acta Comportamentalia*.

Almeida-Verdu, A.C.M., Matos, F.O., Battaglini, M.P., Bevilacqua, M.C., & de Souza, D.G. (In press). Desempenho de seleção e nomeação de figuras em crianças com deficiência auditiva com implante coclear. [Selection performance and picture naming in deaf children with cochlear implants]. *Temas em Psicologia*.

Alvarenga, K.F., Araujo, E.S., Melo, T.M. de, Martinez, M.A.N.S., & Bevilacqua, M.C. (In press). Questionário para acompanhamento do desenvolvimento de audição e linguagem em crianças [A questionnaire to follow-up the development of hearing and language in children]. *Jornal da Sociedade Brasileira de Fonoaudiologia*.

Alvarenga, K.F., Blasca, W.Q., Moret, A.L.M., Ferrari, D.V., Jacob, R.T.S., Melo, T.M., Costa Filho, O.A., & Bevilacqua, M.C. (In press). Indicadores de qualidade no diagnóstico audiológico e no processo de indicação e adaptação do aparelho de amplificação sonora individual: revisão sistemática. [Quality indicators in audiological diagnosis and

in the process of recommending and adapting the individual sound amplification device]. Revista CEFAC.

Antoniuzzi, L.C.K., Aggio, N., & Domeniconi, C. (In press). Formação de classes de estímulos equivalentes em idosos com idade avançada. [Formation of classes of stimulus equivalence in the elderly]. Revista Brasileira de Análise do Comportamento.

Bandini, C.S.M., Sella, A.C., Postalli, L.M.M., Bandini, H.H.M., & Pontes, E.T. (In press). Efeitos de tarefas de seleção sobre a emergência de nomeação em crianças [Effects of selection training on the emergence of naming in children]. Psicologia: Reflexão e Crítica.

Barros, T., & Benvenuti, M.F. (In press). Reforçamento automático: estratégias recentes de análise e intervenção [Automatic reinforcement: Recent strategies of analysis and intervention]. Acta Comportamentalia.

Bataglini, M.P., Almeida-Verdu, A.C.M., & Bevilacqua, M.C. (In press). Aprendizagem via exclusão e formação de classes de equivalência em crianças com deficiência auditiva e implante coclear. [Learning by exclusion and equivalence classes' formation in deaf children with cochlear implant]. Acta Comportamentalia.

Beazim, M.C.M., Silva, R.G., & Giacheti, C.M. (In press). Compreensão oral em adultos com afasia, disartria e apraxia de fala [Auditory comprehension in adults with aphasia, dysarthria and apraxia of speech]. Arquivos de Ciências da Saúde.

Brino, A.L.F., & Goulart, P.R.K. (In press). A emergência gradual da equivalência de estímulos [Gradual emergence of stimulus equivalence]. Revista Brasileira de Análise do Comportamento.

Canovas, D.S., de Souza, D.G., & Barros, R.S. (In press). Simple successive discrimination and functional class formation in preschool children. The Psychological Record.

Canovas, D.S., Postalli, L.M.M., & de Souza, D.G. (In press). Classes funcionais e de equivalência derivadas de linha de base de discriminações simples e condicionais em crianças. [Functional and equivalence classes derived from a baseline of simple and conditional discriminations in children]. Revista Brasileira de Análise do Comportamento.

Cassab, T.V., Lamônica, D.A.P., Zorzetto, N.L., & Giacheti, C.M. (In press). Perfil de habilidades do desenvolvimento em crianças com holoprosencefalia e holoprosencefalia-like [Profile of developmental abilities in children with holoprosencefalia e holoprosencefalia-like]. Revista CEFAC .

- Correa, D.R., Assis, G.J.A., & Brino, A.L. (In press). Efeitos de sobreposição de palavras sobre a composição de sentenças sob controle condicional [Effects of overlapping words on sentence construction under conditional control]. *Acta Comportamental*.
- de Rose, J.C., Hidalgo, M., & Vasconcellos, M. (In press). Controlling relations in baseline conditional discriminations as determinants of stimulus equivalence (In press). *The Psychological Record*.
- Del Prette, Z.A.P., Domeniconi, C., Amaro, L., Benitez, P., Laurenti, A., & Del Prette, A. (In press). Tolerância e respeito às diferenças: efeitos de uma atividade educativa na escola. *Psicologia: Teoria e Prática*.
- Ferreira, P.R.S., Domeniconi, C., & de Rose, J.C. (In press). Explicitando o mecanismo comportamental de extensões do tacto segundo a concepção skinneriana de propriedade de estímulo. [Describing the behavioral mechanism of tact extensions according to Skinner's concept of stimulus properties]. *Acta Comportamental*.
- França, M.L.P., & Gil, M.S.C.A. (In press). Inclusão de crianças cegas: procedimentos de intervenção. [Inclusion of blind children: Intervention procedures]. *Revista Brasileira de Educação Especial*.
- Grisante, P.C., Galesi, F.L., Sabino, N.M., Debert, P., Arntzen, E., & Mcilvane, W.J. (In press). Go/no-go procedure with compound stimuli: Effects of training structure on the emergence of equivalence classes. *The Psychological Record*.
- Gualberto, P.M.A., Aloí, P.E.P., & Carmo, J.S. (In press). Avaliação de habilidades pré-aritméticas por meio de uma bateria de testes. [A battery of tests to assess pre-arithmetic skills]. *Revista Brasileira de Análise do Comportamento*.
- Lamônica, D.A.C., da Silva, G.K., Furlan, R.H., Abramides, D.V M., Vieira, G.H., Moretti-Ferreira, D., & Giacheti, C.M. (In press). Características clínicas, comportamentais, cognitivas e comunicativa na síndrome Smith-Magenis [Clinical, behavioral, cognitive and communicative aspects of the Smith-Magenis Syndrome]. *Revista CEFAC*.
- Pereira, V. A., & Almeida-Verdu, A. C. M. (In press). Avaliação do ler e do escrever de pessoas surdas pela Língua Brasileira de Sinais (LIBRAS). [Evaluation of reading and writing by deaf persons using the Brazilian Sign Language (BSL)]. *Psicologia: Teoria e Prática*.
- Perez, W.F., & Tomanari, G.A.Y. (In press). Controles por seleção e rejeição em treinos de discriminação condicional e testes de equivalência. [Selection and rejection control in conditional discrimination training and equivalence tests]. *Revista Brasileira de Análise do Comportamento*.

Postalli, L.M.M., Nakachima, R.Y., Schmidt, A., & de Souza, D.G. (In press). Controle instrucional e classes de estímulos equivalentes que incluem verbos e ações [Instructional control and classes of stimulus equivalence including verbs and actions]. *Psicologia: Reflexão e Crítica*.

Sabino, N.M., Albino, A.B., Amaral, V.L.A.R., & Tomanari, G.Y. (In press). Estudo exploratório sobre os efeitos do fechamento de suturas cranianas na aprendizagem discriminativa em ratos. *Acta Comportamentalia*.

Salvatori, A., Silva, C.S., Almeida, I.E., Modenesi, R.D., & Debert, P. (In press). Matching de identidade com estímulos compostos e o ensino de notas musicais [Identity matching with compound stimuli and the teaching of musical notes]. *Acta Comportamentalia*.

Santos, M.J.D., Bevilacqua, M.C., Moret, A.L.M., Lamônica, D.A.C., & Yamaguti, E.H. (In press). Processo de indicação do implante coclear em uma criança com paralisia cerebral: estudo de caso. [Recommendation process for cochlear implant in a child with cerebral palsy: A case study]. *Revista da Sociedade Brasileira de Fonoaudiologia*.

Sella, A.C. & Bandini, C.S.M. (In press). Aquisição, manutenção e generalização de seqüências verbais: Alguns contrapontos entre a Análise do Comportamento e Abordagens Cognitivistas. [Acquisition, maintenance and generalization of verbal sequences: Contrasting behavioral analysis and cognitive approaches]. *Acta Comportamentalia*.

Vieira, S., Dupas, G., & Bevilacqua, M.C. (In press). Vendo desmoronar um futuro idealizado: a descoberta da deficiência auditiva pela família [The loss of an idealized future: The discovery of auditory deficits by the family]. *Acta Paulista de Enfermagem*.

Wechsler, S.M., Nunes, M.F.O., Schelini, P.W., Ferreira, A.A., & Pereira, D.A.P. (In press). Criatividade e inteligência: Analisando semelhanças e discrepâncias no desenvolvimento. [Creativity and intelligence: Analyzing similarities and discrepancies in development]. *Estudos de Psicologia (UFRN)*.

Yamada, M.O., & Bevilacqua, M.C. (In press). Dimensão afetiva da pessoa com surdez adquirida, antes e após o implante coclear [Affective dimensions of persons with acquired deafness, before and after the cochlear implantation]. *Estudos de Psicologia*.

SUBMITTED

Almeida, C.G.M., Almeida-Verdu, A.C.M., & Cavalcante, M.R. (Submitted). Efeito de contingências descritas em histórias sobre o comportamento de crianças. [Effect of contingencies described in stories on children' behavior]. *Temas em Psicologia*.

Almeida-Verdu, A.C.M., & Oliveira, F.M. (Submitted). Controle pelos estímulos auditivo e visual sobre o ditado por uma criança com dificuldade de aprendizagem. [Visual and auditory stimulus control on dictation-taking by a child with learning difficulties]. Estudos em Psicologia (Campinas).

Almeida-Verdu, A.C.M., & Santos, S.L.R. (Submitted). Leitura em uma criança surda após equivalência de estímulos. [Reading in a deaf children after stimuli equivalence]. Psicologia em Revista (PUC Minas).

Almeida-Verdu, A.C.M., & Bevilacqua, M.C. (Submitted). Aquisição de relações condicionais auditivo-visuais, formação de classes e vocalização em deficientes auditivos pré-linguais com implante coclear: investigações e análises. [Acquisition of auditory-visual relations, class formation and vocalization in pre-lingually hearing impaired individuals with cochlear implant: Investigations and analyses]. Avances en la Psicología Latinoamericana.

Almeida, J.H., Bortoloti, R., Ferreira, P.R.S., Schelini, P.W., & de Rose, J.C. (Submitted). Análise das propriedades psicométricas de instrumento de diferencial semântico [The analysis of the psychometric properties of a semantic differential instrument]. Psicologia: Reflexão e Crítica.

Bandini, H.H.M., Santos, F.H., & de Souza, D.G. (Submitted). Níveis de consciência fonológica, memória operacional e conhecimento lexical em escolares. Paidéia.

Bandini, C.S.M., Bandini, H.H.M., Sella, A.C., & de Souza, D.G. (Submitted). Emergência de leitura e escrita em adultos analfabetos após tarefas de matching-to-sample. Paidéia.

Barros, R.S., Costa, T.D., Picanço, C.R., & Souza, C.B.A. (Submitted). Learning set de reversões de discriminações simples com macaco-prego: Explorando procedimentos para a formação de classes. [Learning set of simple discrimination reversals with capuchin monkeys: Exploring procedures for class formation]. Acta Comportamental.

Benitez, P.A., & Domeniconi, C. (Submitted). Categorização de dicas verbais fornecidas por familiares durante realização de tarefas de leitura por aprendizes com deficiência intelectual. [Categories of verbal cues provided by family members during reading tasks by learners with intellectual disabilities]. Estudos de Psicologia (Campinas).

Benitez, P.A., & Domeniconi, C. (Submitted). Uso de um software de leitura e escrita por familiares de indivíduos com deficiência intelectual. [Use of a software for teaching reading and writing by family members of individuals with intellectual disabilities]. Psicologia: Teoria e Pesquisa.

