



NEWSLETTER

Volume 29 | 2006 | Number 3

On the Future of Behavior Analysis: Introduction to the Special Issue Dr. Thomas Critchfield



Prognostication is tricky business. Think of music critic Philip Hale (1937), who asserted that, "If Beethoven's Seventh Symphony is not by some means abridged, it will soon fall into disuse." Or Astronomer Simon Newcomb (1888), who concluded that, "We are probably nearing the limit of all we can know about

astronomy."¹ And then there are the legions of doomsday cultists who, despite their enthusiasm for the task, have failed to deliver even one correct end-of-the-world prediction.

A Time of Great Change

About two years ago, in a statement prepared for an ABA election ballot, I wrote that, "Tomorrow's ABA will not look like the one your parents might have enjoyed." This was not prophesy, but merely a description of dynamic times that already are upon us. The typical ABA member of ten years ago, for instance, might not have anticipated any of these recent developments in the Association:

- ABA membership has increased to almost 5,000.
- The ABA convention has nearly outgrown all existing hotel venues and may need to shift to a convention center by as early as 2009 or 2010.

- In addition to its annual convention, ABA also hosts extremely popular biennial international conferences and occasional topical meetings (for information on 2007 offerings, please go to <http://www.abainternational.org/events.asp>).
- ABA is financially stable and owns its own building, making the Association no longer dependent on the charity of Western Michigan University.
- Consistent with an industry trend, ABA's journals soon will be available in electronic form.
- SABA, ABA's sister society devoted to charitable giving, provides annual fellowships for students in behavioral development and the experimental analysis of behavior and annual grants for international development projects.
- Behavior analytic service delivery is in great demand, and a significant portion of the membership is interested primarily in service-delivery issues.

Remarkable things have happened outside of ABA as well. Division 25 (Behavior Analysis) of the American Psychological Association is growing for the first time in decades. Translational research, something that behavior analysts have always understood, has become a priority for U.S. government research funding agencies (e.g., Perone, 2002). A national certification effort for applied behavior analysts (see <http://www.bacb.com>) has achieved considerable success both in the United States and, increasingly, internationally.

continued on page 1

¹ Quotations retrieved 9/30/06 from http://en.wikiquote.org/wiki/Incorrect_predictions

Table of Contents

The Future of Behavior Analysis	Front Cover
Trends in Research	4
Trends in Practice	7
Trends in Dissemination	12
Trends in Other Organizations	17
An Outside Perspective	21
News from the ABA Executive Council	25
ABA Financial Update	28
News from the Field	31
ABA Student Committee News and Update	31
Behavior Analysis Society of Illinois	32
Heartland ABA	32
Ludwig Receives Teaching Award	32
PennABA Conference Update	33
Wisconsin ABA: Professionalism the Main Goal	33
Opportunities for Behavior Analysts	34
Calendar of Upcoming Conferences	35
2006 SABA Donors	36
Autism Conference Registration Form	38
ABA Membership Information	40
ABA 2007 Membership Form	41
ABA 2007 Convention Registration Form	43
2007 Convention Hotel Reservation Form	45
International Conference Registration Form	46
The Analysis of Verbal Behavior Order Form	47
SABA Donations	48

General Information

The *ABA Newsletter* is ABA's primary means of communicating with members about association activities, the activities of ABA chapters and special interest groups, upcoming events, job positions in behavior analysis, and other items of interest to the behavioral community.

Subscriptions

All members of the Association for Behavior Analysis receive the *ABA Newsletter* as a part of their membership benefits. Institution and nonmember subscriptions may be obtained at a cost of \$37/year. Single issues may be purchased for \$13.

Diversity Statement

The Association for Behavior Analysis seeks to be an organization comprised of people of different ages, races, nationalities, ethnic groups, sexual orientations, health status, religions, abilities, and educational levels.

Submitting to *The ABA Newsletter*

The Association for Behavior Analysis publishes the *ABA Newsletter* three times a year. The newsletter Editor is Maria E. Malott, Ph.D. Publication dates and submission deadlines are as follows:

Mailing Date.....Deadline for Submissions

January 30	December 15
July 30	June 15
October 30	September 15

Articles and Advertisements

All advertisements are accepted and published on the representation of the advertiser and its agency that they are authorized to publish the entire contents thereof and that, to the best of their knowledge and belief, all statements made therein are true. The advertiser and the agency agree to hold the publisher harmless from any and all claims arising out of advertising published. Publication of articles, announcements, or acceptance of advertisements in *The ABA Newsletter* does not imply endorsement by ABA. ABA reserves the right to reject any advertisement or copy that ABA, for any reason, deems unsuitable for publication in any association publication.

Articles and announcements must be submitted to the ABA office for consideration. Articles should consist of information of general interest to the behavioral community, and should not be reports of empirical research or conceptual developments, as such articles are more appropriate to refereed journals. Announcements and other advertisements must be relevant to behavior analysis science and/or practice.

Classified advertisements may be submitted in hard copy or faxed, and will be entered at the ABA office. The fee for classified is \$95.00 for the first 25 lines and \$4.00 for each additional line (approximately 50 characters/line). ABA reserves the right to edit all copy.

Display advertisements should be submitted on camera-ready, laser-quality copy. The following table shows the standard pricing structure for display advertisements.

Display size	Cost*
Full page (7" wide x 10" deep).....	\$640
Half page (6½" wide x 4½" deep) or (3¼ wide x 9½" deep).....	\$445
Quarter page (3¼" wide x 4½" deep).....	\$250
Organizations with ten (10) or fewer employees receive a 10% discount on all advertisement prices.	
Prices subject to change.	

Continued from front cover

Perhaps strangest of all, there are signs that, after decades of derision during the "cognitive revolution" (e.g., Baars, 1986), behavioral psychology is inching toward the mainstream of scientific psychology – or, at least, receiving a little respect from it. This stems in part from society's recent embrace of empirically-validated therapies (behavior analysts always have data at the ready!), but there are signs of a more general shift of attitudes. For example, Roediger (2004), a prominent cognitive psychologist, has suggested, with tongue only partly in cheek, that, "behaviorism won," in the sense of exerting enduring positive effects on all of empirical psychology. Roediger's complete argument, reproduced elsewhere in this issue, provides a surprisingly positive external assessment of the current status of behavior analysis.

This view coincides with a shift in emphasis in the dominant (cognitive) paradigm psychology, away from the most florid forms of mentalism that predominated in the past and toward analyses that are more parsimonious and more focused on behavior-environment relations (e.g., Gigerenzer & Todd, 1999; Gray, 2006). In such an intellectual landscape, behavioral psychology can participate in scholarly discussions that cut across theoretical perspectives (e.g., Chase & Watson, 2004). It is possible for cognitive psychologists to publish in *Journal of the Experimental Analysis of Behavior (JEAB)* (e.g., Gagne, 2002), or for an article published in *JEAB* (White & Wixted, 1999) to receive the 2000 George A. Miller Award from Division 3 of APA for "best article in general psychology."

Special Issue: What Does the Future Hold?

If behavioral psychology were dead, as many have asserted, there would be no point in speculating about its future, but all signs are to the contrary. I have described mostly good news, but in the changing world inhabited by our field, challenges exist as well. Either way, ABA members will be wise to consider the implications for their field and the organizations that represent it. With this in mind, the present special issue of the *ABA Newsletter* was conceived to allow several distinguished behavior analysts to comment briefly on developments and trends that will affect the behavior analysis of the immediate future. Although prediction is risky, so is a failure to plan strategically, and the authors represented in this issue all are in a position to understand the forces that will shape tomorrow's behavior analysis.

Each of the essays is informative individually, but I believe that the most important lesson to be derived from them is collective. For reasons described below, there is special incentive currently for behavior analysts to have a broad perspective on their field and its many expressions.

A Molar-Level Challenge

The "problem" is that these are relatively good times for behavior analysis. The field is growing and, in the process, ABA is incorporating more members, with more varied interests, than ever before. Rapid growth also means that a large percentage of ABA members entered the field, or the Association, only recently. According to some writers, such "youth bulges" have two predictable effects on a culture (Hart, Atkins, Markey, & Youniss, 2004). First, newcomers are (by definition) not part of the culture's history and the traditions derived from it. As newcomers become more common they constitute an ever-larger share of the social networks into which other newcomers enter. Second, the preceding is a recipe for unrest. Individuals who have not been shaped by a culture tend to agitate for change – sometimes for good (e.g., the American civil rights movement of the 1960s), sometimes otherwise (e.g., the Hitler youth movement). Some analyses suggest a lag of several years between the emergence of a "youth bulge" and its full impact on a culture. If so, then, with ABA now several years into its growth spurt, we can expect to see the full impact on the Association relatively soon.

What the future will bring, I believe, depends on the extent to which ABA's constituent groups engage in mutual socialization during the coming years. In a perfectly integrated field, method, theory, and application heuristics would be identical for autism professionals, school psychologists, behavioral pharmacologists, organizational behavior analysts, clinical psychologists, animal behavior researchers, and the like. Yet perfect integration is impossible given that different kinds of behavior analysts confront different scholarly and practical problems. To illustrate, consider the contingencies of survival faced by an autism service provider (seeking to develop easy-to-implement treatments and secure insurance payment for services) versus a behavioral pharmacologist (working to understand basic drug-behavior interactions and get research funded by federal agencies). Where survival contingencies are concerned, the two have little in common, and may find common ground instead with, respectively, other kinds of practitioners or other psychopharmacologists.

Possible Bad Outcomes

Here I am reminded of anthropological research that found the longevity of religious communes to be positively correlated with the number of rituals shared uniquely among their members (Sosis, 2004). I am *not* suggesting, as have some critics, that behavior analysis is mostly quasi-religious dogma, or that it is most healthy when totally divorced from other scholarly communities. I merely acknowledge that it is logical for individuals to separate when they experience more reinforcement apart than together. How will growth and diversification affect the sub-communities of ABA?

Fragmentation within ABA

One possible outcome is for sub-communities to remain affiliated with ABA but to function quasi-independently. Consider the case of Precision Teaching (Potts, Eshleman, & Cooper, 1993), which by many measures is a highly successful movement. The Standard Celeration Society (www.celeration.org) has been an active ABA Special Interest Group for years, hosts its own conference, and publishes the *Journal of Precision Teaching (JPT)*. Yet two factors may have limited the impact of Precision Teaching within behavior analysis. First, to make their work understandable to lay persons, Precision Teachers developed a vocabulary different from that of most behavior analysts (Lindsley, 1991). Second, Precision Teachers publish mainly in *JPT*. For example, a recent electronic search revealed about one empirical report on precision teaching per year outside of *JPT*, and most of these were case studies rather than the formal experiments that behavior analysts tend to favor as evidence of effectiveness. As a result, my impression is that most behavior analysts know little about this powerful technology and, not surprisingly, have done little to help promote it.

Fragmentation of ABA

Another possible outcome is for a sub-community to shed its formal connections to traditional behavior analytic institutions. Consider the case of behavioral pharmacology. Although behavior analysts conducted some of the first studies merging behavior science and psychopharmacology (Skinner & Heron, 1937), as behavioral pharmacology matured it became essentially self-sufficient. One can now become well trained in the area and have a productive scholarly career without ever attending an ABA convention or publishing in *JEAB*, because a vibrant (mutually-reinforcing) community inhabits other associations and journals, both specialized (e.g., Behavioral Pharmacology Society; www.behavioralpharmacology.org/) and mainstream (e.g., *Psychopharmacology*). This is a success story, to be sure, but with the side effect that behavioral pharmacology research is encountered less often than one might hope at the ABA convention. I think that ABA is a shade paler for this.

A Better Outcome

A third, and more hopeful, possibility is that ABA members will find ways to link their diverse needs and remain interdependent. I don't have an exact prescription for how this might develop, but I can envision four strategies that may help.

1. Admit there's a problem.

Behavior analysis is said to be unusual among social sciences in the degree to which its diverse participants share a conceptual framework. Certainly this counts for something, but as the examples just mentioned illustrate, a common world

view probably is not enough to assure that we'll all play nicely together in the future.

2. Emulate existing "socializers."

A few behavior analysts cannot be placed into any single sub-community. Some avoid traditional dichotomies within the field, such as basic versus applied (e.g., Murray Sidman and stimulus equivalence or, more recently, Tim Vollmer and response-independent consequence schedules). Some bridge areas of specialization that might appear to be unrelated (e.g., Jack Marr has worked in the lab on behavioral toxicology, in zoos on captive-animal enrichment, and in the classroom on instructional design for college physics courses). Still others manage to remain integrated into the core of behavior analysis while simultaneously helping a specialty area achieve independent successes. In my opinion, for example, we can credit the remaining links between a general behavior analytic community and areas like Precision Teaching or behavioral pharmacology to a relatively few individuals who wear the hat of behavior analyst (with specialization in a subject area) rather than that of subject area expert (who happens to employ behavioral analyses).

Collectively, such individuals serve as a conduit through which ideas are exchanged across verbal communities,² and they illustrate one key to a healthy future for ABA – if only we knew how to reliably engineer this outcome. For now, I suggest taking a close look at the training, habits, and career decisions that have made these people remarkable; these are needed on a larger scale if behavior analysis is to remain reasonably unified.

3. Seek collaboration.

Social psychology teaches that nothing generates interdependence like shared contingencies. It makes sense to look for opportunities to build collaborations that place behavior analysts with different day-to-day survival contingencies on the same team. In the United States, research funding priorities have recently promoted this outcome by favoring proposals with translational (i.e., both basic and applied) emphases (Perone, 2002), but much else may be possible. Here's some quick free-associating: Could there be shared initiatives for ABA's Verbal Behavior and Speech Pathology Special Interest Groups (SIGs)? What about the Behavioral Medicine and Health, Sport, and Fitness

² For example, Doughty, Chase, and O'Shields (2004) both explained and cast a critical eye on some of the assumptions underlying Precision Teaching, and thereby generated spirited discussion in subsequent commentaries. In my opinion, the article succeeded because it placed problems that might be seen as peculiar to precision teaching into a context that any behavior analyst can understand.

SIGs? Are there ways to better integrate the proven practices of Direct Instruction and Precision Teaching into applied behavior analytic treatment regimens? In a translational world, could the Behavior Analysis Certification Board® draw more heavily on the expertise of basic scientists in deciding what is good training in behavior principles? Can organizational behavior managers do more to help service delivery agencies develop their staff management and training systems? And so on.

4. Modify graduate training.

Acts like collaborating, or talking across verbal communities, require special repertoires that cannot be counted on to emerge spontaneously (e.g., Critchfield & Reed, 2005). We should look closely at whether the models of graduate training on which the field has relied for decades are designed to build the needed skills for such collaboration. While there is no question that individual careers start with immersion in autism service delivery, or reinforcement schedule research with nonhumans, such specialized training may contribute to, or at least permit, the fracturing of the field.

Starting Right Now

Here's a prediction: In the future, ABA will thrive as an organization, and behavior analysis will prosper as a discipline, to the extent that behavior analysts view their colleagues' accomplishments and challenges, not as area-idiosyncratic, but rather as successes and hurdles for the field as a whole. Considerable work is needed to achieve this goal. For now, I am betting that the solution begins with energetic exchanges of information regarding the various niches that behavior analysis now fills, something that is approximated in the essays of this special issue. Readers who share my concern regarding the unity of the field are challenged to think strategically, but to simultaneously develop their own, low-cost initial strategies – for example, consider submitting a paper session for ABA 2008 that brings together behavior analysts who don't normally find themselves in the same room.

References

- Baars, B. J. (1986). *The cognitive revolution in psychology*. New York: Guilford.
- Chase, P. N., & Watson, A. C. (2004). Unconscious cognition and behaviorism. *Journal of Mind and Behavior*, 25, 145-159.
- Critchfield, T. S., & Reed, D. D. (2005). Conduits of translation in behavior-science bridge research. In J. E. Burgos & E. Ribes (Eds.), *Theory, basic and applied research, and technological applications on behavior science: Conceptual and methodological issues* (pp. 45-84). Guadalajara: University of Guadalajara.
- Doughty, S. S., Chase, P. N., & O'Shields, E. M. (2004). Effects of rate building on fluent performance: A review and commentary. *The Behavior Analyst*, 27, 7-23.
- Gagné, C. L. (2002). The competition-among-relations-in-nominals theory of conceptual combination. *Journal of the Experimental Analysis of Behavior*, 78, 551-565.
- Gigerenzer, G., & Todd, P. M. (1999). *Simple heuristics that make us smart*. New York: Oxford University Press.
- Gray, W. D. (2006). The emerging rapprochement between cognitive and ecological analyses. In A. Kirlik (Ed.), *Adaptive perspectives on human-technology interaction: Methods and models for cognitive engineering and human-computer interaction* (pp. 230-246). New York: Oxford University Press.
- Hart, D., Atkins, R., Markey, P., & Youniss, J. (2004). Youth bulges in communities: The effects of age structure on adolescent civic knowledge and civic participation. *Psychological Science*, 15, 591-597.
- Lindsley, O. R. (1991). From technical jargon to plain English for application. *Journal of Applied Behavior Analysis*, 24, 449-458.
- Perone, M. (2002). Behavior analysis and translational research. *ABA Newsletter*, 25(3), 1, 3-4.
- Potts, L., Eshleman, J. W., & Cooper, J. O., (1993). Ogden Lindsley and the historical development of precision teaching. *The Behavior Analyst*, 16, 177-189.
- Roediger, R. (2004, March). What happened to behaviorism? *Observer*, 17 (3), Presidential Column. Retrieved 9/30/06 from <http://www.psychologicalscience.org/observer/getArticle.cfm?id=1540>
- Skinner, B. F., & Heron, W. T. (1937). Effects of caffeine and benzedrine upon conditioning and extinction. *The Psychological Record*, 1, 340-346.
- Sosis, R. (2004). The adaptive value of religious ritual. *American Scientist*, 92(2), 1660172.
- White, K. G., & Wixted, J. T. (1999). Psychophysics of remembering. *Journal of the Experimental Analysis of Behavior*, 71, 91-113.

Give to SABA by December 31 and double your donation!

ABA International is pleased to announce that it will match the first \$10,000 in donations to the SABA International Endowment fund through the end of 2006. Donations must be received in the ABA office by December 31, 2006.

Make a secure donation on line by visiting <http://www.abainternational.org/saba> and clicking "Contributions," then "Make a Donation to SABA."

Trends in Research

The Future of Applied Behavior Analysis Is under the Dome

By Dr. Patrick C. Friman

Applied behavior analysis (ABA) has flourished under the tails of the normal distribution of human social problems. For example, harnessing ABA to the normalization movement of the latter 20th century emptied many, and dramatically reduced the populations of most, residential treatment facilities for persons with severe developmental disabilities, thus allowing those individuals a much more normalized life. ABA based treatments have also been successful at reducing or eliminating extreme self-injurious behavior and improving severe deficits in self-care and communication skills in that population. ABA interventions have also significantly increased the velocity of development in children with autism spectrum disorders; expanded food preferences, intake, and self-feeding skills in children with life-threatening feeding disorders; and improved language skills and quality of life in persons with psychotic level mental disturbances. There are many other examples. Such successes represent the power of ABA to help and to heal. In many instances, ABA practitioners were the only professionals who would address such problems with non-medical interventions and thus ABA has often been the primary portal from the formerly bleak life of confinement and drastically limited possibilities to an improved life with multiple freedoms and rational optimism for the future for many persons with developmental disabilities and/or severe psychiatric conditions.

But these successes involve extreme problems in extreme populations—those found in the tails of the normal distribution. If ABA has the power to help and heal such extraordinary problems, it certainly has the power to do the same for the more mainstream problems that occur under the dome of that distribution. Skinner's vision of behavior analysis was that it would become a mainstream science relevant to virtually all behavior concerns afflicting human kind. That vision has not yet been realized. However, increased movement towards its realization could be obtained by extending the applications of behavior analysis out from the tails to the vastly more prevalent and less extreme problems under the dome.

A powerful method for facilitating this extension is affiliation of ABA with mainstream social service provision. Schools are a good example. All children go to school and thus ABA affiliation with school systems creates the possibility of expanding ABA services to all children. Over the past 20 or so years, the presence of ABA in the curriculums for training school psychologists has expanded and their roles have expanded too. In some school systems, ABA informed interventions are now

being used in school- and even system-wide applications. Although there are limited examples of this, the number is increasing and it represents progress of the sort I am advocating here (e.g., Putnam, Handler, Ramirez-Platt, & Luiselli, 2003). Nonetheless, the current role of ABA in American education pales in comparison with the role Skinner envisioned in his writings and thus expansion of ABA in education is a key part of the agenda I am advocating.

Another example involves primary medical care. Virtually all persons in this country receive it and thus affiliation between ABA and primary medical providers presents an opportunity for extension of ABA-type services to all persons. The examples of such research are limited although they do exist (e.g., Warnes & Allen, 2005). Still, given the emphasis on primary health care in this country, the proportion of ABA-type research devoted to it is best described as infinitesimal.

As a subsidiary example, all children in this country receive primary medical services and abundant epidemiological evidence shows that primary providers are almost always the first professionals to learn of child behavior problems. Partnership between these providers and ABA professionals could result in behaviorally-oriented interventions being provided at the time of the first report, thus producing a heightened possibility of early successful resolution (e.g., Friman & Finney, 2003; Friman & Piazza, in press). In currently prevailing circumstances, however, most physicians have limited training and time for the delivery of effective early interventions for children with behavior problems, thus leaving the contingencies that produced the problems intact, increasing the probability of deterioration, and often creating a subsequent need for a higher level of care.

Home safety is another mainstream topic area that presents an opportunity for behavior analysts to influence mainstream America (e.g., Miltenberger et al., 2005). Unintended injury is one of the greatest threats to health and safety in this country. Such injury often results from environmental/behavioral interactions that, when viewed in retrospect, are almost always seen as having been modifiable to prevent injury. In other words, this area is a logical choice for ABA resources. Another example involves traffic safety. This is a country dominated by auto travel and health care statistics are dominated by injury and death resulting from problems at the wheel. Application of basic principles of behavior to the dynamics of road travel could enhance it in a number of ways, including not just accident reductions, but also reduced congestion, travel times, and angry interactions among drivers (e.g., Van Houten, Malenfant, Zhao, Ko, & Van Houten, 2005). Another example involves expanding the role of ABA in the provision of geriatric services. With the "graying of America" has

come an enormous number and variety of behavior problems associated with aging including errant driving, dementia, incontinence, medical noncompliance, food refusal, and hygiene, to name just a few. Using submissions to the *Journal of Applied Behavior Analysis* as an index, it appears there is only a small number of behavior analytic researchers focused on geriatrics (e.g., Cox, Cox, & Cox, 2005; Engelman, Altus, Mosier, & Mathews, 2003).

One increasingly successful endeavor to expand ABA to mainstream America involves the general category of community psychology, a field that emerged early in the history of ABA (e.g., Briscoe, Hoffman, & Bailey, 1975) and continues to expand (e.g., see any issue of *The Journal of Organizational Behavior Management*). Yet when the scope of the construct referred to as community is considered, the proportion of relevant ABA level interest and endeavors seems disproportionately small, especially in comparison with the interest and endeavors ABA devotes to problems in the tails of the distribution.

There are many other examples of mainstream contexts in which behavior analysis could substantively contribute conceptual and empirical modifications that would produce more effective commerce between persons and their environments. Having said all this, I do not mean to say such efforts are not being put forth now, as indicated by the citations above (which were limited to a small number due to space constraints). But the effort put forth in the areas mentioned is typically dramatically less than the effort put forth to address problems in extreme populations. To have a mainstream presence, behavior analysis will have to adopt and increase the number of mainstream applications. In other words, it will have to expand its fortified encampments under the tails of the distribution and set up operations under the dome.

Correspondence may be addressed to:
Patrick C. Friman, Ph.D., ABPP
Clinical Services
Youthcare Building
Boys Town, NE 68010
Phone: 402-498-3353; Fax: 402-498-3375
E-mail: frimanp@boystown.org

References

- Briscoe, R. V., Hoffman, D. B., & Bailey, J. S. (1975). Behavioral community psychology: Training a community board to problem solve. *Journal of Applied Behavior Analysis*, 8, 157-168.
- Cox, C. D., Cox, B. C., & Cox, D. J. (2005). Long-term benefits of prompts to use safety belts among drivers exiting senior communities. *Journal of Applied Behavior Analysis*, 38, 533-536.
- Engelman, K. K., Altus, D. E., Mosier, M. C., & Mathews, R. M. (2003). Brief training to promote the use of less intrusive prompts by nursing assistants in a dementia care unit. *Journal of Applied Behavior Analysis*, 36, 129-132.
- Friman, P. C., & Finney, J. W. (1993). Special section on behavioral pediatrics. *Journal of Applied Behavior Analysis*, 26, 421.
- Friman, P. C., & Piazza, C. (in press). Behavioral pediatrics. In W. Fisher (Ed.), *Handbook of Applied Behavior Analysis*. New York: Guilford.
- Miltenberger, R. G., Gatheridge, B. J., Satterlund, M., Egemo-Helm, K. R., Johnson, B. M., Jostad, C., Kelso, P., & Flessner, C. A. (2005). Teaching safety skills to children to prevent gun play: An evaluation of in situ training. *Journal of Applied Behavior Analysis*, 38, 395-398.
- Putnam, R. F., Handler, M. W., Ramirez-Platt, C. M., & Luiselli, J. K. (2003). Improving student bus-riding behavior through a whole-school intervention. *Journal of Applied Behavior Analysis*, 36, 583-590.
- Van Houten, R., Malenfant, J. E. L., Zhao, N., Ko, B., & Van Houten, J. (2005). Evaluation of two methods of prompting drivers to use specific exits on conflicts between vehicles at the critical exit. *Journal of Applied Behavior Analysis*, 38, 289-302.
- Warnes, E. & Allen, K. D. (2005). Biofeedback treatment of paradoxical vocal fold motion and respiratory distress in an adolescent girl. *Journal of Applied Behavior Analysis*, 38, 529-532.

Trends in Philosophical, Theoretical, and Conceptual Analysis

By Dr. Edward K. Morris

Theoretical, Philosophical, and Conceptual Issues has been listed in the convention programs of the Association for Behavior Analysis since areas were first assigned in 1979. Before then and since, it has been one of our field's three main subdisciplines, the others being basic and applied research. Although the latter appear to be purely empirical endeavors, they are rife with philosophical, theoretical, and conceptual activity. Some researchers deny this, claiming that science's only concerns are (a) its subject matter (in our case, behavior), and (b) understanding its subject matter through objective methods (for us, experimental analysis). Everything else – philosophy, theory, and concept – is an arbitrary social construction. Yes, our subject matter is behavior, and yes, we understand it best through experimental analysis, but no, everything else is not an arbitrary social construction. On a behavior-analytic account, philosophy, theory, and concepts characterize our scientific practices as a whole.

The foregoing claims about our subject matter and methods, for example, characterize two such practices – materialism in ontology (i.e., the nature of nature) and empiricism in epistemology (i.e., how nature is known). As stated, however, these underdetermine our practices, and thus warrant analysis. Our materialism, for instance, does not entail neural reductionism, only that our subject matter engages relations among material constituents: behavior, environment, and biology. Our empiricism is not experience per se, but also entails description, prediction, and experimental control. These characteristics are abstract classes of our practices, whether we are aware of them or not, seeing only the instances. To deny this is tantamount to saying that although we behave, we have no personality or, worse yet, no character. One of our field's challenges, albeit not yet a trend, is to develop a naturalistic account of the practices we call philosophical, theoretical, and conceptual.

To identify the trends, we might conduct a content analyses of the papers presented in the Theoretical, Philosophical, and Conceptual Issues area. This culling, though, would not be inclusive. It would miss philosophical, theoretical, and conceptual trends in, for example, Social and Ethical Issues. For the present, however, I forego the analysis and focus on science, but even then I must be selective in ways that belie the area's richness and depth (and in ways that are uncomfortably personal). In addressing the trends, I take them up in the order in which they are embedded – conceptual, theoretical, and philosophical.

Conceptual Issues

Among the conceptual issues, several trends stand out. One is our appeal to the concept of context to account for variation in behavior that contingencies do not explain. The concept, though, is confused: It includes various terms, disparate meanings, and conflicting referents. Systematizing the concept might prompt research and allow better behavioral interpretations. One systematization might be this: (a) The structure of the current context, biological and environmental (e.g., anatomy, ecology), affects what behavior *can* occur; (b) the historical context, phylogenic and ontogenic (e.g., behavioral history), affects what behavior *may* occur, given that it can; and (c) the function of the current context in biology and the environment (e.g., motivating operations) affects what behavior *will* occur, given that it can and may.

Another trend lies in placing behavior analysis among other sciences. Is it a biological science, a psychological science, or a science unto itself? A biological science? No. Although honorific, this invites explanatory reduction to biology, and eventually to chemistry and physics. Behavior analysis is, instead, an independent life science. A psychological science? Maybe, but not as psychology would have it. Our basic science is a natural science, concerned with fundamental behavioral processes (e.g.,

reinforcement). Psychological science is mainly an historical science, that is, a natural history of behavioral relations situated in time and place (e.g., altruism). Understanding typical and atypical behavior requires both natural science and natural history. Their integration is an emerging trend and important challenge.