- Canovas, D.S., Debert, P., & Pilgrim, C. (Submitted). Functional and equivalence classes established using simple discrimination training procedures. *Journal of the Experimental Analysis of Behavior*.
- Carmo, J.S., & Simionato, A.M. (Submitted). Reversão de ansiedade à matemática: alguns dados da literatura. [Reversion of mathematics' anxiety: Some data from the literature]. *Psicologia em Estudo* (Maringá).
- Carmo, J.S., Fioraneli, R.C., Castro-Canguim, J.F., & Gualberto, P.M.A. (Submitted). Avaliação de habilidades matemáticas básicas em estudantes do Ensino Fundamental. [Assessment of basic mathematics skills in elementary school children]. *Temas em Psicologia*
- Carmo, J.S., Prado, P.S.T., Lorena, A.B., & Lopes, N.L. (Submitted). Concepções de contagem e de conceito de número na perspectiva de professores do ensino fundamental e pós-graduandos em educação. [Conceptions of counting and number for primary school teachers and graduate students in education]. *Zetetiké* (Unicamp).
- Cavaletti, R.L., & Carmo, J.S. (Submitted). Ensino de habilidades no uso de dinheiro a idoso com perda de memória por meio de relações condicionais e equivalência. [Teaching money skills to an elderly with memory loss through conditional relations and equivalence]. *Interação em Psicologia* (UFPR).
- Cortez, M.C.D., & de Rose, J.C. (Submitted). Treino e manutenção de correspondência em autorrelatos de crianças com e sem história de fracasso escolar [Training and maintenance of correspondence in self-reports of children with and without a history of school failure]. *Acta Comportamental*.
- Cruvinel, A., & Hübner, M.M.C (Submitted). Analysis of the acquisition of verbal operants in a child from 17 months to 2 years of age. *The Psychological Record*.
- da Hora, C., Debert, P., LaFrance, D., & Miguel, C. (Submitted). Inadvertent establishment of location control in matching-to-sample tasks in individuals with autism. *Journal of Applied Behavior Analysis*.
- Danieli, F., & Bevilacqua, M.C. (Submitted). Reconhecimento de fala com e sem ruído competitivo em crianças usuárias de implante coclear utilizando dois diferentes processadores de fala. [Speech recognition with and without competing noise in children with cochlear implants using two different speech processors]. *Revista Brasileira de Otorrinolaringologia*.
- Domeniconi, C., de Rose, J.C., & Perez, W.F. (Submitted). Effects of correspondence training on self-reports of errors during a reading task. *The Psychological Record*.

Ferrari, C., de Rose, J.C., & Giacheti, C.M. (Accepted, pending revisions). Teaching spelling skills via matching-to-sample: Two case studies with Fetal Alcohol Spectrum Disorder. *Psychology & Neuroscience*.

Ferreira, P.M., Yamada, M.O., Moret, A.L.M., & Bevilacqua, M.C. (Submitted). Critérios de referência quanto ao estilo cognitivo das crianças candidatas ao implante coclear. [Reference criteria concerning cognitive style of children candidate to cochlear implantation]. *Revista da Sociedade Brasileira de Fonoaudiologia*.

Fioraneli, R.C., & Carmo, J.S. (Submitted). Efeitos do treino de contagem sobre a aquisição de comportamento conceitual numérico. [Effects of counting training on the acquisition of numeric conceptual behavior]. *Psicologia: Teoria e Pesquisa*.

Golfeto, R.M., & de Souza, D.G. (Submitted). Sentence recognition by prelingually deaf children users of cochlear implants. *Journal of Applied Behavior Analysis*.

Grisante, P.C., Costa, A.R.C., Domeniconi, C., de Rose, J.C., & de Souza, D.G. (Submitted). Nomeação de estímulos novos a partir da seleção por exclusão: quantidade de treino e relações de controle [Naming novel stimuli after selection by exclusion: amount of training and controlling relations]. *Paideia*.

Haber, G.M., Galvão, O.F., Baptista, M.Q.G., & Souza, C.B.A. (Submitted). Verbal behavior and music score reading: An operant analysis. *Revista Brasileira de Análise do Comportamento*.

Henklain, M.H.O., & Carmo, J.S. (Submitted). Algumas contribuições da Análise do Comportamento ao estudo do sentido de número em bebês. [Some contributions of behavior analysis to the study of meaning of number in infants]. *Psicologia: Reflexão e Crítica*.

Henklain, M.H.O., & Carmo, J.S. (Submitted). Contribuições da análise do comportamento à educação: um convite ao diálogo. [Contributions of behavioral analysis to education: An invitation to dialogue]. *Cadernos de Educação (UFPEl)*.

Henklain, M.H.O., & Carmo, J.S. (Submitted). Produção analítico-comportamental sobre ensino-aprendizagem de habilidades matemáticas: dados representativos de eventos científicos brasileiros. [Behavior analytic production on teaching and learning mathematical skills: Representative data of scientific Brazilian events]. *Perspectivas em Análise do Comportamento*.

Henklain, M.H.O., & Carmo, J.S. (Submitted). Problemas aditivos: dificuldades relacionadas à forma de apresentação e posição da incógnita. [Additive problems: Difficulties related to

the presentation display and the position set of the unknown quantity]. *Psicologia: Teoria e Pesquisa*.

Huziwara, E.M., Velasco, S.M., Machado, A.D., Tomanari, G.Y., & de Souza, D.G. (Submitted). Emergent relations in pigeons following training with temporal samples. *Animal Learning and Behavior*.

Mendes, A.C., & Carmo, J.S. (Submitted). Estudantes com grau extremo de ansiedade à matemática: identificação de casos e implicações educacionais. [Students with extreme degree of mathematics anxiety: Identification of cases and educational implications]. *Revista Psicologia da Educação (PUC/SP)*.

Moreira, M.B., & Hanna, E.S. (Submitted). Emergência de relações arbitrárias após treino de discriminações simples simultâneas com estímulos compostos. [Emergence of arbitrary relations after simultaneous simple discrimination training with compound stimulus]. *Acta Comportamental*.

Moreno, A.M., & de Souza, D.G. (Submitted). Identity matching-to-sample in bees (*Melipona quadrifasciata* and *Melipona rufiventris*). *Journal of Comparative Physiology - A*.

Moreno, A.M., Reinhard, J., & de Souza, D.G. (Submitted). Are some bees smarter than others? Comparative study of relational learning capacity in *Apis* and *Melipona* Honeybees. *PLoS ONE*.

Moreno, A.M., Varella, A.A.B., Canovas, D.S., Postalli, L.M.M., Ventura, D.F., & de Souza, D.G. (Submitted). Restricted stimulus control in children but not in bees (*Melipona quadrifasciata*). *Behavioural Processes*.

Nogueira da Cruz, I.R., Picanço, C.R.F., & Barros, R.S. (Submitted). Utilização da máscara na verificação de relações de controle de estímulos em macacos-prego. [Using a mask to verify stimulus control relations in capuchin monkeys]. *Revista Brasileira de Análise do Comportamento*.

Pinheiro, A.B.S.M., Yamada, M.O., Bevilacqua, M.C., & Crenitte, P.A.P. (Submitted). Avaliação das habilidades escolares de crianças com implante coclear. [Assessment of school abilities in children with cochlear implants]. *Revista CEFAC*.

Rebello, M., Yu, L.S., Bertoldo, M., Duckur, R., Vernucio, R., & Debert, P. (Submitted). Ensino de ideogramas a partir do procedimento matching de identidade com estímulos compostos [Teaching ideograms through identity matching-to-sample with compound stimuli]. *Revista Brasileira de Análise do Comportamento*.

Sousa, N.M., & Gil, M.S.C.A. (Submitted) Aprendizagem de discriminação simples e reversão por bebês entre 15 e 23 meses. *Psicologia: Teoria e Pesquisa*.

Souza, C.B.A., & Flores, E.P. (Submitted). Transfer and task complexity: "The cart before the horse". *Interamerican Journal of Psychology*.

Verneque, L., & Hanna, E.S. (Submitted). Efeito do tempo de exposição ao estímulo na seleção de diferentes topografias de controle de estímulos. [Effects of exposure time to the stimulus on the selection of different stimulus control topographies]. *Revista Brasileira de Análise do Comportamento*.

Vichi, C., Nascimento, G., & Souza, C.B.A. (Submitted). Aprendizagem ostensiva, comportamento de ouvinte e transferência de função por pareamento de estímulos. [Ostensive learning, hearing behavior and transference of function through stimulus pairing]. *Psicologia: Reflexão e Crítica*.

BOOK

Hübner, M.M.C., & Moreira, M.B. (In press), *Fundamentos de Psicologia – Temas Clássicos de Psicologia à luz da análise do comportamento*. (1a. ed.) Rio de Janeiro: Guanabara Koogan. ISBN 978-85-277-2059-5.

BOOK CHAPTERS

Almeida Verdu, A.C.M., da Silva, W.R., Golfeto, R.M., Bevilacqua, M.C., & de Souza, D.G. (Submitted). Investigação da função simbólica adquirida por estímulos elétricos em crianças com implante coclear [Investigation of the acquired symbolic function of electrical stimuli in children using cochlear implant]. Em de J.C. de Rose, M.S.C.A Gil, & D.G. de Souza (Orgs.). *Aprendizagem relacional e comportamento simbólico: implicações para o ensino*.

Benvenuti, M.F., & Tomanari, G.A.T. (Submitted). Atenção, observação e a produção do comportamento simbólico e do responder relacional [Attention, observation, and the production of symbolic behavior and relational responding]. Em de J.C. de Rose, M.S.C.A Gil, & D.G. de Souza (Orgs.). *Aprendizagem relacional e comportamento simbólico: implicações para o ensino*.

Callonere, A., Rolim, S.F., & Hübner, M.M.C. (In press). *Relações familiares e escolares em práticas inclusivas* [Family and school relationships in inclusive practices]. *Comportamento em foco*.

Costa, A.R., Domeniconi, C., & de Souza, D.G. (Submitted). Controle de estímulos, mapeamento simbólico emergente e aquisição de vocabulário [Stimulus control, emergent symbolic mapping and vocabulary acquisition]. Em de J.C. de Rose, M.S.C.A Gil, & D.G. de Souza (Orgs.). Aprendizagem relacional e comportamento simbólico: implicações para o ensino.

de Souza, D.G., Hanna, E.S., Albuquerque, A.R., & Hübner, M.M.C. (Submitted). Processos recombinativos: algumas variáveis críticas para o desenvolvimento de leitura [Recombinative processes: Some critical variables in reading development]. Em de J.C. de Rose, M.S.C.A Gil, & D.G. de Souza (Orgs.). Aprendizagem relacional e comportamento simbólico: implicações para o ensino.

Debert, P. (Submitted). Procedimentos go/no-go com estímulos compostos no estudo da aprendizagem relacional [Go/no-go procedures with compound stimuli in the study of relational learning]. Em de J.C. de Rose, M.S.C.A Gil, & D.G. de Souza (Orgs.). Aprendizagem relacional e comportamento simbólico: implicações para o ensino.

Ferrari, C. (In press). Avaliação de habilidades de percepção de sons de fala: questões metodológicas [Assessment of speech sound perception skills: Methodological issues]. Em C.M. Giacheti & S.R. Gimenez-Paschoal (Orgs.). Perspectivas interdisciplinares em Fonoaudiologia: da avaliação à intervenção, Editora UNESP.

Galvão, O.F., de Souza, CBA, & Barros, R.S. (Submitted). Sobre o desenvolvimento de um modelo animal do comportamento simbólico [On the development of an animal model of symbolic behavior]. Em de J.C. de Rose, M.S.C.A Gil, & D.G. de Souza (Orgs.). Aprendizagem relacional e comportamento simbólico: implicações para o ensino.

Gil, M.S.C.A. (Submitted). Pergunte aos bebês: definição de classes de respostas e de estímulos no estudo de precursores do comportamento simbólico em bebês [Ask the babies: Definition of response and stimulus classes in the study of precursors of symbolic behavior in babies]. Em de J.C. de Rose, M.S.C.A Gil, & D.G. de Souza (Orgs.). Aprendizagem relacional e comportamento simbólico: implicações para o ensino.

Hübner, M.M.C., Souza, A.C., & Souza, S. (Submitted). Uma revisão da contribuição brasileira no desenvolvimento de procedimentos de ensino para a leitura recombinativa [A review of the Brazilian contribution to the development of procedures to teach recombinative reading]. Em de J.C. de Rose, M.S.C.A Gil, & D.G. de Souza (Orgs.). Aprendizagem relacional e comportamento simbólico: implicações para o ensino.