Two other trends are also evident. First, as our unit of analysis expands from a three-term contingency among temporally independent stimulus and response functions to an *n*-term contingency that includes every participating factor (e.g., motivational operations, conditional stimulus control), it might be better characterized as a stream of behavior – a stream of ever-evolving functional relations. In its static form, this is called a field theory. The second trend is that the oft-stated goal of behavior analysis as prediction and control is becoming the goal of understanding. Prediction and control remain central: They are a means for understanding behavior and a means for assessing the validity of that understanding, but not ends in themselves.

Theoretical Issues

Among the notable theoretical issues is the integration of behavior analysis and biology. How they are integrated is more than an empirical matter. The questions we ask, concepts we apply, and assumptions we make in achieving this integration are, again, part of our science's character. To consider its character something other than (or lying behind) our practices is a category mistake. The character of our science will, though, influence how we integrate (or fail to integrate) behavior analysis and biology in two cutting-edge areas of research.

The first concerns what neuroscience explains. (a) Does neuroscience explain the basic behavioral processes of a natural science or provide a more thorough description of those processes? (b) Does neuroscience explain the natural history of typical and atypical behavior or provide a more thorough description of them? The answers to these questions may not be the same. In a natural science of behavior, neurology is arguably not an independent variable that explains basic behavioral processes. It is, instead, a participant in those processes. In a natural history of behavior, however, neurology contributes more than further description. It can also be an independent variable and hence, in part, an explanation. The answer to whether neurology explains behavior depends on the science – natural science or historical science.

The second area in which theory will influence the integration of behavior analysis and biology lies in the nature-nurture dichotomy. Behavior analysis has uncharacteristically adopted a culturally standard view: Behavior entails the independent contributions of nature (i.e., phylogenic contingencies in species history) and nurture (i.e., the ontogenic contingencies in individual behavioral history), and has thus essentialized them. An

alternative is developmental systems theory, in which nature is the product of the process of nurture, with nurture beginning at conception. On this view, the temporal gap between species history and individual behavioral history is no longer filled with fictional instincts and hypothetical innate acquisition devices, but with individual biological history. Moreover, nature is no longer an uncaused cause. The actions of genes, for instance, depend on time and place, and other participants. Developmental systems theory describes how behavioral development actually happens.

Philosophical Issues

Philosophical issues in science largely concern ontology and epistemology, with behavior analysis emphasizing the latter. It does not take ontological assumptions as givens (e.g., determinism), but as useful or not in advancing description, prediction, and experimental control. Yet at the same time, description, prediction, and experimental control presuppose an ontology about the nature of behavior such that it can be understood through these means. This is why the evolution of science and its philosophy is a bootstrap operation. A naturalized account of these activities will reveal their interdependence.

As for trends in philosophy, contextualism was once advanced as an alternative to mechanism. In the debate that arose, though, behavior analysts on each side attacked straw versions of the other (e.g., contextualism makes science a social construction; behavior is mechanical) and described their own "isms" superficially (e.g., mechanism means science; behavior is context dependent). The debate has now largely run its course, but the trend continues. This is evident in current work showing, on the one hand, that radical behaviorism is a

form of pragmatism and, on the other hand, that contextualism is pragmatism.

Conclusion

Across the foregoing trends in philosophical, theoretical, and conceptual analysis, we see two that are overarching. One is the systematization of our philosophy, theories, and concepts to make them more coherent. The usefulness of coherence, though, depends on whether it contributes to the description, prediction, and control of behavior, including our behavior as scientists. The other trend is the integration of our philosophy, theory, and concepts with like-minded (I say, idiomatically) perspectives in the behavioral, social, and cognitive sciences. Scholarship in the history of psychology now shows that the cognitive revolution was not a revolution. It was an evolution from classical S-R behaviorism to mediational S-O-R behaviorism to cognitivism. In this line of ascent (or descent), cognitivism only changed psychology's surface structure, not the deep structure of its explanatory practices. A minor trend in those other sciences is the recognition and emergence of a number of programs whose philosophy is contextualistic, theories are nonmediational, and concepts are functional. The integration of behavior analysis with them, and then their overall convergence, will be the next revolution in psychology.

Correspondence may be sent to:
Department of Applied Behavioral Science
4020 Dole Human Development Center
University of Kansas
1000 Sunnyside Avenue
Lawrence, KS 66045
Phone: 785.864.4840; fax: 785.864.5202
E-mail: ekm@ku.edu

Trends in Practice

Trends in Behavior Analyst Certification

By Dr. Gerald Shook and Dr. Jim Johnston

Development of the BACB

The Behavior Analyst Certification Board® (BACB®) was formed in 1998 for the purpose of developing, promoting, and implementing a national and international certification program for behavior analyst practitioners. The BACB administered its first certification examinations in May of 2000.

The BACB credentials practitioners at two levels. Board Certified Behavior Analysts™ (BCBA®) must possess at least a Masters' degree, have 225 classroom hours of specific graduate coursework, meet experience requirements, and pass the BCBA examination. Board Certified Associate Behavior Analysts™ (BCABA®) must

have at least a bachelor's degree, have 135 classroom hours of coursework, meet experience requirements, and pass the BCABA examination. BACB certificants must accumulate continuing education credit to maintain their credentials. As of the end of 2006, the BACB projects it will have credentialed over 5,000 certificants.

During its first five years, the BACB reached a number of milestones, for example, BACB:

- Adopted the BACB Guidelines for Responsible Conduct for Behavior Analysts® specifically designed for behavior analyst practitioners;
- Instituted computer-based testing through the 200 U.S. and 150 non-U.S. secure testing sites of Pearson VUE;
- Implemented BACB Professional Disciplinary Standards and due process procedures for certificants;

- Raised the examination qualification requirements for both coursework and supervised experience;
- Conducted an international job analysis to determine current content for BACB examinations; and
- Implemented approval of university coursework to foster the development of behavior analysis training.

Future Trends

Continued Development of the BACB and its Credentials

The BACB will continue to maintain the highest standards and integrity in its certification process and credentials. It also is planning several new developments for the future. A new database will provide new services, such as on-line application; on-line renewal and recertification; on-line payment; and on-line continuing education tracking. New testing procedures such as video clip stimuli and active candidate responding will provide for a more "natural environment" for performance evaluation.

Development of Advanced Certificates

The BACB plans on developing advanced specialty certification in autism and possibly other areas. Although the outcome of this initiative cannot be fully predicted, the process is well established. The BACB intends to convene a panel of experts in autism and other developmental disabilities at the 2007 California ABA convention to consider some basic issues, such as the need for advanced certificates, course requirements, experience requirements, and continuing education requirements. Subsequent panels may be used to develop content areas and task standards. A job analysis survey will likely then be developed and conducted, the results from which would guide the development of knowledge, skills, and abilities statements and examination test items.

Continued Growth in the Number of Universities with Approved Training

BACB approval of university training has been a major factor in the preparation of applicants interested in becoming certified and the unprecedented growth in university behavior analysis training. The BACB initially approved course sequences that met BACB coursework requirements. Figure 1 shows the growth in approved course sequences to date. More recently, the BACB has expanded this program to include approval of supervised experience training. Those institutions earning approval of both course sequence and experience training components become approved programs. Note that the BACB approves university training; it does not accredit university programs. The contingencies associated with certification and the demand for certificants will drive the development of new approved training at universities. Many of the university faculty recently applying for coursework approval are young

Ph.D.s who became BCBAs as part of their training. They often establish approval as a professional goal and use certification preparation as leverage to obtain university support for new courses and, upon occasion, additional faculty to teach those courses.

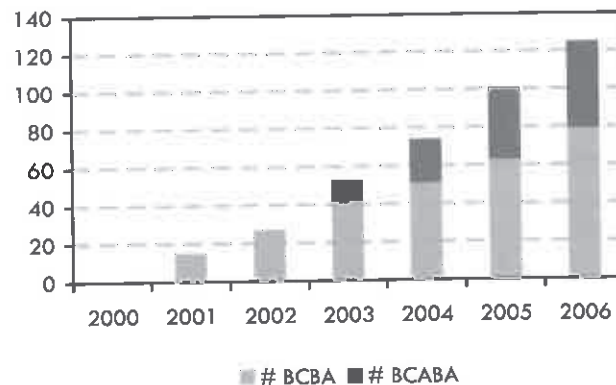


Figure 1. Cumulative number of course sequences per year.

Continued Growth in the Number of Certificants

The number of behavior analysts becoming certified by the BACB has increased steadily each year since the BACB's inception. Figure 2 shows the growth in the number of certificants through 2005. The continuing growth in the number of universities with BACB-approved coursework will result in more opportunities for behavior analysis training, more students who complete the training, and more who become certified. Furthermore, the increasing demand for BACB certificants will provide students with a pragmatic reason to choose behavior analysis training and certification. Because training occurs across a wide variety of academic departments (the majority of approved course sequences are in departments other than psychology, our historical home) behavior analysis will not be tied exclusively to another profession. Students will view behavior analyst certification as a viable professional credential and behavior analysis as a legitimate profession alternative.



California Association for Behavior Analysis
25th Anniversary Western Regional Conference
February 8 - 10, 2007
Hyatt Regency San Francisco Airport
Burlingame, California
www.calaba.org

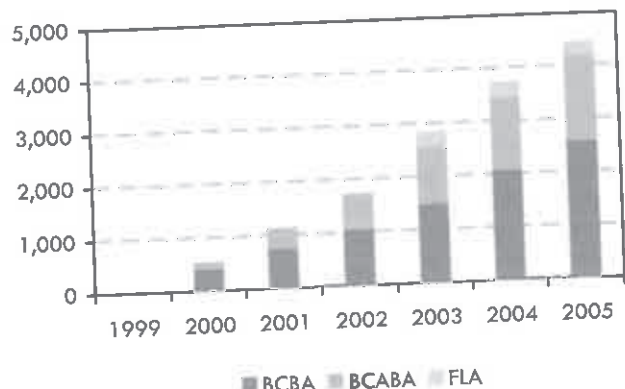


Figure 2. Cumulative number of certificants per year.

Continued International Growth

Over the past few years, the BACB has seen considerable interest in certification from countries outside the United States. There has been growth in the number of non-U.S. approved course sequences (see Figure 3) and the number of non-U.S. certificants (see Figure 4). The BACB currently has certificants in 25 countries. There are universities with approved coursework in Europe (England, Ireland, Norway, Poland, Sweden, and Wales), New Zealand, Israel, and, most recently, Asia (Taiwan and South Korea). Frequently the BACB must work with these universities to mesh BACB requirements with the country's educational system. As in the U.S., faculty are finding that certification and BACB coursework approval may often be used to leverage university support and resources. The growth of international training and certification bodes well for the field. Usually a profession's credential differs in content between countries and are recognized only by the country in which they were developed. Unlike most professions, behavior analysis is based on science, which means that the content of the profession is consistent from one country to another (i.e., the principles of reinforcement are the same in Poland and Taiwan). This consistency of content allows for a universal world-wide credential that is easily "portable" between countries and allows for movement of certificants without the reciprocity problem usually found in other professions. The consistent content and universal credential recognition are huge advantages for certificants and the field.

Announcing New ABA Special Interest Groups

**Behavior Analyst Online
Evidence-Based Practice
Sex Therapy and Educational
Programming**

www.abainternational.org/Special_Interests/si.asp

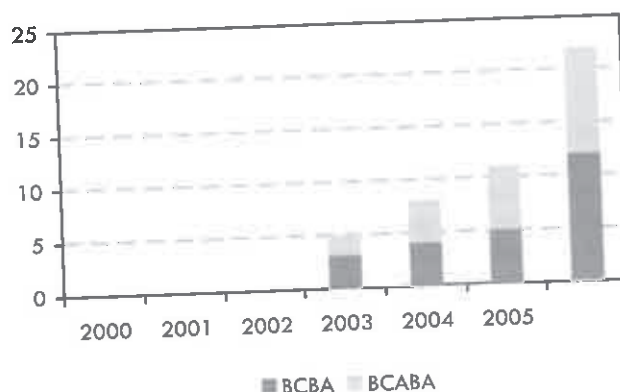


Figure 3. Cumulative number of non-U.S. approved course sequences per year.

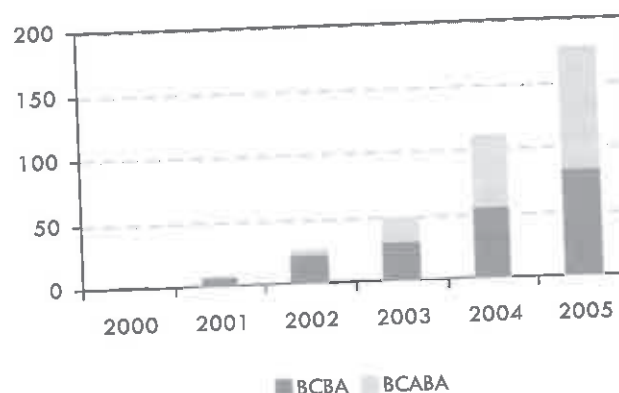


Figure 4. Cumulative number of non-U.S. certificants per year.

Continued Growth in the Recognition and Value of BACB Certification and Behavior Analysis as a Profession

Although a number of states recognize BACB certifications in one manner or another, there is considerable evidence that many more will do so in the near future. In addition, many countries outside the U.S. view an international credential positively and are receptive to BACB certificants as professionals. The BACB will continue to work with behavior analytic organizations in states, provinces, and countries to foster the recognition of credentials and defend certificants' right to practice. The BACB currently is supporting the work of a number of local organizations to that end. In addition, the BACB is working with ABA's Professional Affairs Committee on a number of projects to increase certification recognition and funding. As the recognition and funding of certification increases, the value of the certificate will grow as well. Increasingly, behavior analytic organizations at all levels will need to engage in the public relations and political activities necessary, and devote the resources required, to promote the profession of behavior analysis.

Trends in Social Issues

By Dr. Mark Mattaini

Essentially all of the major social issues with which humans are currently grappling—global warming and environmental degradation, individual and collective violence, the full range of human rights abuses, even poverty—are the direct results of human behavior and cultural practices. The daily news can be so aversive that many simply avoid it; seemingly endless regional conflicts, school shootings and failing schools, child predators in positions of leadership and trust, and lack of governmental and corporate integrity are difficult to continue to attend to as they seem to be more and more embedded into societies. But a concern for such issues, and the hope that they could be addressed, brought many behavior analysts into the field. Applied behavior analysis originated with a concern for “issues of social importance.” Skinner wrote and thought for at least the last five decades of his life about “acting to save the world,” and why we were not doing so when the basic knowledge required was available, or could be elaborated given what was known, and many found that work inspiring.