Melo, R.M., & Hanna, E.S. (Submitted). Comportamento conceitual: treino discriminativo simples simultâneo e formação de classes de estímulos relacionais [Conceptual

behavior: Simple simultaneous discrimination training and the formation of relational stimulus classes]. Em de J.C. de Rose, M.S.C.A Gil, & D.G. de Souza (Orgs.). Aprendizagem relacional e comportamento simbólico: implicações para o ensino.

Schmidt, A., Postalli, L.M.M., & de Souza, D.G. (Submitted). Formação de classes de estímulos equivalentes como um dos processos na origem da compreensão de instruções [Stimulus class formation as one of the processes in the origin of instruction comprehension]. Em de J.C. de Rose, M.S.C.A Gil, & D.G. de Souza (Orgs.). Aprendizagem relacional e comportamento simbólico: implicações para o ensino.

Softwares

Tomanari, G.A.Y. (2011). *Match 1.0*. Programming matching-to-sample procedures to teach conditional discriminations.

Tomanari, G.A.Y. (2011). *Mult 1.0*. Programming reinforcement schedules to study observational responding.

THE ACADEMIC PROGRAM: HUMAN RESOURCES DEVELOPMENT

Post-doctoral research, Doctoral dissertations, Master thesis, and Scientific Initiation Projects completed (from May, 2011 to April, 2012) and currently underway

COMPLETED SUPERVISIONS

Post-doctoral research (7)

1. Daniela Mendonça Ribeiro (DG de Souza). Avaliação da efetividade de um programa informatizado para ensino de leitura aplicado em situação escolar [Assessing the effectiveness of a computerized program to teach reading in a school setting]. Início: 2011. UFSCar. CNPq- INCT-ECCE.
2. Camila Muchon de Melo. (JC de Rose). O conceito de cultura no Behaviorismo Radical Skinneriano: Debates e controvérsias [The concept of culture in Skinner's radical behaviorism: debates and controversies]. Início: 2010. UFSCar. FAPESP.
3. Marcelo Frota Benvenuti (ES Hanna). Leitura com base na recombinação de palavras de treino: o papel da resposta de observação [Reading based on the recombination of training words: the role of the observing response]. *Início: 2008.* UNB. CAPES/PRODOC.
4. Natalia Barreto Frederique (MC Bevilacqua). Avaliação clínica da percepção musical em usuários de implante coclear [Clinical evaluation of music perception in users of cochlear implant]. Início: 2008. USP/CPA-HRAC. FAPESP.
5. Paulo Roberto dos Santos Ferreira (JC de Rose). Regra e criatividade no comportamentalismo radical de B. F. Skinner [Rules and creativity in B.F. Skinner's radical behaviorism]. Início: 2010. UFSCar. FAPESP.
6. Renato Bortoloti (JC de Rose). *Investigação de aspectos quantitativos de relações simbólicas [Investigation of quantitative dimensions of symbolic relations]*. Início: 2007. UFSCar. FAPESP.
7. Wagner Rogério da Silva (MC Bevilacqua). Desenvolvimento de procedimento para avaliação de limiar auditivo e máximo conforto em usuários de implante coclear [Development of a procedure to assess auditory threshold and maximum comfort in users of cochlear implant]. Início: 2009. USP / CPA-HRAC. CNPq.

Doctoral Dissertations (11)

1. Antonio Mauricio Moreno (DG de Souza). Emparelhamento com o modelo em abelhas (*Melipona quadrifasciata*) [Matching-to-sample in bees (*Melipona quadrifasciata*)]. Tese (Doutorado em Psicologia). UFSCar. FAPESP. Abr/2012.

2. Camila Graciela Santos Gomes (DG de Souza). Aprendizagem relacional, comportamento simbólico e ensino de leitura a indivíduos com autismo [Relational learning, symbolic behavior and teaching reading to individuals with autism]. Tese (Doutorado em Educação Especial). UFSCar. CNPq. Dez/2011.
3. Eduardo Neves Pedrosa de Cillo (MMC Hübner). Auto-fala em simulação de esportes: comparação dos efeitos de reforçamento diferencial e instrução no desempenho de iniciantes [Self-speech in sports' simulation: Comparing the effects of differential reinforcement and instruction on the performance of beginners]. Tese (Doutorado em Psicologia [Psicologia Experimental]). USP. CNPq. Dez/2011.
4. Flávio Campestrin Bettarello (ES Hanna). A influência de variáveis de procedimento na determinação de curvas de indiferença de escolha entre atrasos e magnitudes de reforço [The influence of procedural variables in the determination of indifference curves for delay and magnitude of reinforcement]. Tese (Doutorado em Ciências do Comportamento). UNB. Sem bolsa. Fev/2012.
5. Ilara dos Reis Nogueira da Cruz (RS Barros). *Estudos sobre controle de estímulos em macacos-prego [Studies on stimulus control in capuchin monkeys]*. Tese (Doutorado em Teoria e Pesquisa do Comportamento. UFPA. Abr/2011.
6. Lídia Maria Marson Postalli (DG de Souza). Equivalência de estímulos e generalização recombinativa no seguimento de instruções com pseudo-frases (verbo-objeto) [Stimulus equivalence and recombinative generalization in instructional control by pseudo-phrases (verb-object)]. Tese (Doutorado em Educação Especial). UFSCar. FAPESP. Julho/2011.
7. Márcia Cristina Freitas da Silva (LCL Silveira). Alterações hepáticas devidas à exposição ao metilmercúrio em macaco prego, *Cebus apella* (Linnaeus, 1758) [Hepatic alterations due to exposure to methylmercury in capuchin monkeys, *Cebus apella* (Linnaeus, 1758)]. Tese (Doutorado em Neurociências e Biologia Celular). UFPA. 2011.
8. Marielle Diniz Cortez (JC de Rose). Correspondência fazer-dizer: variáveis de controle e condições de manutenção e generalização [Do-say correspondence: controlling variables and conditions for maintenance and generalization]. Tese (Doutorado em Psicologia). UFSCar. FAPESP. Mar/2012.
9. Paulo Elias Gotardelo Audebert Delage (OF Galvão). *Resolução de problemas com uso de ferramentas em Cebus apella [The use of tools in problem solving by Cebus apella]* . Tese (Doutorado em Psicologia [Teoria e Pesquisa do Comportamento]). UFPA. CAPES. Out/2011.
10. Priscilla Crespilho Grisante (JC de Rose). Relações de controle de estímulos e estabelecimento de classes de estímulos equivalentes em crianças e em indivíduos com Síndrome de Down [Controlling relations and the formation of stimulus

equivalence classes in children and individuals with Down Syndrome]. Tese (Doutorado em Educação Especial). UFSCar. FAPESP. Nov/2011.

11. Sylvio Állan (CBA de Souza). Uma interpretação intencionalista da imagem: cognição, semiótica e comportamento [An intensionalist interpretation of image: Cognition, semiotics and behavior]. Tese (Doutorado em Psicologia [Teoria e Pesquisa do Comportamento]). UFPA. CNPq. Fev/2012.

Master Thesis (18)

1. Adriana Oliveira (ES Hanna). Efeito de reforço específico na formação de classes de estímulos a partir de discriminações simples entre estímulos compostos e procedimento com mancha redundante [Effects of specific reinforcement on the formation of stimulus classes after simple discrimination between compound stimuli and a procedure with redundant cue]. Dissertação (Mestrado em Ciências do Comportamento). UNB. CAPES. Fev/ 2012.
2. Alessandra Campanini Mendes (JS Carmo). Identificação de graus de ansiedade à matemática em estudantes do Ensino Fundamental e Médio: contribuições à validação de uma escala de ansiedade à matemática [Identification of degrees of mathematics anxiety: Contributions to the validation of a mathematics anxiety scale]. Dissertação (Mestrado em Psicologia). UFSCar. CAPES. Mar/2012.
3. Ana Claudia de Oliveira Costa (OL Galvão). Pareamento ao modelo com atraso em cebus cf. Apella: efeitos da manipulação do atraso e do intervalo entre tentativas [Delayed matching-to-sample in cebus cf. Apella: Effects of delay and intertrial interval]. Dissertação (Mestrado em Teoria e Pesquisa do Comportamento). UFPA. 2011
4. Ana Cristina de Castro Coelho (MC Bevilacqua). Efeito de diferentes estratégias de codificação dos processadores de fala na voz de crianças usuárias de implante coclear [Effects of different strategies of speech processors coding on the voice of children using cochlear implants]. Dissertação (Mestrado em Fonaudiologia). USP-Bauru. FAPESP. 2011.
5. Anna Christina Porto Maia Passarelli (TP Oliveira). Aquisição de função simbólica por estímulos auditivos em crianças pequenas [The acquisition of symbolic function of auditory stimuli in young children]. Dissertação (Mestrado em Psicologia do Desenvolvimento). UFMG. CAPES. Fev/2012.
6. Daniela de Almeida Casteleti (GAY Tomanari). Equivalência de estímulos em crianças portadoras de síndrome de Asperger [Stimulus equivalence in children with Asperger Syndrome]. Dissertação (Mestrado em Psicologia Experimental). USP. CNPq. 2011.

7. Emerson de Sousa Pereira (ES Hanna). Discriminação de diferença de frequência de sons e aprendizagem de leitura musical [Discrimination of sound frequency and learning musical reading]. Dissertação (Mestrado em Ciências do Comportamento). UNB. CAPES. Fev/2012.
8. Giovana Mendes Ferroni (MSCA GIL). Ensino de conceitos para uma criança com deficiência visual por meio de brincadeiras [Teaching concepts to a child with visual deficits through playing]. Dissertação (Mestrado em Psicologia, Educação Especial). UFSCar. CAPES. 2012.
9. Guilherme Bergo Leugi (JC de Rose). A perspectiva de uma antropologia behaviorista radical: Cultura, variação, seleção e transmissão [The perspective of a radical behaviorist anthropology: Culture, variation, selection, and transmission]. Dissertação (Mestrado em Filosofia). UFSCar. CNPq. Abr/2012.
10. Janaína Tauchen Quesado Filgueiras (ES Hanna). Efeitos do treino discriminativo com resposta de seleção ou de tocar teclado sobre a leitura musical [Effects of discriminative training with selection responding and playing the keyboard on musical reading] Dissertação (Mestrado em Ciências do Comportamento). UNB. CNPq. Março/2011.
11. Luís Fernando Toniollo Reis (JC de Rose). Discriminação de acordes baseada em equivalência de estímulos e treino de abstração [*Discrimination of chords based on stimulus equivalence and abstraction training*]. Dissertação (Mestrado em Psicologia). UFSCar. CAPES/INCT. Jul/2011.
12. Mariane Perin da Silva (MC Bevilacqua). Aplicabilidade do Software Auxiliar na Reabilitação dos Distúrbios Auditivos (SARDA) em crianças com deficiência auditiva [Applicability of the Software to Help in the Rehabilitation of Auditory Disturbs (SHRAD) with children with auditory disabilities]. Dissertação (Mestrado em Fonoaudiologia). USP-Bauru. FAPESP. 2011.
13. Marília Zampieri (PW Schelini). Escala de avaliação da metacognição infantil: Elaboração de itens e análise dos parâmetros psicométricos [A scale for the assessment of children's metacognition: Elaboration of items and analysis of psychometric parameters]. Dissertação (Mestrado em Psicologia). UFSCar. CAPES. Mar/2012.
14. Milena Monteiro Nagahama (CBA de Souza). Escola Experimental de Primatas: Análise da coerência entre pressupostos e práticas empíricas [Experimental School for Primates: Analysis of coherence between assumptions and empirical practices]. Dissertação (Mestrado em Teoria e Pesquisa do Comportamento). UFPA. CNPq. Jun/2011.
15. Nathalia Sabaine Cippola (C Domeniconi). Responder por exclusão em treinos de discriminação condicional com estímulos temporais por universitários [Responding

by exclusion in training of conditional discrimination of temporal stimuli in undergraduate students]. Dissertação (Mestrado em Psicologia). UFSCar. CAPES. Mar/2012.