And yet, not only are few behavior analysts working primarily in these areas, but of those who are, many have largely left the behavior analytic community, usually for prevention science and community psychology. If behavior analysis has something unique and powerful to contribute to addressing or resolving major human problems, as many of us continue to believe, why do those with such interests so often experience themselves as marginalized from the discipline? Many no longer attend the ABA conventions, finding little there to interest or challenge them, and publish primarily outside of the behavior analytic literature. It has been particularly difficult to “hold” people of color, women, and LGBTQ individuals with social concerns, who often report that they find other professional and scientific communities more committed to their interests, and more willing to listen to their concerns.

Despite recent advances discussed later, the overall proportion of behavior analytic science dedicated to social issues remains almost vanishingly small. Few financial resources have emerged to advance this work; behavior analytic scholars working in the area often do not identify themselves primarily as behavior analysts; and students with strong interests in major social problems commonly move on to better-funded work in behavior analysis (like autism), to other disciplines where a critical mass of well-funded and active researchers is easier to find, or in some cases to activist communities.

There are other challenges as well. Centrally, active intervention in most areas of social concern requires work at the cultural level. It is unlikely that effective strategies for addressing major social issues can be developed

without a well-developed cultural analytic science. If behavior analysis is marginalized in academia, as many have bemoaned for some time, cultural analysis has until very recently been largely unknown. Single-system research does not meet most definitions of evidence-based or empirically supported interventions; this is particularly true at the cultural level, where it is, nonetheless, crucial. Conceptual analyses and interpretive work, although valued in behavior analysis and clearly important in cultural analysis, are much less honored outside the discipline.

In addition, of course, most social issues are very difficult to engage in natural contexts (into which we are seldom invited), and are almost impossible to bring into the laboratory except in the case of certain analogue studies. Nearly everyone in modern society manifests their own explicit or implicit theories of human behavior and collective action; most of those are not consistent with behavior science, making marketing much more challenging. And it is profoundly hard to have a meaningful impact on many social issues, given the limited resources available (and often even when there are considerable resources present).

But there are also some hopeful trends. There has been something of a resurgence of interest in social issues in the behavior analytic community in the past five years, much of it international in scope. There are a number of behavior analysts working in several important areas, including violence prevention and the environment, and much of this work is translational in nature—grounded in well-researched basic behavior science (for example, the matching law, or behavioral momentum). Developing a community of scholar/activists appears more possible now than at any other time in the past two decades. One of the major reasons behind this is the international interest in the analysis of cultural practices, an emerging and challenging subdiscipline with the potential to increase work in complex areas.

Much of this work is being published in the journal *Behavior and Social Issues (BSI)*, published by Behaviorists for Social Responsibility. Now with on-line open access available worldwide, *BSI* is accessed on the Web thousands of times each month (www.behaviorandsocialissues.org). Recent issues of the journal have addressed domestic violence, terrorism, the environmental impact of consumer behavior, substance use, rehabilitation of prisoners, the science of nonviolence, human rights, child labor, racial discrimination, gambling, and HIV/AIDS, to name only a few. In addition, the journal has recently published two issues focused primarily on advancing the basic science of cultural analysis, as well as a number of important methodological advances for applied work.

But there is much more to be done; unrelenting suffering is all around, and human rights violations are ubiquitous. In a world characterized by ever-expanding globalization, the lives of the privileged are increasingly

and intimately connected with those whose lives are limited by our own excesses. So, where to start? I have elsewhere suggested five strategic priorities for behavior scientists interested in acting in solidarity with those most at risk (Mattaini, 2006). The heart of these priorities is that every behavior analyst can contribute in some way to human rights and social justice, whether it be through pursuing courageous scholarship in these areas at least part of the time; advocating that scientific organizations consider their ethical responsibilities in these areas; contributing professional expertise to local, national, or international service efforts; assisting students in finding ways to pursue their serious concerns; or any of numerous other possible options. While the rate of behavior analytic behavior in these areas currently appears to be accelerating, it remains very modest. Seeing the potential for our science to address major social issues in meaningful ways, our personal and collective responsibilities seem clear.

References

- Mattaini, M. A. (2006). Editorial: Human rights, pragmatic solidarity, and behavior science. *Behavior and Social Issues*, 15, 1-4.

Evidence-Based Practice and Autism Spectrum Disorders

By Dr. Susan M. Wilczynski

Medicine, psychology, education, and other fields of study are consistently coming to the same conclusion: Evidence-based practice is critical for patient care. Evidence-based practice involves the integration of research findings with clinical judgment and patient values (Sackett et al., 2000). In order to engage in evidence-based practice, service providers must have access to clear, concise information about the strength of evidence supporting different treatment options. For this reason, expert panels have been convened to evaluate empirical evidence on every topic from heart disease and cancer to nocturnal enuresis and attention deficit hyperactivity disorder (ADHD). After examining available research conducted to date, these panels have forwarded a series of practice guidelines to assist educators and service providers in making treatment decisions and in producing informed consumers. Is there any reason to believe autism spectrum disorders should be different?

Perhaps even more alarming than the increase in diagnosed cases of autism spectrum disorders is the exponential growth of 'miracle elixirs' for this set of disorders. In the absence of true scientific support, advocates for these approaches often cloak themselves in the garb of science by providing shocking figures on the number of children they have 'cured' (Green, 1999). Although scientist-practitioners often express surprise that parents would consider these unsupported treatments, it

should be perfectly expected that parents would make such requests given their urgent need to help their children. Yet, in order to remain consistent with ethical standards requiring the use of empirically-supported treatments (Behavior Analyst Certification Board, 2004), service providers must both be aware of the strength of evidence supporting a broad range of intervention alternatives and be able to help parents and other consumers understand their import. Unfortunately, parents are often confronted with educators and service providers who are insufficiently familiar with the research literature. The uncertainty expressed by some educators and service providers speaks volumes when placed in contrast with the absolute certainty offered by proponents of 'cures.'

To be fair, many educators and service providers do not specialize exclusively in the treatment of one population and it is difficult to keep abreast of research outcomes when more than one population is served. Even when educators and service providers remain up-to-date on the latest research findings, they are still likely to find it helpful to be armed with an independent evaluation of the literature to share with parents and other consumers. In a climate where the need is so urgent, the alternatives so abundant, and the ability to keep updated on the latest research findings so difficult, evidence-based guidelines are absolutely critical.

Recognizing the importance of practice guidelines regarding autism spectrum disorders is not entirely new. In 2001, the National Research Council published a report examining the scientific, theoretical, and policy literature involving young children with autism spectrum disorders. Unfortunately, no conclusions could be drawn regarding treatment of older children and adolescents because this fell outside the purview of their examination. Also, because the research reviewed was conducted prior to the year 2000, it may be rapidly becoming outdated as a great deal of treatment research continues to be published. Currently, efforts are underway to complete the National Standards Project, a collaborative effort to systematically evaluate educational and behavioral treatment options for individuals under 22 years of age. The goal is to provide practice guidelines and information about the strength of scientific evidence supporting a broad range of interventions for autism spectrum disorders. The National Standards Project is expected to provide useful data regarding the effectiveness of both comprehensive programs designed to address all core deficits associated with autism spectrum disorders and focused interventions designed to either increase developmentally appropriate skills or decrease severe problem behaviors.

The National Standards Project may help promote evidence-based practice in the treatment of autism spectrum disorders by providing critical information about research-supported interventions. However,

evidence-based practice involves more than merely having access to information about the quality and quantity of research supporting specific interventions. The results of the National Standards Project would need to be integrated with clinical judgment and patient values to truly reflect an evidence-based approach to autism services.

Debate remains among professionals endorsing evidence-based practice regarding the extent to which scientific research, clinical expertise, and patient values should be emphasized when making treatment decisions (APA, 2006). Well-reasoned arguments against an overemphasis on scientific research have been made. For example, drawing conclusions from published research is somewhat limited due to the unlikelihood of studies involving direct replications, simple extensions, and non-significant findings being published. Thus, if an insufficient number of studies support a particular intervention because replications and extensions are less likely to be published, should practitioners really shy away from using these interventions? In contrast, should practitioners only consider selecting interventions with the highest level of research support even though they know unpublished studies with non-significant findings may exist?

The National Standards Project, like all of its predecessors in evidence-based practice, must acknowledge that clinical judgment and patient values play an important role in determining which treatment to pursue. Of course, clinical judgment should always be informed by data. A consistent reliance on single-case design methodology to evaluate the effectiveness of an intervention should be employed whenever services are provided to children with autism spectrum disorders. Ideally, selection of the initial treatment approach would be influenced by the strength of evidence supporting an intervention and data would guide the continuance, modification, or termination of the intervention. Finally, the extent to which patients, families, and other consumers endorse a treatment approach should also influence intervention selection. Educators and service

providers will have to respectfully inform patients, families, and other consumers about research-supported interventions, help them understand the importance of clinical judgment and data-based decision-making, as well as balance their ethical mandates with patient values as they maneuver through the sometimes difficult waters of evidence-based practice. This certainly requires a great deal of skill and careful consideration; it cannot be gleaned from any practice guideline. However, without a careful analysis of the educational and behavioral intervention literature, a crucial component of evidence-based practice is lost and patient care will be undermined. Certainly, controversy about autism treatment decisions will continue; however, solid information about the quality and quantity of research is necessary to move the field forward.

References

- American Psychological Association. (2006). *Evidence-based practices in mental health: Debate and dialogue on the fundamental questions*. Baltimore, MD: United Book Press, Inc.
- Behavior Analyst Certification Board. (2004, August). *Behavior analyst certification board guidelines for responsible conduct for behavior analyst*. Retrieved October 3, 2006, from <http://www.bacb.com/pages/conduct.html>.
- Green, G. (1999). Science and ethics in early intervention for autism. In P. M. Ghezzi, W. L. Williams, & J. E. Carr (Eds.), *Autism: Behavior Analytic Perspectives*. Reno, NV: Context Press.
- National Research Council. (2001). *Educating children with autism*. Washington, DC: National Academy Press.
- Sackett, D. L. Straus, S. E., Richardson, W. S., Rosenberg, W., & Haynes, R. B. (2000). *Evidence-based medicine: How to practice and teach EBM* (2nd Ed.). London: Churchill Livingstone.

Trends in Dissemination

Disseminating Behavior Analysis through Archival Publications

By Dr. A. Charles Catania

The continuity of populations, whether consisting of members of species, bits of behavior, groups of individuals within societies, or instances of cultural practices, depends on the selection of variations by their consequences. Our field consists of multitudes of individuals engaging in research and applications. Whether their practices survive will depend on what we do to pass them on not only to each other and to our students but also to our contemporaries outside of

behavior analysis. Our publications are central to those objectives.

In our shared human origins phylogenetic selection (of the Darwinian variety) has been the basis for our evolutionary history; ontogenic selection (of the operant variety) has been the basis for our various individual repertoires. But what makes our field special is particularly the product of a different level of selection that operates not upon the behavior of the individual organism but rather upon what can be passed on from one organism to another.

Skinner called one version of such selection cultural selection; the evolutionary biologist Richard Dawkins called another but similar version memetic selection. A central issue is that of determining the units of selection, and for our purposes the appropriate units in cultural selection must be behavioral ones (the production of phonemes and methods for preparing ethnic cuisines are two examples). Furthermore, those behavioral units most relevant to the survival of our research methods and their applications in the midst of the vast diversities of contemporary human societies must be verbal ones. A researcher working alone in a laboratory may make marvelous discoveries, but that work can have no impact if it is never reported. An applied behavior analyst may develop new techniques while working with an individual client or within a special classroom, but if those in other places do not learn about these new practices they will not spread.

We do of course discuss our work at our professional meetings, and certainly we sometimes learn important things about behavior from each other in such settings, but the products of such practices are too often ephemeral. What does it take to access the details of a twentieth-century ABA presentation or to locate information about a poster presented at a recent meeting? This will of course get easier as ABA develops an on-line archive of its convention programs, but while such archiving will help in locating authors and other information, we are no doubt still some way from an archive that preserves the full content of presentations and posters. Such problems are not unique to ABA, and in fact there is much to be said for maintaining an environment in which presenters can test the reactions of audiences and in which audiences can shape the skills of presenters: How often have we felt that it is just as well that our first tentative presentation of some new procedure or finding has not been captured in a permanent archive?

In any case, the point is that conventions and publications have different functions, and it is our publications that are the repository of the essential components of our field. They will not substitute for what happens in classrooms, on-line courses, workshops, training sites, or laboratories, but they will remain crucial adjuncts to such settings, as when a faculty member assigns journal readings in an advanced course or a supervisor provides treatment guides or handouts.

The future of behavior analysis is not only a matter of archiving its accomplishments in journals and related publications. It also depends on how easily the archives can be accessed and how likely relevant material in those archives can be found. Significant progress has already been made elsewhere, as when, given the initiatives of Victor G. Laties and the support of the Society for the Experimental Analysis of Behavior, all of the back issues of the *Journal of the Experimental Analysis of Behavior* and of the *Journal of Applied Behavior*

Analysis have become available on line through PubMed Central. Other organizations have moved to on-line publishing (e.g., as with the journal *Behavior and Philosophy* from the Cambridge Center for Behavioral Studies), and ABA has begun taking steps to make *The Behavior Analyst* (TBA) and *Analysis of Verbal Behavior* (AVB) similarly available on line.

It is important for all of us to support ABA as it moves in these directions not only for the increased accessibility of our literature within the field, but for increased visibility outside of the field. An on-line archive will make it more likely that those from other disciplines will discover some of what we have been doing for some decades now, as their literature searches include our work among their hits.

There will be constraints. Some indexing operations require certain features in certain formats (e.g., abstracts or key words) before including journals in their databases, but the cost of conforming to such requirements is amply repaid if the outcome is that the content of those journals is more widely seen. Input to ABA from those with expertise in topics such as Web site design that makes site content more likely to be picked up by search engines will be invaluable. The Web is a new means by which we can pass our verbal products on to others. But that world is an exceedingly competitive one, and we cannot afford to drop out of the continuing selection that the Web engenders. The competition exists not only within the larger context of human cultures but also within our field and related disciplines such as psychology, as on-line journals, lists, and other vehicles for maintaining records of verbal behavior proliferate, each with its idiosyncratic mechanisms for editorial oversight, review, opportunities for commentary, and so on. The junior faculty member who will be up for review on a tenure track would do well to choose those publication outlets that are most likely to be indexed and to produce visibility, especially if that individual will be judged in a department with few, if any, other behavior analytic colleagues. Our publications must allow for these as well as other contingencies that will affect the ways in which our field is seen by others.