16. Rogério Crevelenti Fioraneli (JS Carmo). O papel da contagem na formação do conceito de número em crianças pré-escolares [The role of counting on the formation of the concept of number in preschool children]. Dissertação (Mestrado em Psicologia). UFSCar. FAPESP. Mar/2012.
17. Thaise Löhr (MSCA Gil). Ensino de respostas de tatear para quatro bebês com estimulação verbal restrita [Teaching tacting responding to four infants with restricted verbal stimulation]. Dissertação (Mestrado em Psicologia). UFSCar. CAPES/INCT. 2011.
18. Wandria de Andrade Mescouto (GAY Tomanari). Efeitos de contingências e de instruções sobre respostas de escolha e de movimentos dos olhos durante o estabelecimento de discriminações simples [Effects of contingencies and instructions on selection responses and eye movements during simple discrimination training]. Dissertação (Mestrado em Psicologia Experimental). USP. CNPq. 2011.

Undergraduate research (iniciação científica)

1. Aline Santos Seabra (CBA Souza). Discriminação auditivo-visual em macaco-prego [Auditory-visual discrimination in a capuchin monkey]. UFPA. CNPq. 2011.
2. Álvaro Júnior Melo e Silva (RS Barros). Busca empírica de distinção entre identidade generalizada e reflexividade em macaco-prego (*Cebus apella*) [Empirical investigation of the distinction between generalized identity and reflexivity in a capuchin monkey (*Cebus apella*)]. UFPA. PIBIC. 2011
3. Ana Paula Bemerguy Assumpção (Olavo F. Galvão). *Discriminações condicionais abstratas em macacos-prego: ensino de relações de continuidade com estímulos em movimento* [Abstract conditional discrimination in a capuchin monkey: Teaching continuity relations with moving stimuli]. UFPA. CNPq. 2011.
4. Anne Kelly Alves Gonçalves (CBA Souza). A função social dos estímulos na aprendizagem de cães domésticos e macacos-prego [The social function of the stimuli on domestic dogs and capuchin monkeys learning]. UFPA. CNPq. 2011
5. Bianca Marcelino de Souza (PW Schelini). Comparação entre conhecimento metacognitivo e desempenho a partir de testes de capacidades intelectuais [Comparison between metacognitive knowledge and performance based on tests of intellectual capabilities]. UFSCar. CNPq. 2011.

6. Bruna Mares Terra (ACM Almeida-Verdu). Evolução da nomeação em deficientes auditivos implantados pré-linguais [Evolution of naming in prelingual hearing impaired cochlear implant users]. UNESP/Bauru. CNPq (INCT-ECCE). 2011.
7. Bruno Motta Melo (DG de Souza). Recombinação de estímulos no ensino de leitura e escrita [Recombination of stimuli in teaching reading and writing]. UFSCar. CNPq (INCT-ECCE). 2011.
8. Caio Carvalho Moreira (M Ribeiro Filho). Software educacional para avaliação e auxílio ao aprendizado do inglês através de interação por voz em um ambiente virtual 3D [Educational software for English evaluation and teaching through voice interaction in a 3D virtual environment]. UFPA. CNPq. 2011.
9. Carolina Ito (C Domeniconi). Treino discriminativo e teste de generalização de resposta: proposta de análise do controle exercido pelo tempo no comportamento canino [Discriminative training and response generalization test: A proposal for the analysis of temporal based control on dog behaviors]. UFSCar. FAPESP. 2011.
10. Daniela Fassis (JS Carmo). Identificação e descrição de graus de ansiedade à matemática em estudantes do ensino fundamental (6º ao 9º ano) das redes pública e particular de ensino [Identification and description of levels of math anxiety in elementary school students (6th to 9th grade) from public and private schools]. UFSCar. CNPq. 2011.
11. Danielle Oliveira Freitas (HHM Bandini). Privação linguística e desenvolvimento cognitivo: estudo com surdos sem aquisição prévia de linguagem formal [Linguistic deprivation and cognitive development: Study of hearing impaired individuals without prior acquisition of formal language]. UNCISAL. CNPq (INCT-ECCE). 2011.
12. Débora Longo Miyashita (MC Bevilacqua). Construção de um material de apoio para fonoaudiólogos da rede de saúde auditiva: o uso do website Saúde Auditiva Brasil [Developing of a support material for speech-language pathologists of the hearing health network: Using the website Hearing Health Brasil]. USP - Faculdade de Odontologia de Bauru. FAPESP.
13. Emanuele Santos Javarrotti (HHM Bandini). Comparação entre desempenhos de leitura e de escrita de crianças expostas a diferentes condições de ensino [Comparison between reading and writing performances of children exposed to different teaching conditions]. UNCISAL. CNPq/INCT. 2011.
14. Fabiana Cristina de Souza (ACM Almeida-Verdu). Efeito do ensino de palavras com ênfase nas sílabas sobre a nomeação de figuras em deficientes auditivos implantados [The effect of teaching words with emphasis on syllables on picture naming in users of cochlear implant]. UNESP/Bauru. FAPESP. 2011.

15. Fabiana Ferreira Rodrigues (MC Bevilacqua). Construção de um material de orientação para crianças no processo pré-cirúrgico do implante coclear [Primer for children in the cochlear implant pre-surgical process]. USP. FAPESP. 2011.
16. Fabiane da Silva Pereira (OF Galvão). *Comportamento pré-simbólico em macaco-prego (Cebus apella): relações de igualdade, de perspectiva e de pertinência* [Pre-symbolic behavior in a capuchin monkey (Cebus apella): Sameness, perspective and relevancy relations]. UFPA. CNPq. 2011.
17. Fernanda Piqueira Gomes (ACM Almeida-Verdu). Desenvolvimento de rotinas de avaliação e ensino de repertório expressivo e receptivo em deficientes auditivos implantados cocleares [Developing evaluation and teaching routines for expressive and receptive repertoires in users of cochlear implant]. UNESP/Bauru. FAPESP. 2011.
18. Florença Lucia Coelho Justino (PW Schelini). Análise da capacidade de modificação de estórias em crianças, adultos e idosos [Analysis of the ability of children, adults, and elderly in modifying stories]. UFSCar. CNPq/INCT. 2011.
19. Giulia Ganthous (CM Giacheti). Análise da fluência de fala em indivíduos com transtorno do espectro alcoólico fetal em tarefa de narrativa oral [Analysis of speech fluency of individuals with fetal alcohol spectrum disorder in an oral narrative task]. UNESP/Marília. FAPESP. 2011.
20. Jamile Santos Lago (CBA Souza). Aprendizagem de relações condicionais auditivo-visuais: análise dos efeitos de exclusão e da transferência para a nomeação [Learning of auditory-visual conditional relations: Analysis of the effects of exclusion and transfer to naming]. UFPA. CNPq. 2011.
21. Jessika Natel (MMC Hübner). Efeito da formação de uma classe de equivalência positivamente qualificadora (de tatos com autoclícticos) sobre leitura, na duração da resposta de ler e escolha de imagens relacionadas [Effect of a positively qualifying equivalence class formation (of tacts with autoclicts) on reading ability, on the duration of the reading response, and the on the choice of related pictures]. USP. CNPq. 2011.
22. João Hanna Mendes Cardoso (JS Carmo). O papel da contagem na aquisição de comportamento conceitual numérico [The role of counting on the acquisition of the numerical conceptual behavior]. UFSCar. CNPq. 2011.
23. Kauer Kitzinger d'Avila (GAY Tomanari). Efeito da variação de estímulos novos e irrelevantes sobre a resposta de observação e controle da resposta operante [Effect of novel and irrelevant stimuli variation on the observing response and on operant response control]. USP. CNPq. 2011.

24. Larissa Germiniani dos Santos (MC Bevilacqua). Avaliação do website para fonoaudiólogos que trabalham na rede de saúde auditiva [Evaluation of a website for speech-language pathologists in the hearing health network]. USP - Bauru. FAPESP. 2011.
25. Lígia Mosolino de Carvalho (GAY Tomanari). Parâmetros da discriminação visual simultânea avaliados pelos movimentos dos olhos [Simultaneous visual discrimination parameters evaluated through eye movements]. USP. CNPq (INCT-ECCE). 2011.
26. Lorena Cardoso Rodrigues de Araújo (OF Galvão). *Evidência de comportamento categorial em macaco-prego [Evidence of categorical behavior in a capuchin monkey]*. UFPA. CNPq. 2011.
27. Luana Modesto Athaide (LCL Silveira). Impacto ambiental e neurociência: estrutura e função do sistema visual normal e alterado pela exposição ao Hg [Environmental impact and neuroscience: Structure and function of regular and altered visual system due to exposure to Hg]. UFPA. CNPq. 2011.
28. Luísa Baiochi (ES Hanna). Efeito do tipo de treino sobre a leitura musical - Ampliação da amostra [Effect of different training on reading music – Extending the sample]. UNB. CNPq/INCT. 2011.
29. Luísa Ferrari Tomé (ES Hanna). Tamanho da unidade musical treinada e sua influência na aprendizagem de leitura musical - ampliação da amostra [Trained musical unit size and its influency on learning of reading music – Extending the sample]. UNB. CNPq/INCT. 2011.
30. Mariana Almeida Brasileiro (HHM Bandini). Elaboração de um procedimento informatizado de ensino de leitura para crianças surdas usuárias de LIBRAS [Developing of a computerized procedure for teaching reading to hearing impaired children, users of LIBRAS]. UNCISAL. CNPq.
31. Rayssa de Andrade França (HHM Bandini). Ensino computadorizado de palavras complexas da língua portuguesa para deficientes auditivos por meio de sistema FM [Computerized teaching of complex Portuguese words to hearing impaired individuals through a FM system]. UNCISAL. FAPEAL. 2011.
32. Tamyres Roberta Colares Leal (ALF Brino). Efeitos da manipulação do atraso e do intervalo entre tentativas sobre o desempenho no pareamento ao modelo em *Cebus apella* [Effects of the delay and inter-trial interval manipulation on the matching-to-sample performance in *Cebus apella*]. UFPA. CNPq/Ações afirmativas. 2011.
33. Tharsila Moreira Gomes da Costa (C Ferrari). *Análise de concordância de respostas de nomeação e do grau de familiaridade de figuras por adultos normais [Analysis of*

the agreement between naming responses and the degree of familiarity of pictures by adults]. UNESP / Marília. CNPq.

34. Vanessa Ayres Pereira (DG de Souza). Ambientes virtuais como ferramenta para a aprendizagem de discriminações em pré-escolares [Virtual environments as a tool for teaching discrimination to preschool children]. UFSCar. CNPq/PIBIC. 2011.
35. Vinícius Kenji Souza Yonezawa (RS Barros). Pareamento arbitrário sucessivo (go/no-go) e teste de simetria em macaco-prego (*Cebus apella*) [Successive arbitrary pairing (Go/no-go) and symmetry test in a capuchin monkey (*Cebus apella*)]. UFPA. CNPq/PIBIC. 2011.
36. Vladímir de Aquino Silveira (LCL Silveira). Análise quantitativa do papel das vias M e P na visão: medida da entropia conjunta nos domínios do espaço e das frequências espaciais [Quantitative analysis of the role of M and P pathways on viewing: Measure of joint entropy on space domains and space frequencies]. UFPA. CNPq. 2011.
37. Yulla Christoffersen Knaus (GAY Tomanari). *Efeitos de mudanças sistemáticas nas propriedades discriminativas de estímulos visuais sobre os movimentos oculares* [Effects of systematic changes in the discriminative properties of visual stimuli on eye movements]. USP. CNPq. 2011.

ONGOING SUPERVISIONS / ORIENTAÇÕES EM ANDAMENTO

Post-doctoral research/ Pós-doutorado

1. Edson M. Huziwará (DG de Souza). Efeitos de um treino de múltiplos exemplares para a demonstração de comportamentos simbólicos em cães (*Canis familiaris*) [Effects of a multiple-exemplars training to establish symbolic behaviors in dogs (*Canis familiaris*)]. Início: 2010. UFSCar. FAPESP.
2. Mariele Cortez Diniz (JC de Rose). Transferência de significado em relações de equivalência, oposição e comparação [Transfer of meaning in equivalence, opposition, and comparison relations]. Início: 2012. UFSCar. CNPq/INCT.
3. Naiene (JC de Rose). Correlatos eletrofisiológicos da atividade relacional simbólica [Electrophysiological correlates of the symbolic relational activity]. Início: 2012. UFSCar. CNPq/PNPD.
4. Paulo Elias Audebert Gotardelo Delage (OF Galvão). Desenvolvimento de modelos animais para estudo experimental do comportamento pré-simbólico e funções executivas em *Cebus apella* e traslado para pesquisa em ambiente não verbal com humanos. Início: 2011. UFPA. CAPES/FAPESP.

5. Raquel Melo Golfeto (DG de Souza). Tecnologia comportamental para a reabilitação auditiva de indivíduos com surdez prelingual [Behavioral technology for auditory rehabilitation of prelingually deaf individuals]. Início: 2011. UFSCar. CNPq/PNPD.
6. Saulo Missiaggia Velasco (GAY Tomanari). *Equivalência de estímulos em infra-humanos (Columba livia): em busca de um modelo animal para o estudo do comportamento simbólico* [Stimulus equivalence in non-humans (Columba lívia): In search of an animal model to study symbolic behavior]. Início: 2009. USP. FAPESP.
7. Viviane Verdu Rico (JC de Rose). Avaliação e aperfeiçoamento de programas computadorizados de ensino de habilidades de leitura e escrita [Evaluation and improvement of computerized programs to teach reading and writing]. Início: dez/2010. UFSCar. CNPq/PNPD.

Doctoral Dissertations/ Teses de Doutorado

1. Adriana Oliveira (ES Hanna). Formação de classes a partir de treino de discriminação simples com apresentação de distratores [Class formation after simple discrimination training with the presence of distractors] Início: 2012. Tese (Doutorado em Ciências do Comportamento). UNB.
2. Alcides Renato da Silva Pamplona Junior (M Ribeiro Filho). *ITV - Instruções técnicas virtuais*. Início: 2011. Tese (Doutorado em Engenharia Elétrica). UFPA.
3. Alvaro Arturo Clavijo Alvarez (GAY Tomanari). *Processos de discriminação visual* [Processes of visual discrimination]. Início: 2009. Tese (Doutorado em Psicologia [Psicologia Experimental]). USP. CAPES.
4. Ana Karina Leme Arantes (JC de Rose). Topografias de controle de estímulos e equivalência de estímulos [Stimulus control topography and stimulus equivalence]. Início: 2008. Tese (Doutorado em Psicologia). UFSCar. FAPESP.
5. André Augusto Borges Varella (DG de Souza). Formação de classes de equivalência em pessoas com autismo: requisitos comportamentais para a emergência de desempenhos novos [The formation of equivalence classes in persons with autism: behavioral requisites for the emergence of novel behavior]. Início: 2009. Tese (Doutorado em Psicologia). UFSCar. FAPESP.
6. Andrea Callonere (MMC Hübner). *Efeitos de um programa de orientações de pais sobre a interação pais e filhos: uma replicação sistemática de Weber* [Effects of a parent training program about parent-child interactions: A systematic replication of Weber]. Início: 2012. Tese (Doutorado em Psicologia Experimental). USP. CAPES.
7. Andréa do Socorro Campos de Araújo Sousa (LC Silveira). Estudo morfológico, histoquímico e ultraestrutural de tecido cerebral, renal e hepático de Cebus apella

- (Linnaeus, 1758) submetidos à intoxicação experimental pelo metil mercúrio [Morphological, histochemical, and ultra-structural study of cerebral, renal, and hepatic tissues in *Cebus apella* (Linnaeus, 1758) exposed to experimental poisoning by methylmercury]. Início: 2008. Tese (Doutorado em Neurociências e Biologia Celular). UFPA.
8. Angela Bernardo de Lorena. (JS Carmo). Programação de ensino e educação à distância (EaD): contribuições da análise do comportamento para a formação inicial e continuada de professores de matemática [Teaching programming and distance education: Contributions of behavior analysis to the education of teachers of mathematics]. Início: 2011. Tese (Doutorado em Psicologia). UFSCar. CAPES.
 9. Ariene Coelho Souza (MMC Hübner). O processo de controle por unidades mínimas e o desempenho em leitura recombinativa [The process of control by minimal units and performance in recombinative reading]. Início: 2009. Tese (Doutorado em Psicologia [Psicologia Experimental]). USP. CAPES.
 10. Christiana Gonçalves Meira Almeida (MSCA Gil). *Formação de classes de equivalência de estímulos em bebês [Stimulus class formation in infants]*. Início: 2010. Tese (Doutorado em Psicologia). UFSCar. CAPES.
 11. Daniela de Souza Canovas (P Debert). Avaliação de classes de estímulos funcionalmente equivalentes e classes de estímulos equivalentes por meio de procedimento de discriminações simples sucessivas go/no-go em crianças pré-escolares [Assessment of functional classes and equivalence classes through the go/no-go procedure in preschool children]. Início: 2010. Tese (Doutorado em Psicologia [Psicologia Experimental]). USP. FAPESP.
 12. Dhayana Inthamoussu Veiga (DG de Souza). Estudos exploratórios sobre variáveis motivadoras envolvidas em um programa de ensino de leitura informatizado [Exploratory studies on motivating variables involved in a computerized reading program]. Início: 2010. Tese (Doutorado em Psicologia). UFSCar. CNPq.
 13. Djenane Brasil da Conceição (JC de Rose). Uma análise das relações entre a lingüística de A. Gardiner e o Comportamento Verbal de B.F. Skinner [An analysis of the relations between A. Gardiner's linguistics and B.F. Skinner's verbal behavior]. Início: 2011. Tese (Doutorado em Psicologia). UFSCar.
 14. Fernanda Augustini Pezzato (MG Mijares). Envolvimento das vias serotoninérgicas na etiologia de sintomas autistas: avaliação em ratos com lesão eletrolítica do núcleo mediano da rafe [Involvement of serotonergic pathways in the etiology of autistic symptoms: Assessment in rats with electrolytic lesions in the raphe's median nucleus]. Início: 2010. Tese (Doutorado em Psicologia [Psicologia Experimental]). USP. CAPES.

15. Flávia Teresa Silva (CBA de Souza). *Discriminações auditivo-visuais em bebês: papel da atenção conjunta e da aprendizagem por exclusão* [Auditory-visual discriminations in infants: The role of joint attention and learning by exclusion]. Início: 2012. Tese (Doutorado em Teoria e Pesquisa do Comportamento). UFPA. FAPESPA.
16. Eliza Maria da Costa Brito Lacerda (LCL Silveira). *Avaliação psicofísica visual e neuropsicológica de sujeitos expostos de forma crônica ocupacional a solventes orgânicos* [Psychophysical and neuropsychological assessment of individuals chronically exposed to organic solvents]. Início: 2011. Tese (Doutorado em Teoria e Pesquisa do Comportamento). UFPA. CAPES.
17. Giovana Mendes Ferroni (MSCA GIL). *Ensino de conceitos para crianças com deficiência visual* [Teaching concepts to individuals with visual deficits]. Início: 2012. Tese (Doutorado em Educação Especial). UFSCar. CAPES/REUNI.
18. Heloisa Cursi Campos (P Debert). *Emergência da relação de simetria por meio do procedimento go/no-go com estímulos compostos em pombos* [The emergence of symmetry through the go/no-go procedure with compound stimuli in pigeons]. Início: 2010. Tese (Doutorado em Psicologia [Psicologia Experimental]). USP. FAPESP.
19. Hernando Borges Neves Filho (MG Mijares). *Variáveis definidoras da resolução de problemas do tipo insight*. Início: 2011. Tese (Doutorado em Psicologia Experimental). USP. CNPq.
20. Isabela Zaine (C Domeniconi). *Estabelecimento de discriminações simples emergentes em cães (Canis familiaris) por meio de relações indiretas a conseqüências diferenciais* [Establishing emergent simple discriminations in dogs (Canis familiaris) through indirect relationships with differential consequences]. Início: 2011. Tese (Doutorado em Psicologia). UFSCar. FAPESP.
21. Janaina de Fátima Castro Caneguiam (JS Carmo). *Programa de ensino de pré-requisitos de habilidades aritméticas: planejamento, implementação e avaliação* [A program to teach prerequisites of arithmetic skills: planning, implementation and evaluation]. Início: 2012. Tese (Doutorado em Psicologia). UFSCar.
22. João Henrique de Almeida (JC de Rose). *Análise quantitativa da transferência de funções de estímulos em classes de estímulos equivalentes reorganizadas e em classes formadas por rejeição* [Quantitative analysis of the transfer of stimuli functions in reorganized equivalence classes and in classes formed by rejection]. Início: 2010. Tese (Doutorado em Psicologia). UFSCar. FAPESP.
23. Jussara de Fátima Pascualon (PW Schelini). *Escala de metacognição: evidências de validade, precisão e estabelecimento de normas* [Metacognition Scale: Validity, accuracy and norms]. Início: 2012. Tese (Doutorado em Psicologia). UFSCar. FAPESP.

24. Katarina Kataoka Dias (RS Barros). *Formação de classes de estímulos em macacos-prego Cebus sp [Stimulus class formation in capuchin monkeys Cebus sp]*. Início: 2010. Tese (Doutorado em Psicologia [Teoria e Pesquisa do Comportamento]). UFPA. CAPES.
25. Leonardo Brandão Marques (DG de Souza). *Variáveis motivacionais no ensino de leitura: o jogo como recurso complementar [Motivational variables in the teaching of reading: A game as a supplementary resource]*. Início: 2010. Tese (Doutorado em Psicologia). UFSCar. FAPESP.
26. Liane Dahas Jorge de Souza (CBA de Souza). *Comportamento pré-simbólico em cães domésticos (Canis Familiaris) [Presymbolic behavior in domestic dogs (Canis familiaris)]*. Início: 2009. Tese (Doutorado em Psicologia [Teoria e Pesquisa do Comportamento]). UFPA. CNPq.
27. Lidianne Lins de Queiroz (Romariz S. Barros). *Efeitos da manipulação do número de escolhas sobre o desempenho em tarefas de discriminação simples em macaco-prego (Cebus apella) [Effects of the manipulation of the amount of choices on the performance of capuchin monkeys (Cebus apella) in simple discrimination tasks]*. Início: 2011. Tese (Doutorado em Psicologia [Teoria e Pesquisa do Comportamento]). UFPA. CNPq.
28. Marcos Roberto Garcia (MMC Hübner). *Formação de classes de estímulos equivalentes qualificadores positivos e controle instrucional para o comportamento de ler [The formation of classes of positive qualifying stimuli and instructional control on reading behavior]*. Início: 2009. Tese (Doutorado em Psicologia [Psicologia Experimental]). USP. CNPq.
29. Marcileyde Tizzo (ES Hanna). *Adaptação de um programa computadorizado de ensino para instalar repertório de leitura em crianças com necessidades especiais de ensino. [Adaptation of a computerized teaching program to establish a reading repertoire in children with special education needs]*. Início: 2012. Tese (Doutorado em Ciências do Comportamento). UNB.
30. Maria Clara de Freitas (JC de Rose). *Construção de um programa de ensino de habilidades de pré-requisito de leitura e escrita para pessoas com deficiência mental [Constructing a program to teach prerequisites of reading and writing to persons with intellectual disabilities]*. Início: 2008. Tese (Doutorado em Psicologia). UFSCar. FAPESP.
31. Mariana Morais Miccione (JS Carmo-CO). *Produção de seqüências com base na análise experimental de relações ordinais em crianças com paralisia cerebral [The production of sequences by children with cerebral palsy, derived from the experimental analysis of ordinal relations]*. Início: 2012. Tese (Doutorado em Teoria e Pesquisa do Comportamento). UFPA CNPq.