Once ABA has gone on line with its journals, it will have set a crucial precedent. Many new opportunities will become available. For example, some international behavior analytic journals have been publishing for some time (e.g., in Mexico and in Japan); others have only recently begun (e.g., in Brazil). Perhaps our organization can provide resources to international chapters to help them bring their behavioral journals on line (one candidate is the *European Journal of Behavior Analysis*, which to date is available mainly in print format). Once TBA and AVB become on-line journals, one possibility is that their content might also include, as mirror publications, what had appeared in the journals of affiliated chapters; those journals could maintain their separate editorial identities and criteria while at the

same time making their contents more generally available on line (precedent exists in the sectional structure offered by some of the journals of major scientific organizations). Print journals continue to be costly, so such on-line publication would offer economies along with vastly enhanced accessibility.

The potential benefits are enormous, so possible startup costs in time and in effort should not stand in our way. Our future as a discipline is inseparable from the future of our publications. It would be premature to try to spell out the details, but our field will undoubtedly benefit immensely by moving as quickly as possible to making our literature readily and broadly available on the Web. We must not only pass on our work to each other and to our students; we must also do all we can to help it migrate to new environments.

International Dissemination of Behavior Analysis.

Where Do We Go from Here?

By Dr. Ruben Ardila

In many academic and professional contexts, behavior analysis and its applications are sometimes associated with the Anglo-Saxon culture, and specifically with U.S. culture. It is considered a "typical American" discipline, with a philosophy, a methodology, and a number of applications centered on problems of U.S. society. As a matter of fact, behavior analysis began in the United States, although with some roots in Russia (Bechterev, Pavlov), England (Darwin, Spencer, Huxley), France (Pieron), and others. But in the last few decades the behavioral movement has become global, in both the geographical and cultural sense.

The discipline that we call behavior analysis (or, previously, the experimental analysis of behavior) was developed in the United States during the first half of the 20th century. The main research work, publications, congresses and conventions, training centers, professional associations, controversies, applications, and social impact, took place in the U.S. Many of the leading figures, like Skinner and his close associates, lived and worked there. Behavior analysis (BA) was well known and gave origin to many developments in the U.S.

On the other hand, the discipline soon reached other countries, mainly in Europe and Latin America. The philosophy of behavior analysis, the experimental work, and the wide range of applications, were known outside of the U.S., and many original contributions took place at the world level. In Great Britain the influence of H.J. Eysenck was very great, including the journal that he founded in 1963, *Behaviour Research and Therapy*. In Brazil, the visits of Fred S. Keller to Sao Paulo (1961) and to Brasilia (1964) greatly impacted experimental behavioral research and application. In Mexico, Sydney W. Bijou educated a number of researchers and

practitioners, among them Emilio Ribes, the main figure of behavior analysis in Mexico. The journal *Revista Mexicana de Análisis de la Conducta/Mexican Journal for Behavior Analysis* began publication in 1975, and was the voice of behavior analysis in the Iberoamerican world.

Professional organizations such as the European Association for Behavior Therapy, the European Association for Behavior Analysis, the Japanese Association for Behavior Analysis, the German Association, and the Latin American Association for Behavior Analysis and Modification, among many others, are indications of the growth of behavior analysis and its applications at the world level. There is also important work carried out in Australia and New Zealand, India, China, Jordan, and some African countries.

Behavior analysis at the world level is part of psychology, but also has relationships with education, social work, nursing, psychiatry, sociology, and even anthropology. There are jobs available for behavior analysts in many countries in special education centers, hospitals, universities, businesses, pharmaceutical industries, sport centers, health promotion institutions, community development organizations, and so forth.

The behavior analyst community organizes congresses and conventions at the international level and publishes journals in several languages, such as the *Japanese Journal of Behavior Analysis*, *Scandinavian Journal of Behavior Therapy*, *Verhaltenstherapie*, *Psicología Conductual*, and *Behaviour Research and Therapy*, among many others. Graduate training in behavior analysis and applied behavior analysis is available, although mainly at the Master's level.

As an indication of the internationalization of behavior analysis see Malott (2004), and Ardila (2006). Probably the next step ("Where do we go from here?") will be to increase communication and collaboration across cultures, languages, and nations. The future of behavior analysis is linked to the future of psychology (see Ardila, 2002) and also to the development of behavior analysis as a discipline and as an applied field. The contribution of behavior analysts in the U.S. could be enriched by the work done outside the borders. The international community of behavior analysts is quickly progressing.

Correspondence may be addressed to:

Ruben Ardila, Ph.D.
National University of Colombia
P.O. Box 88754
Bogotá, Colombia
E-mail: psycholo@etb.net.co

References

- Ardila, R. (2002). *Psicología en el futuro (Psychology in the future)*. Madrid, Spain: Editorial Pirámide.

Ardila, R. (2006). Behavior analysis in an international context. In A.C. Brock (Ed.), *Internationalizing the history of psychology*. New York: New York University Press.

Malott, M. M. (2004). Toward the globalization of behavior analysis. *The Behavior Analyst*, 27, 25-32.

International Development: Progress and Change

By Dr. Simon Dymond

Over recent years, behaviour analysis has experienced enormous growth. Witness, for instance, the increasing number of academic positions seeking well-trained behaviour analysts, the demand for behavioural services in fields such as developmental disabilities, the research funding opportunities that are opening up behavioural research to new audiences, and the growing student membership levels of professional organisations. Such indicators of growth are all the more impressive when we consider that behaviour analysis is still a relatively young discipline and that growth is occurring all over the world. Behaviour analysis programmes are springing up in places where before there was no behavioural presence. In many countries, behaviour analysis is no longer the preserve of an isolated few, but of a growing critical mass of basic and applied researchers making important inroads in research and also training the next generation of behaviour analysts. For instance, my *alma mater*, University College Cork, was once referred to as one of several centres on the "Celtic Fringe" of Ireland, Wales, and Scotland where individual behaviour analysts ploughed an often-lonely furrow. Not anymore. Wales and Ireland now have multiple sites offering BACB-approved certification courses and some of the highest research output of any lab in Europe.

Perhaps now more so than ever, behaviour analysis can be said to be truly international. Behaviour analysts from more than 32 countries attended the 2006 annual convention of the Association for Behaviour Analysis International (ABA). Several countries publish their own-language behavioural journals and BACB-certification is now an international phenomenon. ABA has always played a central role in the international dissemination of behaviour analysis. It is perhaps salutary to consider the ways in which both ABA and the Society for the Advancement of Behaviour Analysis (SABA) continue to support international development and their achievements:

- SABA provides funding through its International Development Grant for behaviour analysts to host a workshop, set up a university course, or any other such activity that will contribute to the international dissemination of behaviour analysis. Competition for this award is fierce, and the number of applications has steadily grown over the years.

- SABA also provides an award for International Dissemination of Behaviour Analysis, and a glance through the list of previous recipients highlights the extraordinary range of talented behaviour analysts who have been honoured with this award.
- ABA has organised several international delegations, funded entirely by delegates and hosts, to countries such as China and Jordan. Such delegations have helped establish academic programmes in behaviour analysis where none existed before.
- Every two years, ABA organises an International Conference in a country outside of the U.S. The three conferences held so far (the next is in Sydney, Australia, August 12-14th 2007), have all been hugely successful in helping to raise the profile of our field by directly involving local members in the organisation, planning, and hosting of the International Conference. (Incidentally, proposals to host the 2009 conference are currently being sought.)
- There are currently 29 international affiliated chapters of ABA, and their combined total membership is greater than that of the U.S. chapters' membership. ABA has recently established two email list-serves to facilitate communication among representatives from all of the 60 U.S. and non-U.S. affiliated chapters.

These are some of the ways in which ABA and SABA support international development. Apart from these organisational mechanisms, I believe that there are other ways in which individuals can support the international growth and profile of our field. In what follows, I offer a personal view, reflective of my own academic research bias, of some of the opportunities that lie ahead and how we can capitalise upon them.

1. Let's stick together

ABA is a membership organisation and the policies and activities it pursues are undertaken on behalf of the membership. As in any other democratic organisation, there exist mechanisms by which members may make suggestions or comments about existing policy. By sticking together, we are better placed to maintain the gains we have made and overcome the challenges of the future.

2. Choose your bedfellows wisely

Behaviour analysts can win friends and influence the future of their science by collaborating with specialists from other fields. As an example, consider current interest in cognitive neuroscience methods, in particular functional magnetic resonance imaging (fMRI). From a behaviour-analytic perspective, most fMRI research may be considered demonstration research in that differential brain activity is compared either in response to different stimulus events or by virtue of pre-existing group

differences. Behaviour analysts can, and increasingly do, contribute to this research agenda by, for instance, designing experimental paradigms or by modelling, *ab initio*, the relevant task or group differences in the lab. Cognitive researchers are becoming increasingly interested in "learning," and we have something unique to bring to these collaborations. We should choose our collaborators wisely and not be afraid to "dance with the devil" in order to push forward our research agenda.

3. *Don't pin your colours to just one mast*

In most parts of the world, behavioural services for treating autism and other developmental disorders are increasing in demand, which represents a golden opportunity to make a lasting impact on the lives of many children and their families. However, we should be cautious and guard against our field becoming perceived by the public as being synonymous with services in this one area. Other diverse areas such as consumer behaviour analysis, health promotion, organisational behaviour management, and environmental management should be highlighted to consumers of behavioural services whenever possible because these areas represent opportunities for our field to grow in new and exciting ways.

4. *Seek and you shall find*

New and imaginative sources of funding need to be identified to teach behavioural courses and to undertake research. In Europe, EU funds exist to support both teacher and student exchange. Such funding channels offer a means of establishing, for instance, a co-operatively taught postgraduate degree in a region lacking a critical mass of behaviour analysts.

In summary, the activities of ABA and SABA have made huge achievements in the arena of international development in a relatively short amount of time. Much work remains to be done, but I am confident that behaviour analysis can rise to the challenges and opportunities of the future.

Correspondence may be addressed to Simon Dymond, Ph.D., BCBA, via s.o.dymond@swansea.ac.uk

Trends in International Dissemination: Behavior Analysis on the World Stage

By Dr. M. Jackson Marr

Some years ago the Association for Behavior Analysis became the Association for Behavior Analysis *International*. This change in title was done for at least two interlocking reasons. First, there really was a significant and growing international (i.e., outside the U.S.) community of behavior analysts with whom ABA would like to develop closer relations through affiliate chapters, joint meetings, special interest groups, as well

as program and publication functions. Second, to help accomplish these efforts as well as others, some official recognition as well as responsibilities would accrue from attaching the term "International" to the organization. In some sense ABA would have to put its money where its mouth was. However, I don't believe any of us who were around when these efforts first began could have imagined how they would evolve into their current, extraordinarily active and creative state.

An essential step to upholding the international title was to incorporate distinguished ABA members from outside the U.S. into ABA governance. The 1990s saw our first ABA President from outside the U.S.—Masaya Sato from Japan. Further acknowledgement of the significance of international development was the establishment of an ABA Council position for international affairs and development. Michael Davison, a New Zealander, served as the first representative of the world community of behavior analysts. These recognitions and others have enriched the annual ABA convention program immensely through invited presentations and symposia, receptions, expos, student activities and support, SABA awards, and many other events and efforts.

But these reflections of ABA's international involvement have largely emerged from a rapidly growing behavior analytic representation outside the U.S. The numbers are telling: The non-U.S. ABA membership has more than doubled in the last decade; as has the number of its affiliate chapters; the membership in these chapters (6831) now exceeds that of the affiliate chapters within the U.S. (6015). Some 30 countries are represented, from Iceland to Italy; from Brazil to Bahrain; from Norway to New Zealand; from Japan to Jordan. In some cases independent regional behavioral associations (e.g., the European Association for Behaviour Analysis), involving several countries, have been founded with their own international meetings and publications.

In the past several years ABA has engaged in two major thrusts in international development. The first has been to organize conferences outside the U.S., necessarily involving local representatives of the behavior-analytic community as hosts and attracting students, practitioners, and faculty from the region, as well as "outsiders." So far, Italy (Venice), Brazil (Campinas), and China (Beijing) have, with the support of ABA, served as hosts. These meetings have been extraordinarily successful in terms of attendance, participant satisfaction, and cost. The next meeting will be in Sydney, Australia in August.

The second thrust is more ambitious, but has great promise for the development and longevity of the field of behavior analysis—basic and applied. The simple fact is that people everywhere need what this field, and only this field, can provide. Problems of developmental disabilities, education, management, and many others addressable through behavior-analytic methods have no international boundaries. Simple demographics applied to China, for example, would predict that there at least

10 million autistic children in that country. Who is going to treat these children? The primary issue is training, that is, the development of self-sustaining programs in behavior analysis to produce qualified and effective faculty and practitioners in the region where such problems may begin to be addressed. By invitation, ABA has sent delegations (at the delegate's own expense!) to Russia, China, and the Middle East to initiate such programs. What has been accomplished so far? Here are some examples:

- China: The ABA delegation resulted in an affiliated chapter, later the 2005 international conference in Beijing, and the subsequent establishment of three schools for children with disabilities, established by Applied Behavior Consultants. In addition, a Chinese person trained in the U.S. in behavior analysis at University of Nevada-Reno went back to China with a dissemination mission.
- Middle East: The ABA delegation resulted in the establishment of the Middle East Association for Behavior Analysis, which is very active. During the delegation visit we held a conference with over 100 attendees from Bahrain, Egypt, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, the Sudan, and the United Arab Emirates. Publicity about the conference in the media was very positive and detailed, with multiple articles appearing in local newspapers.

Another is being considered for Abu Dhabi as a result of the very favorable reception of the first Middle East delegation. In Jordan, through encouragement and support at the highest levels of government, an M.A. program is under development at the Jordan University of Science & Technology, scheduled to open next summer.

These are complex as well as ambitious tasks and will take several years and much hard work to show their ultimate merit; but, as one who has had the privilege of serving on three of these delegations, I have seen what can only be described as a desperate call by government officials, physicians, parents, university presidents, and other constituents for what we, as behavior analysts can provide. Many in the U.S. think that our field is "dead," or, at least moribund; indeed, there is no doubt that many academic programs in behavior analysis are struggling to maintain their integrity. But in the rest of the world, many are not contaminated by doctrinaire and ignorant prejudices about the value of behavior analysis—as a science and a practice: they see that it works, and they want more. Thus, the future of behavior analysis may well depend on our efforts in international development.