32. Mariane Perin da Silva (MC Bevilacqua). Habilidades auditivas e de linguagem de crianças usuárias de implante coclear: análise dos marcadores clínicos de desenvolvimento [Auditory and language skills in children using cochlear implant: The analysis of clinical markers of development]. Início: 2012. Tese (Doutorado em fonoaudiologia). USP. FAPESP.
33. Marina Morettin (MC Bevilacqua). Avaliação das habilidades auditivas de linguagem de crianças usuárias de implante coclear sob uma nova perspectiva [Assessment of language auditory abilities in children using cochlear implant under a new approach]. Início: 2009. Tese (Doutorado em Saúde Pública). USP. CNPq.
34. Naiara Minto de Sousa (MSCA Gil). Treino de discriminações simples componentes de discriminação condicional arbitrária por bebês [Training infants in the simple discrimination components of arbitrary conditional discrimination]. Início: 2009. Tese (Doutorado em Psicologia). UFSCar. CAPES (INCT-ECCE) / FAPESP.
35. Natalia Maria Aggio (JC de Rose). Investigação sobre o estabelecimento de "falsas memórias" por meio do paradigma de equivalência de estímulos [Investigation of the establishment of false memories through the stimulus equivalence paradigm]. Início: 2010. Tese (Doutorado em Psicologia). UFSCar. FAPESP.
36. Paulo Sergio Dillon Soares Filho (GAY Tomanari). Respostas de observação e topografias de controle de estímulos na tarefa de MTS: comparação entre diferentes estruturas de treino [Observing responses and stimulus control topographies in matching-to-sample tasks: A comparison between training structures]. Início: 2011. Tese (Doutorado em Psicologia [Psicologia Experimental]). USP. CAPES.
37. Paulo Roberto Abreu (MMC Hübner). *Efeitos de instruções sobre respostas de checagem* [Effects of instructions on checking responding]. Início: 2008. Tese (Doutorado em Psicologia Experimental). USP. CNPq.
38. Pebertli Nils Alho Barata (M Ribeiro Filho). Reconhecimento eficiente de gestos em um sistema body tracking para treinamento de operadores e mantenedores [Gesture recognition through a body tracking system for training professionals (for operation and maintenance of electrical systems)]. Início: 2011. Tese (Doutorado em Engenharia Elétrica). UFPA. CNPq.
39. Peter Endemann (GAY Tomanari). *Análise experimental de discriminações visuais* [Experimental analysis of visual discriminations]. Início: 2008. Tese (Doutorado em Psicologia [Psicologia Experimental]). USP. CNPq.
40. Priscila Afonso Benitez (C Domeniconi). Ampliação das atividades de um programa informatizado de leitura e escrita para aprendizes com deficiência: inserindo pais e professores da escola regular [Amplification of the activities of a computerized program to teach reading and writing to learners with intellectual disabilities: The

- inclusion of parents and teachers from the regular school]. Início: 2011. Tese (Doutorado em Psicologia). UFSCar. FAPESP.
41. Priscila Mara de Araújo Gualberto (JS Carmo). Ensino de habilidades matemáticas básicas a alunos com dificuldades de aprendizagem nas séries iniciais, por meio da formação de classes de equivalência [Teaching basic math skills to students with learning difficulties in elementary classes, through the formation of equivalence classes]. Início: 2009. Tese (Doutorado em Psicologia). UFSCar. Sem bolsa.
 42. Rafael Diego Modenesi (P Debert). Controle contextual com procedimento go/no-go com estímulos compostos [Contextual control using the go/no-go procedure with compound stimuli]. Início: 2010. Tese (Doutorado em Psicologia [Psicologia Experimental]). USP. FAPESP (Doutorado direto).
 43. Regiane de Souza Quinteiro (DG de Souza). *Ensino de Braille a adultos com deficiência visual [Teaching Braille to visually impaired adults]*. Início: 2010. Tese (Doutorado em Psicologia). UFSCar. Sem bolsa (docente).
 44. Solange Calcagno (DG de Souza). Ensino de leitura e escrita a adultos analfabetos com um programa informatizado adaptado para aplicação em larga escala [Teaching reading and writing to illiterate adults through a computerized program adapted for large scale application]. Início: 2011. Tese (Doutorado em Psicologia). UFSCar. CAPES.
 45. Tatiana Mendes de Melo (MC Bevilacqua). Percepção de fala com e sem ruído competitivo em crianças usuárias de implante coclear: estudo comparativo de duas estratégias de processamento de sinal do sistema hi resolution (Speech perception with and without competitive noise in children using cochlear implant: Comparison of two strategies of signal processing of a hi resolution system]. Início: 2009. Tese (Doutorado em Fisiopatologia Experimental). USP.
 46. Thaize de Souza Reis (DG de Souza). Estabelecimento de escrita sob controle de ditado como base para a generalização recombinação na leitura e na escrita [Establishing writing under control of dictation as a base for recombinative generalization in reading and writing]. Início: 2009. Tese (Doutorado em Psicologia). UFSCar. FAPESP.
 47. Tony Nelson (OF Galvão). Análise comportamental de desempenhos em testes diagnósticos de afasia [Behavioral analysis of performance in tests for diagnose of aphasia]. Início: 2009. Tese (Doutorado em Psicologia [Teoria e Pesquisa do Comportamento]). UFPA. CAPES.
 48. William Ferreira Perez (GAY Tomanari). *Topografia de controle de estímulos e movimentos dos olhos [Stimulus control topography and eye movements]*. Início: 2008. Tese (Doutorado em Psicologia [Psicologia Experimental]). USP. FAPESP.

Master Thesis / Dissertações de Mestrado

1. Adalberto Bosco Castro Pereira (DC Monteiro). Inteligência artificial aplicada em jogos computacionais para crianças com atraso de aprendizagem [Artificial intelligence applied to computerized games for children with learning delays]. Início: 2011. Dissertação (Mestrado em Ciência da Computação). UFPA.
2. Ailton Barcelos da Costa (MSCA GIL). Estímulos táteis e auditivos no ensino de frações a crianças cegas [Tactile and auditory stimuli in the teaching of ratios to blind children]. Início: 2011. Dissertação (Mestrado em Educação Especial) UFSCar. CAPES.
3. Alessandra Canosa (MSCA GIL). Formação de classes de equivalência de estímulos auditivo-táteis e táteis-táteis em crianças com deficiência visual [The formation of auditory-tactile and tactile-tactile equivalence classes in children visually impaired]. Início: 2011. Dissertação (Mestrado em Educação Especial). UFSCar. CAPES.
4. Alex Bacadini França (PW Schelini). Escala metacognitiva para idosos: Elaboração de itens e análise dos parâmetros psicométricos [Metacognitive Scale for Elderly: Items' elaboration and analysis of psychometric parameters]. Início: 2011. Dissertação (Mestrado em Psicologia). UFSCar. FAPESP.
5. Amanda Oliveira Santos (CM Giacheti). Análise da fluência em tarefa de narrativa oral em indivíduos com síndrome de I22q11.2. [The analysis of fluency in oral narratives of individuals with I22q11.2. Syndrome]. Início: 2011. Dissertação (Mestrado em Fonoaudiologia). UNESP/Marília. FAPESP.
6. Ana Maria A. Albuquerque Fernandes (ES Hanna). Adaptação de um programa de ensino baseado no paradigma de equivalência para crianças com atraso no desenvolvimento [Adaptation of a teaching program based in stimulus equivalence for children with developmental delays]. Início: 2011. Dissertação (Mestrado em Psicologia). UNB. CAPES.
7. Anderson Jonas das Neves (ACM Almeida-Verdu). Compreensão e produção de sentenças em crianças com deficiência auditiva pré-lingual usuárias de implante coclear [Sentence comprehension and production in children with cochlear implant]. Início: 2011. Dissertação (Mestrado em Psicologia do Desenvolvimento e Aprendizagem). UNESP-Bauru.

8. André Lepesqueur Cardoso (RM Melo). *Reorganização de classes de equivalência em crianças [Reorganization of stimulus classes in children]*. Início: 2011. Dissertação (Mestrado em Ciências do Comportamento). UNB. CAPES.
9. Antonio Carlos Leme Junior (JC de Rose). *Sobre a escuta musical: processos e mecanismos subjacentes [On musical listening: Underlying processes and mechanisms]*. Início: 2011. Dissertação (Mestrado em Psicologia). UFSCar.
10. Brunna Stella Carvalho (DG. de Souza). *Individualização do ensino de leitura e escrita a um adolescente com o espectro de autismo [Individualized teaching of reading and writing to an adolescent with the Autism Spectrum Disorder]*. Início: 2011. Dissertação (Mestrado em Educação Especial). UFSCar. CAPES (REUNI).
11. Caio Carvalho Moreira (M Ribeiro Filho). *Implementação de sensores de movimento na criação de um jogo para treinamento utilizando o sistema ITV [Implementation of movement sensors in the creation of a game for training purposes using the ITV system]*. Início: 2011. Dissertação (Mestrado Engenharia Elétrica). UFPA. CNPq.
12. Carlos Rafael Fernandes Picanço (RS Barros). *Busca de propriedade de simetria em relações condicionais via comparação de aquisição de relações simétricas versus relações não-simétricas [In search of symmetry in conditional relations by comparing the acquisition of symmetrical versus assymmetrical relations]*. Início: 2011. Dissertação (Mestrado em Teoria e Pesquisa do Comportamento). UFPA. CAPES.
13. Denise Bachega (JS Carmo). *Aproximações possíveis entre as propostas de educação de Freire e Skinner: uma discussão [Potential approximations between the proposals of Freire and Skinner for education: a discussion]*. Início: 2012. Dissertação (Mestrado em Psicologia). UFSCar. CAPES.
14. Diana Catalina Serrano Ramos (GAY Tomanari). *Expressões faciais como estímulos discriminativos [Facial expressions as discriminative stimuli]*. Início: 2010. Dissertação (Mestrado em Psicologia [Psicologia Experimental]). USP.
15. Diego Felipe Silveira Seabra (JS Carmo). *Ensino de habilidades pré-matemáticas a pré-escolares por meio da tecnologia de controle de estímulos [Stimulus control technology to teach pre-math skill to preschoolers]*. Início: 2012. Dissertação (Mestrado em Psicologia). UFSCar. CAPES.
16. Edson Luiz Nascimento dos Santos (CBA Souza). *Análise de diferentes procedimentos para o ensino de nomeação receptiva em crianças com comportamento autista [The analysis of procedures to teach receptive naming in children with autistic behavior]*. Início: 2012. Dissertação (Mestrado em Psicologia). UFPA. CNPq.
17. Elton Sarmanho Siqueira (DC Monteiro). *Jogo educacional computadorizado como recurso complementar para ensino de crianças com dificuldade de aprendizagem em*

- leitura e escrita [An educational computerized game as a supplementary resource to teach children with difficulty in learning reading and writing]. Início: 2010. Dissertação (Mestrado em Ciência da Computação). UFPA. CAPES.
18. Fabiane da Silva Pereira (OF Galvão). Discriminação auditivo-visual e nomeação em adultos submetidos ao implante coclear [Auditory-visual discrimination and picture naming in adults users of cochlear implant]. Início: 2011. Dissertação (Mestrado em Psicologia [Teoria e Pesquisa do Comportamento]). UFPA. CNPq.
 19. Fábio Freire Laporte (RM Melo). Variáveis que afetam a formação de classes de estímulos [Variables affecting the formation of stimulus equivalence classes]. Início: 2012. Dissertação (Mestrado em Ciências do Comportamento). UNB.
 20. Felipe Gomes (MMC Hübner). Manipulação de autoclíticos no estímulo antecedente verbal e a escolha de atividades em crianças [Manipulation of autoclitics in the verbal antecedent stimulus and children's choice of activities]. Início: 2012. Dissertação (Mestrado em Psicologia [Psicologia Experimental]). USP.
 21. Fernando Del Manno Luckesi (ACM Almeida-Verdu). Verificação dos efeitos da exposição a um programa de ensino de leitura de palavras sobre a inteligibilidade da fala em crianças com deficiência auditiva e implante coclear [Assessment of the effects of the exposure to a program to teach word reading on the speech intelligibility of children with auditory deficits and cochlear implant]. Início: 2011. Dissertação (Mestrado em Psicologia do Desenvolvimento e Aprendizagem). UNESP/Bauru. FAPESP.
 22. Flávia de Azevedo Lacerda (RM Melo). Leitura e repertório recombinativo: efeito da tarefa de resposta construída com atraso e da possibilidade de consulta a dicas [Reading and recombinative repertoire: Effects of a delayed constructed-response task involving the availability of search for cues] Início: 2012. Dissertação (Mestrado em Ciências do Comportamento). UNB. CNPq.
 23. Francisco Anderson Gonçalves Carneiro (MG Mijares). Condições de efetividade de controle de estímulos olfativos em ratos [Conditions of effectivity of stimulus control by olfactory stimuli in rats]. Início: 2011. Dissertação (Mestrado em Psicologia [Psicologia Experimental]). USP.
 24. Gilberto Nerino de Souza Júnior (DC Monteiro). Modelagem de metodologias educacionais orientadas para crianças com atraso de aprendizagem [Modeling educational methodologies oriented to children with learning delays]. Início: 2011. Dissertação (Mestrado em Ciência da Computação). UFPA. CAPES.
 25. Giulia Ganthous (CM Giacheti). Caracterização da narrativa oral de histórias de indivíduos com o transtorno do espectro alcoólico fetal [Characterization of oral narrative of stories in individuals with Fetal Alcohol Syndrome (FAS)]. Dissertação (Mestrado em Fonoaudiologia). UNESP-Marília. FAPESP.

26. Glaucy Oliveira Costa (CBA SOUZA). Discriminações auditivo-visuais em crianças com comportamento autista: efeitos do ensino de múltiplos exemplares [Auditory-visual discriminations in children with autistic behavior: Effects of teaching with multiple exemplars]. Dissertação (Mestrado em Psicologia). UFPA. CNPq.
27. Gleiton N. de Azevedo (RM Melo). Aprendizagem relações condicionais via reforçamento específico [Learning conditional relations via specific reinforcement]. Início: 2010. Dissertação (Mestrado em Ciências do Comportamento). UNB. CAPES/REUNI.
28. Grazielle Tomasinho de Aguiar (MSCA Gil). Práticas parentais e desenvolvimento infantil: comparando o desenvolvimento de bebês de 12 meses e as práticas de suas mães [Parenting practices and child development: Relating infants development to their mothers' practices]. Início: 2011. Dissertação (Mestrado em Psicologia). UFSCar. CAPES.
29. Ingrid Schunlaus Nikolak Jacometto (OF Galvão). Desenvolvimento comportamental manipulativo e ocorrência de olhar mútuo entre macacos-prego (*Cebus cf. apella*) em cativeiro [Behavioral manipulative development and the occurrence of mutual looking between capuchin monkeys(*Cebus cf. apella*) in captivity]. Início: 2009. Dissertação (Mestrado em Teoria e Pesquisa do Comportamento). UFPA. CAPES.
30. Jaqueline Pimentel Tenório (DG de Souza). Avaliação do efeito de jogos que requerem comportamento textual no ensino de leitura a crianças com dificuldades de aprendizagem [The assessment of games requiring textual behavior to teach reading to children with difficulties in learning]. Início: 2011. Dissertação (Mestrado em Educação Especial). UFSCar. CNPq.
31. Jonathan Melo de Oliveira (ES Hanna). *Escolha e controle de estímulos [Choice and stimulus control]*. Início: 2012. Dissertação (Mestrado em Ciências do Comportamento). UNB. CAPES/REUNI.
32. Juliana Sarantopoulos Faccioli (PW Schelini). *Análise do pensamento contrafactual na depressão [The analysis of counterfactual thought in depression]*. Início: 2011. Dissertação (Mestrado em Psicologia). UFSCar. CAPES.
33. Kelvis Rodrigo Sampaio Cruz (RM Melo). *Equivalência de estímulos e construção de sentenças [Stimulus equivalence and sentence construction]*. Início: 2012. Dissertação (Mestrado em Psicologia). Ciências do Comportamento. UNB. CAPES.
34. Leomário Silva Machado (DC Monteiro). Avaliação, modernização e integração da rede Navega-Pará com tecnologias de comunicação heterogêneas: uma abordagem para a inclusão digital e social [Evaluation, modernization, and integration of the Navega-Pará network with heterogeneous communication technology: An approach for digital and social inclusion]. Início: 2012. Dissertação (Mestrado em Ciências da Computação). UFPA.

35. Leylanne Martins Ribeiro de Souza (MSCA Gil). Ensino de discriminações condicionais para bebês por meio do responder por exclusão [Teaching conditional discriminations to infants through exclusion responding]. Dissertação (Mestrado em Psicologia). UFSCar. CAPES.
36. Luiza Costa Langsdorff (C Domeniconi). Aprendizagem por exclusão em crianças com transtorno do espectro autista [Learning by exclusion in children with autistic spectrum]. Início: 2011. Dissertação (Mestrado em Psicologia). UFSCar.
37. Marcela Almeida Sousa de Moraes (TP de Oliveira). Avaliação de repertório auditivo e vocal em crianças usuárias de implante coclear [Assessment of auditory and vocal repertoires of children users of cochlear implant]. Início: 2011. Dissertação (Mestrado em Psicologia). UFMG.
38. Marcelo Henrique Oliveira Henklain (JS Carmo). Equivalência de estímulos e ensino de resolução de problemas de adição e subtração a estudantes com dificuldades em matemática [Stimulus equivalence to teach students with difficulties in mathematics to solve addition and subtraction problems]. Início: 2011. Dissertação (Mestrado em Psicologia). UFSCar. CAPES.
39. Maria Jaqueline Dias dos Santos (MC Bevilacqua). Reabilitação auditiva por meio do implante coclear em crianças com paralisia cerebral [Auditory rehabilitation through cochlear implant in children with cerebral palsy]. Início: 2010. Dissertação (Mestrado em Fonoaudiologia). USP-Bauru. FAPESP.
40. Marília Santana Alves (ES Hanna). *Discriminação de estímulos compostos* [Discrimination of compound stimuli]. Início: 2012. Dissertação (Mestrado em Ciências do Comportamento). UNB. CAPES.
41. Michelle Queiroz Zattoni (MC Bevilacqua). Benefício do sistema de frequência modulada em crianças usuárias de aparelhos de amplificação sonora individual e implantes cocleares [Benefits of the FM system for children using individual sound amplification devices and cochlear implant]. Início: 2009. Dissertação (Mestrado em Fisiopatologia Experimental). USP.
42. Natália Maria Sertori (MSCA GIL). Discriminações condicionais em bebês de risco: o responder por exclusão [Conditional discriminations in children at risk: responding by exclusion]. Início: 2011. Dissertação (Mestrado em Educação Especial). UFSCar. CAPES.
43. Nayara Freitas Fernandes (MC Bevilacqua). Percepção da fala em crianças portadoras de deficiência auditiva neurosensorial com espectro da neuropatia auditiva usuárias de implante coclear: um estudo longitudinal [Speech perception in children with neurosensory auditory impairment and the auditory neuropathy spectrum, using cochlear implant: A longitudinal study]. Início: 2011. Dissertação (Mestrado em Fonoaudiologia). USP-Bauru. FAPESP.

44. Nicolas Carsten Rossger (GAY Tomanari). Em busca de metodologias experimentais para análise do comportamento de Saguís (*Callithrix jacchus*) [In search for experimental methodologies to analyze the behavior of *Callithrix jacchus*]. Início: 2012. Dissertação (Mestrado em Psicologia [Psicologia Experimental]). USP.
45. Patricia Andreia Caldas (CM Giacheti). *Habilidades auditivas em crianças desnutridas* [Auditory skills in mal-nourished children]. Início: 2012. Dissertação (Mestrado em Fonoaudiologia). UNESP/Marília.
46. Paulo Henrique Alves Lira (RM Melo). *Equivalência de estímulos e comportamento conceitual* [Stimulus equivalence and conceptual behavior]. Início: 2012. Dissertação (Mestrado em Ciências do Comportamento). UNB.
47. Paulo Henrique Módena Coutinho (Olavo F. Galvão). Bem-estar em cativeiro: enriquecimento ambiental com tarefas cognitivas em macacos-prego (*Cebus spp.*) [Well-being in captivity: Environmental enrichment with cognitive tasks for capuchin monkeys (*Cebus spp.*)]. Início: 2009. Dissertação (Mestrado em Psicologia [Teoria e Pesquisa do Comportamento]). UFPA. CNPq.
48. Priscila Meireles Guidugli (ACM Almeida-Verdu). Efeito de ensino informatizado de leitura e escrita sobre comportamentos externalizantes concorrentes à aprendizagem [Effects of computerized teaching of reading on externalizing behaviors concurrent with learning]. Início: 2012. Dissertação (Mestrado em Psicologia) Psicologia do Desenvolvimento e Aprendizagem. UNESP-Bauru.
49. Rebeca Morais de Paula (ES Hanna). Familiaridade com fragmentos melódicos utilizados no ensino de leitura musical [Familiarity with melodic fragments used to teach musical reading]. Início: 2011. Dissertação (Mestrado em Psicologia). UNB. CAPES.
50. Sabrina Roberta Oliveira (DG de Souza). Avaliação da produção de fala de usuários de implante coclear após o ensino de componentes de relações verbais [Assessment of speech production in users of cochlear implant after the teaching of the components of verbal relations]. Início: 2011. Dissertação (Mestrado em Educação Especial). UFSCar. CAPES.
51. Sandra de Lima Ribeiro dos Santos (ACM Almeida-Verdu/MC Bevilacqua). Caracterização de desempenho de leitura e escrita em crianças com deficiência auditiva [Characterization of the repertoires of reading and writing in auditory impaired children]. Início: 2010. Dissertação (Mestrado em Psicologia do Desenvolvimento e Aprendizagem). UNESP-Bauru.
52. Sandra Lima Ribeiro dos Santos (ACM Almeida-Verdu). Caracterização de desempenho de leitura e escrita em crianças com deficiência auditiva [Characterization of reading and writing repertoires of auditory impaired children].

- Início: 2011. Dissertação (Mestrado em Psicologia do Desenvolvimento e Aprendizagem). UNESP-Bauru.
53. Sidinei Rolin (MCC Hübner). *Tatos metafóricos e persuasão [Metaphoric tacts and persuasion]*. Início: 2012. Dissertação (Mestrado em Psicologia). USP.
54. Tâmara de Andrade Lindau (CM Giacheti). Avaliação da narrativa em crianças com desenvolvimento típico de linguagem [Assessment of narratives in children with typical language development]. Dissertação (Mestrado em Psicologia). UNESP/Marília.
55. Tathiana Amorim Souza Montagnolli (DG de Souza). Um procedimento para investigar aprendizagem discriminativa e formação de classes funcionais em cães [A procedure to investigate discrimination learning and formation of functional classes in dogs]. Início: 2010. Dissertação (Mestrado em Psicologia). UFSCar. FAPESP.
56. Thais Arantes Ribeiro (DG de Souza). Responder por exclusão na aprendizagem de relações simbólicas envolvendo adjetivos [Exclusion responding in the acquisition of symbolic relations between features and qualifiers]. Início: 2011. Dissertação (Mestrado em Psicologia). UFSCar. FAPESP.
57. Thereza Vilella (MSCA Gil). Contação de estórias para aprendizagem conceitual de crianças pequenas cegas [Story telling for young blind children conceptual learning]. Início: 2009. Dissertação (Mestrado em Educação Especial). UFSCar.
58. Tiago Porto França (ES Hanna). Recombinação de unidades mínimas de resposta na arte marcial karatê-dô [Recombination of response's minimal units in the martial arts of karatê-do] . Início: 2011. Dissertação (Mestrado em Psicologia). UNB. CAPES.
59. Vladimir de Aquino Silveira (LCL Silveira). Discriminação acromática de estímulos espaciais com luminância modulada por Funções de Gábor: estimativa da entropia conjunta do espaço e frequência espacial para o sistema visual humano [Achromatic discrimination of spatial stimuli with luminance modulated by Gabor functions: estimates of joint entropy of space and spatial frequency for the human visual system]. Início: 2010. Dissertação (Mestrado em Neurociências e Biologia Celular). UFPA. CNPq.