Trends in Other Organizations

Trends at the American Speech-Language-Hearing Association

By Barbara E. Esch

Speech pathology (SLP), as a profession, has been interested in behavior analysis for some time (see Koenig & Gerenser, 2006 for an historical review). Increasingly, speech pathologists are joining the Association for Behavior Analysis (ABA) and are dynamically participating in its activities. SLP involvement at ABA resulted in the 2005 establishment of the Speech Pathology SIG (www.behavioralspeech.com) whose mission, in part, is to promote dissemination of evidence-based practices to speech and language professionals.

ASHA

The American Speech-Language-Hearing Association (ASHA) is the professional organization for speech-language pathologists, audiologists, and speech and hearing scientists who practice in the United States and internationally. Through ASHA, members can access the credentialing process as well as address issues of interest and priority (see ASHA's 2006 Focused Initiatives at <http://www.asha.org/about/leadership-projects/national-office/focused-initiatives/>).

SLP and ABA

Many speech pathologists, having already met rigorous standards for certification (i.e., Certificate of Clinical Competence), are additionally seeking a behavior analysis credential through the Behavior Analyst Certification Board (BACB; www.bacb.com). This implies a strong commitment to acquire accepted competencies in behavior analysis, to adhere to the professional standards of its community, and to work collaboratively with behavior analysts to enhance interdisciplinary services to consumers and advocates. As professional interaction between speech pathologists and behavior analysts has increased, it has become apparent that our mutual interests can be advanced by addressing several issues, variously articulated, but highly prioritized, by both ASHA and ABA.

1: Collaboration and Dissemination of Evidence-Based Practices

Professional collaboration is part of a multidisciplinary communication system supporting efforts to identify, prioritize, and solve complex research and clinical issues so that best practices are effectively disseminated. Such collaboration is promoted by ASHA in that it has established multiple venues (e.g., joint committees,

special interest divisions, training modules, professional development events, practice documents, legislative and advocacy teams, policy initiatives, on-line public access) that provide opportunities and impetus for ASHA members to develop and extend communication with scientists and practitioners from disciplines related to speech pathology. However, for maximum benefit (ultimately to consumers), professionals must necessarily speak the same language, provide and accept opportunities for interaction, and objectively evaluate the efficacy of shared information. Notwithstanding the role for SLPs, these strongly interrelated issues provide valuable opportunities for behavior analysts.

Terminology

Persons outside the field of behavior analysis are largely unfamiliar with, or often misinterpret, its terminology. Although efficient for us, our verbal precision and parsimony may lack the redundancy or common usage needed for non-behaviorists to cross the intraverbal bridge or even meet us halfway. This is not to suggest that we dilute our science (indeed, we should continue to strive for clarity in articulating our theories and technologies), but, as others (e.g., Baer, 1991; Bailey, 1991; Schlinger, 2006) have pointed out, we have much to gain by perfecting the way we market it. To its benefit, ASHA has adopted many of the marketing strategies already proposed to our own profession (see Bailey, 2000). We should follow this lead, and that of other professions (e.g., medicine), and work for acceptance, not just among ourselves, but also throughout our entire consumer base (which includes related professions). This requires that we develop multiple, but equivalent, verbal repertoires and discriminations about the functions (i.e., utility for consumers) of these repertoires. In doing so, we are more likely to fulfill the charge set forth by Skinner (1948) to promote the welfare of all members of our culture and not just our own.

Interaction

Behaviorally-oriented speech pathologists have embraced the opportunity to promote empirical support for, and application of, a behavior analytic approach to communication disorders. At ABA 2005 and 2006, for example, members of the Speech Pathology SIG made 15 and 12 presentations, respectively. In contrast, SIG members reported having four proposals accepted for the ASHA 2005 convention; an acceptance rate that has been halved for the 2006 convention (held in November). Of the eight proposals submitted by SIG members to ASHA 2006, the two that were accepted cover functional assessment, Functional Communication Training (FCT), and computer-assisted instruction to facilitate picture exchange. Rejected proposals ($n = 6$) spanned a variety of behavioral topics such as verbal behavior analysis, errorless learning, teaching sign language through shaping, establishing the teacher as a conditioned reinforcer, replacing challenging behaviors

(FCT), behavioral teaching strategies to improve joint attention and early language skills, and the use of shaping to teach requesting and echoic behaviors. It is unclear why particular proposals were rejected, but feedback from ASHA reviewers indicated unfamiliarity or difficulty with behavior analysis in terms of its theoretical underpinnings (e.g., [does not consider] the child's ability to construct meaning from an experience; will evidence contrary to [these] views be provided), the current research base supporting behavioral practices (e.g., this is outdated information), and its treatment efficacy (e.g., this approach not widely held).

Although opinions may differ about the validity of this feedback, nevertheless, it provides us with useful information needed to effect change. The ASHA platform upon which to disseminate our work is an important opportunity, given its potential influence, and we would do well to strive for relevancy within this population. To that end, we offer a few suggestions: (1) continue to submit proposals to venues (e.g., conferences, product markets, publications, workshops) accessed by speech pathologists, (2) ensure proposals are user-friendly (i.e., informative for the reviewer audience) and maximally address review criteria, (3) establish ASHA-approved continuing education credits for speech pathologists attending ABA and ABA-related conferences, and (4) monitor ASHA's Web site for priority issues that may present opportunities for professional interactions and contributions.

Efficacy

One of the challenges facing science practitioners today is how to define evidence-based practice (EBP). ASHA assists its members in considering this problem by providing a position statement (American Speech-Language-Hearing Association, 2005) as well as extensive references (<http://search.asha.org/query.html?qt=evidence+based+practice>) that allow members to connect with the current public discourse on this issue and to participate in forums that influence how EBP is defined. However, within this body of information, descriptions of single-case designs are notably absent, although the door is open for their inclusion (e.g., Dollaghan, 2004) and we have guidance and support for doing so (e.g., Horner et al., 2005). As a profession that has amassed an impressive research base demonstrating treatment efficacy through single-case experiments, we need to have a greater presence alongside other respected professional organizations (e.g., American Medical Association, American Psychological Association, ASHA) in this all-important public discussion.

2: Shortages

Certified practitioners

In the field of speech pathology, as in behavior analysis, the demand for qualified practitioners exceeds availability. ABA could assist speech pathologists in

maintaining certification by offering ASHA CEUs at its conferences. This might also establish ABA events, in general, as more valuable for these professionals.

Ph.D.-level researchers

According to ASHA, the number of skilled researchers investigating speech/language issues is not optimal (www.asha.org). This situation provides opportunities to promote research activities, perhaps interdisciplinary, by which behavioral experiments (and case studies) augment the empirical base currently available in speech and language.

Reimbursement

In some clinical areas (e.g., language instruction), there is considerable overlap in services provided by speech pathologists and behavior analysts. Thus, both have responsibility to support and clarify their services to consumers, healthcare insurers, and employers offering coverage plans. Professional organizations are well positioned to educate decision-makers about the efficacy and necessity of services provided by their members, thereby influencing demand for, and accessibility of, those services. ABA is far behind ASHA in this endeavor and the current healthcare marketplace makes it crucial for the profession to address this discrepancy.

3: Specialty Recognition

Professional credentialing organizations such as ASHA and BACB have begun to establish Specialty Recognition Programs that acknowledge an individual's particular area of expertise within the organization's professional scope of practice (see ASHA: http://www.asha.org/public/cert/gen_info.htm; BCBA: http://www.bacb.com/consum_frame.html). Currently, ASHA offers three such endorsements: child language, fluency, and swallowing. When available, the BACB Autism Specialty Credential will strongly underscore the credibility (i.e., value) of behavior analysts on interdisciplinary teams working to address this disorder.

References

- American Speech-Language-Hearing Association (2005). *Evidence-based practice in communication disorders* [Position statement]. Available at <http://www.asha.org/members/deskref-journals/deskref/default>.
- Baer, D. M. (1991). Tacting "to a fault." *Journal of Applied Behavior Analysis*, 24, 429-431.
- Bailey, J. S. (1991). Marketing behavior analysis requires different talk. *Journal of Applied Behavior Analysis*, 24, 445-448.
- Bailey, J. S. (2000). A futurist perspective for applied behavior analysis. In J. Austin & J. E. Carr (Eds.), *Handbook of applied behavior analysis* (pp. 473-488). Reno, NV: Context Press.
- Dollaghan, C. (2004, April 13). Evidence-based practice: Myths and realities. *The ASHA Leader*, 12, 4-5.
- Horner, R. H., Carr, E. G., Halle, J., McGee, G., Odom, S., & Wolery, M. (2005). The use of single-subject research to identify evidence-based practice in special education. *Exceptional Children*, 71, 165-179.
- Koenig, M., & Gerenser, J. (2006). SLP-ABA: Collaborating to support individuals with communication impairments. *Journal of Speech Pathology-Applied Behavior Analysis*, 1, 2-10.
- Schlinger, H. (2006, May). *Behavior analysis: All dressed up and nowhere to go*. Paper presented at the meeting of the Association for Behavior Analysis, Atlanta, GA.
- Skinner, B. F. (1948). *Walden two*. New York: The Macmillan Company.

Division 25:

Where Would We Be without It?

By Dr. Larry Alferink and Dr. Timothy Hackenberg

Since its inception in 1965, Division 25 has been the primary behavioral voice within the American Psychological Association (APA). There was a time prior to the existence of ABA when Division 25 represented the main professional affiliation for most behavior analysts. Division membership peaked in the late 1970s (at upwards of 1,600 members), but has fallen over the years as behavior analysts have joined ABA and other behaviorally-oriented organizations in increasing numbers. Indeed, given these trends in professional affiliations, one might ask (as some no doubt already have) whether it makes sense for behavior analysts to continue supporting Division 25. There is, after all, only so much time (and money) to go around. Is it worth the investment, or has the Division outlived its usefulness?

To answer this question, it may be helpful to imagine a future in which Division 25 did not exist. Imagine a future with no representation of behavior analysis within the world's largest and most influential professional organization of psychologists. Imagine APA developing a model high school and undergraduate curriculum with no behavior analysts in the room. Imagine a member of Congress proposing legislation to ban the use of timeout procedures, with no behavior analysts to speak up at the Congressional hearings. Imagine APA developing educational and therapeutic programs with no input from behavior analysts. Imagine the federal government deciding what constitutes evidence of effective procedures without anyone there to argue for the value of single-subject designs.

Fortunately, we have not had to imagine such bleak scenarios, for Division 25 members have always been there, stepping up when needed to promote the causes

of behavior analysis. But much more remains to be done and the future depends on the active involvement of behavior analysts working through Division 25 and other APA divisions.

Given both its size (more than 150,000 members) and location (Washington D.C.), APA is well positioned to advocate on behalf of psychology. Such advocacy efforts range from educating congressional staff and arranging for psychologists to testify on Capitol Hill to mobilizing support for or against legislation of importance to psychologists. And while many of these efforts fall outside the specific interests of behavior analysis, this need not be the case. With the departure of many academic psychologists from APA to the American Psychological Society (APS) over the past decade, APA has looked increasingly to science divisions such as Division 25 for direction on science-related policy and initiatives. And the Division's unique blend of science and application has enabled productive collaborations with other divisions, including Division 28 (Psychopharmacology), Division 33 (Mental Retardation), and others. In fact, in addition to membership in Division 25, many behavior analysts belong to a wide variety of APA divisions, providing opportunities to network with others to work on a variety of issues.

A major challenge faced by Division 25 is in recruitment and retention of members. Despite spirited recruitment efforts in recent years, membership has remained roughly constant since 2000. Membership is the prime currency within the APA governance structure, with membership numbers translating into seats on APA Council. At present Division 25 has but one Council Representative, but is well within reach of obtaining a second council seat. Bolstering membership in Division 25 would increase the behavioral voice within APA.

Another way to increase influence is to become active within APA. In the past, we have been blessed to have behavior analysts in a variety of important positions within APA. For example, Kurt Salzinger served as Director of the Science Directorate and Barbara Wasik served as Chair of the Board of Educational Affairs, the primary governance body for the Education Directorate. Others have served in a number of other positions on APA Committees, Task Forces and Coalitions where the opportunity to make a difference in APA exists. A current opportunity to have a significant impact in APA is the presidential nomination of Alan Kazdin. One of five nominees, Alan has strong support from a number of APA Divisions, including Division 25. As President of APA, Alan would have a tremendous opportunity to have an impact in APA, including establishing Presidential initiatives and appointing members to work to further those initiatives. He will need our help both to become President and to work to further those initiatives once elected.

This is a time of important opportunities for Division 25 and we need your help as a member and as an individual willing to help make a difference. As a science

division, we have always worked closely with the Science Directorate to help advance the science of behavior analysis, to promote animal research and appropriate animal care, to promote human research and address issues of IRBs that sometimes make that research more difficult, and to promote federal funding of behavior research. Given our unique blend of basic research and application, we have maintained regular contact with the Practice Directorate as well. Recently, we have also become more directly linked to the Education Directorate and this has provided opportunities for us to influence the education of future students in high schools, community colleges, and universities. We have been invited to the table as the model curriculum for high school psychology is updated to help rewrite that curriculum. Future opportunities will exist to work with the model undergraduate curriculum and a variety of other issues. We need people to help with these efforts.

After all, what will the future be like if students don't learn about behavior analysis? If federal agencies don't fund behavioral research? If no one advocates for single-subject designs? And if we don't work with others to make these things happen?

Recent Trends in the Eastern Psychological Association

By Dr. Philip N. Himeline

In the early days of behavior analysis, the annual convention of the Eastern Psychological Association (EPA) was the primary place for psychologists to meet in early spring. Skinner and Keller, along with their colleagues and students ("operant conditioners," as they were then called) were very much a part of this, and the genesis of our flagship publication, the *Journal of the Experimental Analysis of Behavior*, was accomplished at an EPA meeting. Over the years, EPA became less central to the field when various specializations, including behavior analysis, developed their own organizations, but it has retained its identity as sponsoring a meeting with a distinctively scientific orientation. EPA is a meeting that has become a particularly good place for graduate students and other young scholars to begin presenting their work. A firmly committed group of researchers identified with "animal learning" has maintained an especially strong part of the program, thus providing a platform for some of the basic research in behavior analysis. Meanwhile, the program categories explicitly concerning human behavior has evolved along the lines of traditional experimental psychology, providing no clear venue for behavior-analytic work with humans. We have recently fixed that, as noted below.

Last year, Stanley Weiss, of American University, was President of EPA, and his term coincided with the delivery of the first Fred Keller Memorial Lecture – one of three endowed events to be scheduled on a rotating basis. Stan's Presidential Address, and Murray Sidman's

Memorial Lecture, then, gave behavior analysis a salient place on the program. Stan's topic was "Environmental Control of Drug-Seeking: Reinforcement Contingencies and Incentive Motivation." Murray celebrated our old friend as "Fred S. Keller: A Generalized Conditioned Reinforcer." Complementing these was a special gathering of the students and other intellectual descendents of Fred Keller, and reminiscences provided by Fred's son, John, were a highlight of a Sunday morning symposium.

We hope to build upon the success of these events to facilitate renewed participation and visibility of behavior analysts in this organization, and thus within psychology as well. Applied Behavior Analysis has been added as a distinct program category, for which William Ahearn is serving as Program Chair. Given the close link between the basic concepts and practical applications of behavior analysis, this topic area can readily encompass both basic and applied work.

The 2007 EPA convention will be held March 23-25 in Philadelphia. Preliminary planning has yielded, in addition to my own Presidential Address, an Integrative

Symposium under the title, "Behavioral Economics in Three Flavors," and a Focus Session that will feature the work of behavior analysts on feeding disorders. An additional symposium will showcase techniques that build upon functional classes of verbal behavior. Allen Neuringer has agreed to give an invited address entitled "Science, Choice, and Free Will," thus presenting analyses of behavior in a domain that is often viewed as beyond the reach of a behavioral approach.

Proposals for additional presentations and posters are especially welcome; the submission deadline is 15 November, 2006. Coming in early spring, EPA can provide a good warm-up for getting one's ABA act together—given the slight overlap of audiences between EPA and ABA, thematic overlap between one's presentations at the two meetings should not be an issue. Presenters at EPA must be members of the organization, but the combined membership/registration fee is a reasonable expense as such things go. Consequently we anticipate that renewed behavior-analytic vigor will accompany the spring thaw on the Eastern seaboard, and we invite the citizens of ABA to join in.

An Outside Perspective of Contemporary Behavior Analysis

What Happened to Behaviorism?

By Dr. Roddy Roediger

This article originally appeared as a Presidential Column in the newsletter of the Association for Psychological Science: Roediger, R. (2004, March). What happened to behaviorism? *Observer*, 17 (3). Retrieved: 9/30/06 from <http://www.psychologicalscience.org/observer/getArticle.cfm?id=1540>

The year 2004 marks the centenary of B. F. Skinner's birth. I doubt that most members of the American Psychological Society (and even a smaller proportion of all psychologists) will pay much attention. After all, hasn't behaviorism passed from the scene? Don't we live in the age of the cognitive revolution, which still roars along and dominates most subfields within psychology? Doesn't the field of animal learning psychology, the spawning ground of behaviorism, belong to the 1950s, the same era as black and white television, three TV channels, and antennas on the house? Many readers in APS would probably answer yes to all three questions. If this is the right answer - and as you'll see, I don't necessarily think it is - then we can ask what happened.

Let's go back a hundred years when psychology was a new field. The first labs date from 1879 or thereabouts (let's not revisit this controversy), and in 1904, Skinner's birth year, the field was struggling to emerge as a science. However, the methods were varied, and the papers in journals were often long on observation and speculation. Careful experimentation was in short supply if not absent altogether. Some papers bordered on murky nonsense. In St. Louis, from where I write, there

was a famous World's Fair in 1904 and an assemblage of many of the greatest scholars of the day, including psychologists, gathered with the aim of providing a state-of-the-art set of lectures on their fields and, of course, to show the field off to its best advantage. Examination of their talks, reports of which were preserved for posterity, permits a capsule summary of the state of the art 100 years ago. I'll examine these contributions in an upcoming column.

In 1913, nine years after Skinner was born, John B. Watson published his famous paper "Psychology from the Standpoint of a Behaviorist" in *Psychological Review*. It was brief but powerful. Watson said that psychology should rid itself of introspective studies of mental events that were not directly observable - imagery, memory, consciousness, et al. - and study behavior. Watson endorsed the statement of Walter Pillsbury that "psychology is the science of behavior" and went on to say that "I believe we can write a psychology, define it as Pillsbury [did], and never go back on our definition: never use the terms consciousness, mental states, mind, content, introspectively verifiable, imagery and the like" (1913, p.116). Heady stuff! To study only behavior! Older psychologists probably judged Watson as somewhat off his rocker, but younger psychologists flocked to him, and his position continued to attract strong adherents over the years. If psychology was to be the science of behavior, then its goals would be (as Skinner said years later) the prediction and control of behavior. Behavior control! How exciting!

Behaviorism was intended to make psychology a natural science. During the years when behaviorist ideas were

being developed, they were in harmony with the philosophical position of logical positivism being championed in physics and elsewhere. Concepts should be defined by the operations used to measure them, to keep science tightly grounded to observable data and to remove flights of speculative fancy.

The decades that followed revealed behaviorism in ascendancy, and the animal learning laboratory was the hotbed of study, the white rat and the pigeon the organisms of choice (with an assumption that all organisms and all behaviors obey similar laws).

Edgar Chace Tolman championed the methodology of behaviorism and contributed important work. Some of his concepts (latent learning, cognitive maps) still appear today, even in the cognitive literature. Pavlov's books were translated in the 1920s, and Clark Hull began publishing his important series of *Psychological Review* papers in the late 20s and early 30s. Hull's most famous student, Kenneth Spence, also began his important work in the 1930s. Edwin Guthrie published his ideas on the role of contiguity in learning and the notion of one-trial learning. In 1938, B. F. Skinner published *The Behavior of Organisms* and launched his operant approach, which became the most famous behaviorist position and today, among many, seems to represent behaviorism. One of my favorite courses as an undergraduate was *The Psychology of Learning*, taught by my undergraduate mentor, David G. Elmes, using a book by James Deese and Stuart Hulse of John Hopkins University with that title.

Now, returning to behaviorism, let's consider the cartoon view of the history of psychology that many cognitive psychologists (which is to say, most of the field these days) seem to believe. In this caricature, the History of Psychology is something like the History of Western Civilization and goes as follows: Early psychologists like William James had great ideas and speculations, and psychologists studied, as best they could, cognitive phenomena like imagery. (James et al. correspond to the ancient Athenians - Socrates, Plato and Aristotle, perhaps). However, later, due to Watson, Skinner and their ilk, the Dark Ages descended - the religious orthodoxy of Behaviorism blanketed the land and smothered creative thought about cognitive phenomena and other topics. Finally, the Renaissance occurred beginning in the 1950s when the experimental work of George Miller, Donald Broadbent, Wendell Garner and others, as well as the writings of Noam Chomsky, led psychology from the dark ages and into the light of the cognitive revolution. The movement picked up steam in the 1960s and Ulric Neisser's great book, *Cognitive Psychology*, both named the new field and ably summarized its content in 1967. Behaviorism was still lively during the 1960s and early 1970s, so this story goes, but as viewed today this was only as a rear guard intellectual movement that was in its last gasp of popularity. By the 1990s the domination of cognitive

approaches across almost all areas of psychology (even animal learning!) was nearly complete. Look at the ads in the *APS Observer* as one measure - how often does one see cognitive or cognitive neuroscience in an ad relative to behaviorist or animal learning?

So, back to my original question, what happened to behaviorism? Here are some possible answers. I'll let people wiser than I grade them and decide if the answer should be some combination of these alternatives, or none of the above.

One possibility is that the decline of behaviorism represents an intellectual revolution, and young scientists (like youth in all times) like the heady fervor of a revolution. So, with behaviorism having been in ascendancy in psychology, especially (and mainly) American psychology, for so long, the time for a new intellectual revolution was ripe. The analyses of the early cognitive psychologists (Broadbent, Miller, Garner, et al.) were rigorous, provocative, and opened new intellectual vistas. Many problems that were somewhat outside the purview of behavioristic analyses - perceiving, attending, remembering, imagining, thinking - were approached in a radically new way. In this telling, nothing really "happened" to behaviorism; it was not really shown to be "wrong" in any real sense. Rather, the cognitive approach simply generated adherents at the expense of the established order, opened new techniques and methods of study, and created excitement that attracted graduate students away from animal laboratories. (Some types of cognitive analyses that seemed so great in the 1960s seem to be growing long in the tooth now. For example, metaphorical models and box and arrow diagrams, so popular at one time, seem quaint compared to cognitive neuroscience approaches to mapping brain networks underlying cognitive performance). In brief, cognitive analyses swept the day as being more exciting and interesting in opening new arenas of study.

A second possible reason is that behavioristic analyses were becoming too microscopic in the 1970s. As in most fields as they develop, researchers began studying more and more about less and less. Rather than focus on the central, critical problems, behavioristic researchers began looking at ever more refined (that is to say, picayune) problems, with experimental analyses increasing in complexity all out of proportion to the gains in knowledge that they enabled. (It is remarkable how many of the fundamentally great discoveries in most fields are often direct, simple, straightforward, so that after the fact others can wonder, "why didn't I think of that?"). The number of parameters and epicycles in the Hull-Spence approach ballooned. Examine Ferster and Skinner's ponderous *Schedules of Reinforcement* (1959) relative to the more direct writing of Skinner in *The Behavior of Organisms* (1938). In this version of history, there was something wrong with behaviorism in the

1970s and 1980s - it became too focused on specific problems and lost the big picture.

Another way in which behaviorism lost is that many psychologists (especially cognitive psychologists) do not focus on the learning history of the organism. As John Wixted wrote to me in commenting on this column, "researchers have forgotten to explain why we behave as we do. Much of what we do is a function of the prior consequences of our actions. And we learn from those consequences. Cognitive models are often a surrogate of that learning history (they refer to a magic computer in the head without considering what is responsible for its computational abilities ...). So, to the extent that cognitive psychology and cognitive neuroscience don't care about the learning history of their subjects (and, for the most part, they don't), behaviorism lost."

A third answer is that there is, thank you, nothing wrong with behaviorism today. The premise of the analysis at the beginning of this column is simply wrong. Behaviorism is alive and well and nothing "has happened" to it. The *Journal of the Experimental Analysis of Behavior* is still a lively outlet (and edited now by my colleague, Len Green), as is the *Journal of Applied Behavior Analysis*. Both journals are published by the Society for the Experimental Analysis of Behavior, which has been going strong since 1957. The primary meeting of behaviorists is the Association for Behavior Analysis, or ABA, which has over 4,200 members in 2003, and at the 2002 meeting there were 3,200 registrants. Counting affiliate organizations around the world, there are some 12,000 members (Jack Marr, personal communication). ABA has grown tremendously over the years and still attracts around 250 new members a year just in the U.S. The Society for the Quantitative Analysis of Behavior meets before and during ABA, with its own mathematically sophisticated membership. Much of the work reported at these meetings is based on research with humans (and not just pigeons and rats, as in the stereotype).

Why the enthusiasm? Because behavioristic analyses work! We know how to alleviate or eliminate phobias through extinction-based therapies; we know the power of a token economy in regulating behavior on a mental ward; we can reduce problematic behaviors and increase the probability of desired behaviors by judiciously providing and withholding reinforcements. Even for problems that cognitively oriented psychologists study, behavioristic therapies are the treatments of choice. For an autistic child, Lovaas's behavioristic techniques provide the greatest (indeed, so far the only) hope. (Theory of mind debates about autism are fine, but not if you want therapies and treatment - go to behaviorism). Similarly, for stuttering and aphasia, as interesting as their analysis by psycholinguists may be, the treatments come largely from the behaviorists' labs. In the field of neurobiology of learning, the central paradigm is classical conditioning and the main theoretical model is the Rescorla-Wagner model. And

behavioristic analyses exist in self-management programs, in industry (Organizational Behavior Management), in sports, in parenting guides, and of course in animal training programs for pets and for zoos. Anywhere that prediction and control of overt behavior is critical, one finds behavioristic analyses at work. In sum, this answer maintains that, although most psychologists don't know it, behaviorism still is alive and thriving, albeit perhaps not as much in the mainstream of the field as it once was.

Another framing to the previous answer (owing to Endel Tulving) is that there are several valid sciences of psychology. He wrote to me in an e-mail comment on an earlier draft of this column that: "It is quite clear in 2004 that the term 'psychology' now designates at least two rather different sciences, one of behavior and the other of the mind. They both deal with living creatures, like a number of other behavioral sciences, but their overlap is slim, probably no greater than psychology or sociology used to be when the world was young. No one will ever put the two psychologies together again, because their subject matter is different, interests are different, and their understanding of the kind of science they deal with is different. Most telling is the fact that the two species have moved to occupy different territories, they do not talk to each other (any more), and the members do not interbreed. This is exactly as it should be."

Perhaps the most radical answer to the question I posed is that behaviorism is less discussed and debated today because it actually won the intellectual battle. In a very real sense, all psychologists today (at least those doing empirical research) are behaviorists. Even the most cognitively oriented experimentalists study behavior of some sort. They might study effects of variables of pushing buttons on computers, or filling out checklists, or making confidence ratings, or patterns of bloodflow, or recalling words by writing them on sheets of paper, but they almost always study objectively verifiable behavior. (And even subjective experiences, such as confidence ratings, can be replicated across people and across conditions). This step of studying objectively verifiable behavior represents a huge change from the work of many psychologists in 1904. Today the fields of cognitive psychology and cognitive neuroscience are highly behavioral (if one includes neural measures of behavior). True, there is nothing necessarily inherently interesting about pushing buttons on computers, but on the other hand, the basic laws of behavior in the animal lab were worked out on rats pushing levers and navigating runways, or pigeons pecking keys - not exactly riveting behaviors in their own right. In all these cases, the scientist's hope is to discover fundamentally interesting principles from simple, elegant experimental analyses. The cognitive researcher goes further and seeks converging evidence from behavioral observations on internal workings of the mind/brain systems. But as experimentalists, both cognitive and behavioral researchers study behavior. Behaviorism won.

I could go on with reasons or speculations, I suppose, but let's leave it at five. And let me explain why I left out a popular explanation that I have read in history textbooks. Didn't Noam Chomsky's review of Skinner's *Verbal Behavior* devastate behavioristic analysis and show that it was bankrupt as pertains to language? I have read the debate a couple of times and, although interesting, it always seemed to me that the protagonists were arguing at cross purposes, from fundamentally different paradigms. Chomsky was and is a rationalist; he had no uses for experimental analyses or data of any sort that pertained to language, and even experimental psycholinguistics was and is of little interest to him. My guess is that Chomsky's review deserves to be credited as a minor cause of the cognitive revolution. To most psychologists, empiricists at heart, it was the great new experiments that researchers were conducting on cognitive topics that created the cognitive revolution and not Chomsky's review of Skinner's book (rather effectively refuted in a commentary by Kenneth MacCorquodale, by the way).

I am a cognitive psychologist, true, but I have sympathy for several answers. Behaviorism is alive and most of us are behaviorists. That may be truer of me than many. My theorizing is often rather functional in nature. Some reviewers complain that I don't have "real theories" or that I am redescribing the data; some have argued that my ideas are too descriptive to be testable; yet others, undercutting the previous point, have busily tested them and found them empirically wrong (hmm ... both sets of critics can't be right, methinks). It is true that I feel comfortable sticking closer to the data and engaging in fewer flights of theoretical fancy than many of my cognitive colleagues, having been partly raised in the functional intellectual tradition of John McGeoch, Arthur Melton, and Robert Crowder.