Undergraduate research / Iniciação científica

Ongoing

1. Aline Morales Simionato (JS Carmo). *Procedimentos de reversão de ansiedade à matemática: um estudo com base na análise da literatura acadêmica*

- [Procedures of math anxiety reversion: A study based on the analysis of the academic literature]. Início: 2011. UFSCar. CNPq.
2. Ana Paula Bemerguy Assumpção (OF Galvão). *Discriminações condicionais abstratas em macacos-prego: ensino de relações de continuidade com estímulos em movimento [Abstract conditional discrimination in capuchin monkeys: Teaching continuity relations with moving stimuli]*. Início: 2011. UFPA. CNPq.
 3. Aparecida de Fátima Silva Cerqueira (CSM Bandini). *Comparação do desempenho de leitura e de escrita manuscrita de palavras com dificuldades da língua, após o ensino com e sem tarefas de CRMTS [Comparison of difficult words reading and handwriting performance after teaching with or without a CRMTS task]*. Início: 2011. CESMAC, FEJAL.
 4. Camila Straforin de Oliveira (JS Carmo). *A pessoa com autismo na família: depoimentos de pais e irmãos adolescentes [Autistic person in the family: Parents and teenager siblings testimonies]*. Início: 2011. UFSCar.
 5. Cassiano Gaiani de Santis (C Domeniconi). *Discriminação de quantidades por cães em situação estruturada: controlando área, razão e distância numérica [Quantity discriminations by dogs in a structured situation: controlling area, ratio and numerical distance]*. Início: 2011. UFSCar. FAPESP.
 6. Christiane Nakahara (MMC Hübner). *Programas vocacionais para a inclusão social de pessoas com deficiências [Vocational programs for social inclusion of people with disabilities]*. Início: 2011. USP.
 7. Ciro Ribeiro Marques (MMC Hübner). *CAIS: centro de apoio e inclusão social [CAIS: Support and social inclusion center]*. Início: 2010. USP. CNPq/INCT
 8. Débora Longo Miyashita (MC Bevilacqua). *Construção de um material de apoio para fonoaudiólogos da rede de saúde auditiva: o uso do website saúde auditiva Brasil [Developing of a support material for speech-language pathologists of the hearing health network: Using the website Hearing Health Brasil]*. Início: 2011. USP. FAPESP.
 9. Fabiana Cristina Melo (CM Giacheti). *Perfil comportamental e a correlação com vocabulário receptivo e expressivo de indivíduos com paralisia cerebral [Behavioral profile and its correlation with receptive and expressive vocabulary in individuals with cerebral palsy]*. Início: 2011. UNESP. PROEX.
 10. Isabelle Kaline Fidelix Magalhães (HHM Bandini). *Associações entre consciência fonológica, memória operacional fonológica e competência de leitura e escrita [Associations between phonological awareness, phonological working memory, and reading and writing competencies]*. Início: 2011. UNCISAL. CNPq.

11. Jessika Natel (MMC Hübner). *Efeito da formação de uma classe de equivalência positivamente qualificadora (de tatos com autoclícticos) sobre leitura na duração da resposta de ler e escolha de imagens relacionadas [Effect of a positively qualifying equivalence class formation (of tacts with autoclicts) on the duration of the reading response and on choice of related pictures picking]*. Início: 2011. USP. CNPq.
12. Kauer Kitzinger d'Avila (GAY Tomanari). *Efeito da variação de estímulos novos e irrelevantes sobre a resposta de observação e controle da resposta operante [Effects of novel and irrelevant stimuli variation on the observing response and operant response control]*. Início: 2011. USP. CNPq.
13. Kellya Luiza Pereira da Silva (CSM Bandini). *Emergência de escrita manuscrita após ensino de leitura por meio de micro-computador [Handwriting emergence after teaching reading in a microcomputer]*. Início: 2011. CESMAC, FEJAL.
14. Laís Fernandes Pires (CBA de Souza). *Leitura dialógica: efeitos sobre o comportamento verbal de pré-escolares e crianças em processo de alfabetização [Dialogic reading: Effects on verbal behavior of preschoolers and children in the literacy process]*. Início: 2011. UFPA. CNPq.
15. Leonardo Sarraff Nunes de Moraes (DC Monteiro). *Desenvolvimento de software computacional e sistemas computacionais embarcados para reabilitação de crianças com deficiência auditiva [The development of computer software and onboard computer systems for rehabilitation of hearing impaired children]*. Início: 2011. UFPA. CNPq/INCT.
16. Leticia Barbieri (C Domeniconi). *Avaliação de atividades em sala de aula regular em conjunto com a aplicação de um software de leitura e escrita para alunos autistas [Tasks evaluation in a regular classroom together with a reading and writing software application in students with autism]*. Início: 2011. UFSCar. FAPESP.
17. Luciana Degrande Rique (ACM Almeida-Verdu). *Nomeação de figuras após ensino de relações auditivo-visuais envolvendo palavra impressa, sílaba impressa, e figuras em crianças com deficiência auditiva e implante coclear [Picture naming after teaching auditory-visual relations involving printed word, printed syllable, and pictures in users of cochlear implant]*. Início: 2011. UNESP/Bauru. CNPq.
18. Luisa Souza Trindade (ES Hanna). *Efeito do tipo de treino sobre a leitura musical - ampliação da amostra [Effects different training on the reading music – Extending the sample]*. Início: 2011. UNB. CNPq/INCT.
19. Luiz Antonio Lourencetti (ACM Almeida-Verdu). *Discriminação auditiva e comportamento verbal expressivo em crianças com implante coclear [Auditory*

- discrimination and expressive verbal behavior in children users of cochlear implant*]. Início: 2011. UNESP/Bauru. CNPq.
20. Mariana Amado Cordeiro (ES Hanna). *Tamanho da unidade musical treinada e sua influência na aprendizagem de leitura musical - ampliação da amostra* [Trained musical unit size and its influence on learning of reading music – Extending the sample]. Início: 2011. UNB. CNPq/INCT.
21. Mariana Pereira Zenaro (CM Giacheti). *Análise da coerência na narrativa oral de histórias em crianças com transtorno de déficit de atenção e hiperatividade* [Analysis of coherence in oral stories narrative in children with attention deficit hyperactivity disorder]. Início: 2011. UNESP/Marília. FAPESP.
22. Marília de Paula Giorgetti (CM Giacheti). *Inventário comportamental e competências sociais de indivíduos com gagueira* [Behavioral inventory and social competencies in individuals with stuttering]. Início: 2011. UNESP/Marília. FAPESP.
23. Maylson Lívio dos Santos Gonçalves (M Ribeiro Filho). *Estudo e implementação de jogos eletrônicos multiplayer* [Study and implementation of multiplayer electronic games]. Início: 2011. UFPA.
24. Natasha Sayuri Dias Nakashima (M Ribeiro Filho). *Ambiente virtual para o ensino de química no ensino fundamental e médio* [Virtual environment for teaching chemistry in elementary and high schools]. Início: 2011. UFPA.
25. Nathára Vieira Gonzaga (DG de Souza). *Ensino de escrita (ditado) afeta a aquisição de leitura?* [Does teaching writing (dictation) affect reading acquisition?]. Início: 2011. UFSCar. CNPq/PIBIC.
26. Raquel Chaguri Esteves (ACM Almeida-Verdu). *Procedimentos de ensino da linguagem e comportamento verbal: revisão da literatura* [Language and verbal behavior teaching procedures: A literature review]. Início: 2011. UNESP/Bauru. CNPq.
27. Robson Cardinali Castro (TP Oliveira). *Aprendizagem relacional em crianças com audição recente* [Relational learning in children with recent hearing]. Início: 2011. UFMG. CNPq/INCT.
28. Rodolfo da Silva Campos (ALF Brino). *Aprendizagem de relações arbitrárias por exclusão e testes de simetria e transitividade em macacos-prego (Cebus apella)* [Learning of arbitrary relations by exclusion, and symmetry and transitivity tests in capuchin monkeys (Cebus apella)]. Início: 2011. UFPA. CNPq.
29. Ryan Ríquel Barbosa do Espírito Santo (OF Galvão). *Location memory spam of capuchin monkeys*. Início: 2011. UFPA. CNPq.

30. Suelen Bertin Marcuci (JS Carmo). *Reversão de ansiedade à matemática em estudantes do ensino fundamental [Math anxiety reversion in elementary school students]*. Início: 2011. UFSCar. CNPq.
31. Suellen Raquel da Silva (DG de Souza). *Relações entre desempenho em leitura e ditado em aprendizes iniciantes [Relationship between reading performance and dictation in beginning learners]*. Início: 2012. UFSCar. CNPq/INCT.
32. Tamires Gallano (DG de Souza). *Ensino de vocabulário a crianças pequenas por meio de procedimento exclusão [Teaching vocabulary to young children by an exclusion procedure]*. Início: 2011. UFSCar. CNPq/PIBIC.
33. Thalyta de Souza Rodrigues (CSM Bandini). *O efeito do uso de dicas no processo de ensino de recontagem de histórias [The effect of using prompts on the retelling stories teaching process]*. Início: 2011. UNCISAL. FAPEAL.
34. Tharsila Moreira Gomes da Costa (C Ferrari). *Análise de concordância de respostas de nomeação e do grau de familiaridade de figuras por adultos normais [Analysis of the agreement between naming responses and the degree of familiarity of pictures by adults]*. Início: 2011. UNESP/Marília. CNPq/INCT.
35. Vanessa Ayres Pereira (DG de Souza). *Avaliação dos efeitos de consequências convencionais ou desenhos animados na aprendizagem discriminativa em ambiente virtual com pré-escolares [Assessment on the effects of conventional consequences or cartoons on discriminative learning in virtual environment with preschooler children]*. Início: 2011. UFSCar. FAPESP.

TECHNICAL SUPPORT / BOLSAS DE APOIO TÉCNICO

1. Junio Vieira de Rezende (Thais Porlan de Oliveira). *Aprendizagem relacional e função simbólica*. Início: 2010. UFMG. CNPq/INCT-ECCE.
2. Guilherme Bergo Leugi (Julio C. de Rose). *Relações de controle de estímulos e formação de classes de estímulos equivalentes*. Início: 2012. UFSCar. CNPq/INCT-ECCE.
3. Leonardo Sarraff Nunes de Moraes (DC Monteiro). *Desenvolvimento de software computacional e sistemas computacionais embarcados para reabilitação de crianças com deficiência auditiva*. Início: 2010. (Graduando em Ciência da Computação). UFPA. CNPq/ INCT-ECCE
4. Mainá Santana dos Santos (Deisy G. de Souza). *Aprendizagem de leitura e escrita: dificuldades da língua*. Início: 2011. UFSCar. CNPq/INCT-ECCE.
5. Mariana Chernicaró Guimarães (Elenice S. Hanna). *Ensino de leitura e escrita a alunos abrigados*. Início: 2011. UnB. CNPq/INCT-ECCE.

6. Natalia Dall' Antonia Zopellari (Deisy G. de Souza). Supervisão de professores para monitorar a aplicação de um programa individualizado de ensino de leitura e escrita. Início: 2011. UFSCar. CNPq/ INCT-ECCE.
7. Neyma Santana Rocha (Heloisa H.M. Bandini). *Ensino de Língua Brasileira de Sinais*. Início: 2011. UNCISAL. CNPq/INCT-ECCE.
8. Pauliana do Nascimento Rodrigues Heloisa H.M. Bandini). Ensino computadorizado de palavras complexas da língua portuguesa para deficientes auditivos por meio de sistema FM. Início: 2011. UNCISAL. CNPq/INCT-ECCE.