A few years back, Robert Solso edited a volume entitled *Mind and Brain Sciences in the 21st Century* (MIT Press) for which I wrote a chapter in which I made fearless predictions on the future of cognitive psychology. My eleventh and last prediction was that a strong form of behaviorism would make a comeback in mainstream psychology. That does mean I believe the movement went "away" in some sense, even if I think that the behaviorist revolution was largely successful and the central tenets have been incorporated into psychology. After all, even the most ardent behaviorist would agree that the great debates that swirled among and between behaviorists in the 1950s do not arise in the mainstream literature today. As John Wixted pointed out in the quote above, cognitive psychologists tend to ignore learning history in their theories. If we at least begin incorporating learning history back into our considerations, then behaviorism will be making a comeback. Still, at the same time, it is clear that many aspects of behaviorism never went anywhere at all.

Rather, many psychologists simply ignored the good work researchers in the behaviorist tradition have been doing.

Let me suggest a way you can celebrate Skinner's centennial and learn the elegance and power of behavioristic analyses. Treat yourself and read Skinner's 50-year old book, *Science and Human Behavior*, which is still in print. The book was meant as an introduction to behaviorism and is powerfully and elegantly written. The *Journal of the Experimental Analysis of Behavior* has published five retrospective articles in the November, 2003 issue entitled "The Golden Anniversary of Skinner's *Science and Human Behavior*." Read the book and celebrate the power of behavioristic analyses yourself, even if (or especially if) you are one of those cognitive psychologists who believe that behaviorism is irrelevant, passé and/or dead. It isn't.

Author's Note: Len Green, Jack Marr, Jim Neely, Endel Tulving, Ben Williams, and John Wixted provided comments that greatly aided my conceptualization of these issues. I appreciate permission to quote from messages I received from Drs. Tulving and Wixted.

4th International ABA Conference Sydney, Australia August 12-14, 2007

Hilton Sydney
488 George Street, Sydney

Local Attractions: Darling Harbor
◆ Sydney Aquarium ◆ Bridge Climb
◆ Sydney Harbor Tours

On line Registration Now Open

For more information, visit
www.abainternational.org/sydney

ABA Now and in Days to Come: News from the ABA Executive Council

By Dr. Thomas Critchfield, ABA President

Every three years, the ABA Executive Council undertakes a strategic planning session with the goal of defining the Association's priorities for the coming years. To guide the session, the Council examines mountains of data on ABA's operations (including its Board and Committees), on how comparable organizations operate, on the needs and accomplishments of ABA members, and on the behavior analysis field. The Council seeks insight about two questions: (1) What can ABA do to serve its members and the field? (2) How can ABA remain financially and organizationally stable while executing its mission as the world's largest behavior analysis organization. What follows are some highlights from the October, 2006 session.

ABA Now

Any view of the future begins with an assessment of the status quo, and the data describing ABA are mostly good. During the coming year our membership will surpass 5,000, which represents growth of 160% since 1994 – more than 10 times the mean of comparable organizations. The response to the 2007 convention call for papers set an ABA record for number of submissions, and the event itself likely will attract a record number of registrants. During the early 1990s, ABA expenditures far exceeded income, making survival from year to year a primary concern. Now, thanks to growth in the field and remarkable management by Executive Director Maria Malott, ABA is solvent and therefore able to think strategically.

When I served as a Student Representative to the Council in the late 1980s, ABA was smaller and planning was handled somewhat casually. Contemporary Councils represent a larger and more diverse membership whose needs are more difficult to anticipate – hence my emphasis on data in the preceding paragraph. A great deal of effort is expended each year to make sure that Council members have at their disposal as much information as possible about the Association and factors that affect it. You may have noticed, for instance, that in recent years ABA has surveyed its members on a regular basis. Your responses to these surveys are, quite literally, the Council's window to your world. A major behind-the-scenes development occurred in 2006 when ABA began working with a survey research firm to help assure that surveys are well constructed, tap into a representative portion of the membership, and are properly interpreted.

The most recent survey asked about member satisfaction with 14 current ABA services. The survey was sent to all members with a valid electronic mail address on file, and elicited responses from about 12% of the members in

each of several membership categories (e.g., consultant/staff trainer, professor/academic, psychologist/therapist, student, etc.). Although there is no way to assure a fully representative sample within each member category (members may respond or not as they please), survey professionals regard this as an adequate sample. Overall, you told us that ABA is doing a pretty good job. For every service, at least 87% of members indicated that they were very, or somewhat, satisfied; Figure 1 shows illustrative results. Remarkably, a detailed analysis revealed consistently positive appraisals across all segments of the membership (not shown in the figure).

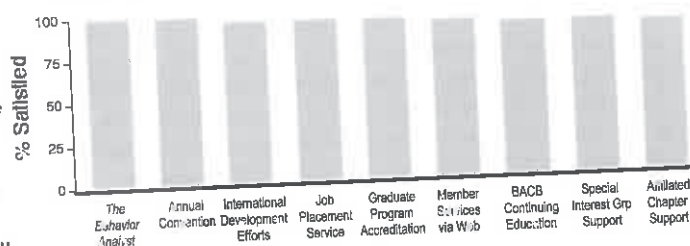


Figure 1. Percent of survey respondents who were very or somewhat satisfied with selected ABA initiatives.

Another important piece of the status quo is that ABA has been very careful with money. Among several dozen comparable professional organizations, ABA ranks near the top in terms of administrative efficiency. To illustrate, consider that comparable organizations employ one full-time staff member for about every 165 convention registrants. In 2006, ABA's ratio was 1:333, for roughly double the efficiency. Perhaps not coincidentally, ABA's membership dues and convention registration fees are among the lowest for associations of comparable size and scope.

ABA's Future

ABA's current good fortune is comforting but does not assure that we are addressing the issues that dictate future success. Elsewhere in this issue, I describe what I believe to be ABA's overarching long-term hurdle, integrating an increasingly diverse membership. In keeping with that theme of integration, here I will describe three general areas of challenge and opportunity that were addressed in some detail by the Council and that cut across the traditional missions of the field: research, education, and practice.

The Annual Convention

To the typical ABA member, the annual convention is a five-day event in May, but those five days are the culmination of a year-round effort by many people. For

example, one overwhelming task each year is processing around 1,500 volunteer submissions. Not long ago, the average time to process and acknowledge a submission was about one month. Currently, due to process improvements in the ABA office, including implementation of a Web-based submission system, that delay is down to one day. Screening, organizing, and scheduling of submissions has been managed by Program Co-Coordinator (currently Bill Palya and Ramona Houmanfar) and an Area Coordinator in each of the program's topical divisions. To lighten this load and to provide for continuity when terms end, each program area will now be overseen by Co-Coordinator who serve staggered terms. This change should also allow Area Coordinators to give additional attention to the quality of volunteer submissions.

Among the most popular convention events in recent years have been invited addresses and tutorials. The Program Board will continue to recruit informative invited speakers and to showcase them, when possible, in larger meeting rooms. In the future, watch for the debut of the B.F. Skinner Lecturer series. Area Coordinators will be given new resources to use in recruiting invited speakers who are not ABA members and might not otherwise attend our convention. This series is intended to broaden the range of topics and perspectives addressed in the convention program and to bolster ABA's relationships with other disciplines.

To the typical ABA member, the annual convention is a forum for exchange of the latest ideas, but the convention also generates most of the income that allows ABA to serve the field during the rest of the year. In this sense, convention growth has helped ABA on many levels, but a major challenge looms, as ABA is fast outgrowing even the largest convention hotels. One solution is to move the meeting to a convention center, but the practical and financial ramifications of this are still under study. Another solution is to cap the size of the annual meeting. This, however, would place limits on opportunities to present, something to which members have voiced loud objections in the past. Consequently, the Council is wrestling with how to keep the annual convention both inclusive and affordable. This is a conversation in progress, but one that will need to yield concrete action by the 2009 convention (2010 at the latest).

Growth in Organized Behavior Analysis

Behavior analysis continues to proliferate, not only within ABA, but also within more than 60 affiliated chapters across the world. One telling measure is that ABA's international membership has grown faster than membership in the United States. Moreover, membership in affiliated chapters outside of the United States now exceeds that of domestic chapters. It seems obvious that ABA should continue its popular and successful international development efforts.

One ongoing initiative is to sponsor a biennial international conference. The 2007 meeting will take place next August in Sydney, Australia (for information, see <http://www.abainternational.org/sydney/index.aspx>) and possible sites for the 2009 meeting will be evaluated soon. Also continuing are ABA-coordinated international delegations (http://www.abainternational.org/events_intl_del.asp) that help to establish behavior analysis infrastructure in countries where the field is not currently represented. Past delegations to Russia, China, and several countries in the Middle East all have borne promising fruit (a future newsletter article will provide specifics) and new opportunities are under consideration.

Outreach

Many ABA members have expressed frustration that policy makers and members of the general public know too little about, or do not sufficiently value, the successes of behavioral science and practice. During the coming few years, a variety of ABA projects will address this concern.

Research advocacy. With regard to research and public policy, ABA will sustain two ongoing efforts that allow ABA to maximize its influence by working collaboratively with other groups that share its interests. ABA will continue membership in the Federation of Behavioral, Cognitive, and Psychological Sciences, a coalition of scientific societies devoted to legislative advocacy on behalf of science policy and research funding. ABA's voice in these matters is important to the more than 300 ABA members who collectively report receiving over \$30 million in extramural research funding per year, and to the many other members whose research is potentially fundable.

Because much basic behavior analysis research is conducted with nonhuman subjects, ABA also will continue its affiliation with the Association for Advancement and Accreditation of Laboratory Animal Care (AAALAC), which supports animal research by promoting humane laboratory practices. Being a member organization earns ABA a representative on AAALAC's board of directors and thereby guarantees ABA will have input as animal care and use policies evolve.

Dissemination to the public. During 2007, ABA will undertake a pilot project to increase awareness of the benefits of behavior analysis to both science and practice. A task force is being assembled to oversee this project and to evaluate its effectiveness. With the help of a public relations firm, ABA will increase positive coverage of behavior analysis in the popular media. Among the preliminary goals of this project are to generate media attention to the 2007 convention in San Diego, and to enhance the utility of ABA's Web page to the press and members of the public who seek information about the field. Another interest is in

providing a mechanism through which affiliate groups who mount their own public relations efforts may share information about techniques and successes.

Professional dissemination. ABA also will launch three major projects aimed at disseminating the best of behavior analysis research and practice to a professional audience. First, ABA's two journals, *The Behavior Analyst* and *The Analysis of Verbal Behavior* will be available to the world in electronic form in 2008. Both journals have been accepted for inclusion in PubMed Central, a Web-based archive dissemination of scholarly publications that is sponsored by the United States government. PubMed operates in perpetuity (to the extent that the government can guarantee this) at no cost to member journals except for the small expense of putting journal content into electronic form. PubMed is already home to some of the world's most prestigious journals, including *Journal of the Experimental Analysis of Behavior* and *Journal of Applied Behavior Analysis*. The most current issues of ABA journals will be available to members/subscribers only; back issues will be freely available to everyone. You can examine the contents and search capabilities of PubMed at <http://www.pubmedcentral.nih.gov/>.

Second, in 2008 ABA will launch *Applying Behavior Analysis*, a peer-reviewed journal for practitioners and the people who train and supervise them. The periodical's mission is to promote empirically validated best practices in an accessible format that describes not only what works, but also the challenges of implementation in practical settings. The Executive Council is thrilled to announce that Dorothea Lerman of the University of Houston-Clear Lake will serve as the Founding Editor of *Applying Behavior Analysis*, and will work in concert with Associate Editors Greg Hanley of the University of Kansas and Stephanie Peterson of Idaho State University. Watch for calls for papers and other information about this new publication during 2007.

Third, as part of a relatively new series of specialty meetings, ABA will host a 2008 conference on evidence-based education that will bring together behavior analysts, policy makers, and representatives of other fields and organizations that are grappling with the challenges of evidence-based practice. Education is an area of vast opportunity for our field, and recent years have seen increasing public demand for accountable, effective practices, a cultural shift that should favor behavior analytic approaches. Consequently, the conference has two goals: to highlight the current and potential contributions of behavior analysis to evidence-based education, and to inform interested behavior analysts about current developments in the pursuit of evidence-based practice generally.

Speaking of specialty conferences, time still remains to register for ABA's conference on Progress and Challenges in the Behavioral Treatment of Autism, which

will be held February 2-4, 2007 in Boston. For more information, go to <http://www.abainternational.org/autconf/index.asp>.

Concluding Comments

The preceding is not a complete accounting of all that will happen within ABA during the coming few years. Although the Council attempts to provide focus and leadership, much of the Association's important business takes place through the boards and committees that are part of ABA's organizational structure and through the affiliate chapters and special interest groups that members organize and maintain to address specialized interests. You can learn more about these groups at <http://www.abainternational.org/aba/structure.asp>. News about their accomplishments appears regularly in the ABA Newsletter.

Note, too, that the initiatives described here are predicated on current understanding of the forces that affect the Association and our field. If circumstances change, ABA priorities will change as well. For example, recently ABA has enjoyed an increase in resources (e.g., through membership growth) during a time of relatively stable expenses, but this state of affairs cannot continue indefinitely. Recall that the annual convention is ABA's main source of revenue. Under the current convention model, expenses are kept very low, meaning that a portion of registration revenue can be applied to year-round initiatives. Moving the annual meeting to a convention center, however, might substantially increase costs. Another practical hurdle is that, as a result of growth in membership and operations, the ABA office is starting to strain at its seams in terms of both space and staffing. Expanding the office to accommodate ABA's growing operations also could increase expenses. These are only two ways in which meeting the growing needs of ABA members will require additional resources.

Presumably, no one is opposed to such noble goals as keeping convention presentation opportunities as widely available as possible; spreading positive messages about behavior analysis in the media and across scholarly communities; maintaining enough administrative infrastructure to serve members well; and so forth. A question that must be faced, however, is how ABA will support – in practical terms – diverse initiatives like those I have described. In coming years, the Council and the ABA office will keep a close eye on financial statements. Because the available evidence suggests that ABA already provides members with more for their money than most comparable organizations, increased efficiency can only take us so far. Instead, keeping abreast of member needs may require diversifying ABA's revenue sources. This is something else that will receive a lot of the Council's attention in coming years.

Without a doubt, the next few years in ABA will be interesting ones. Watch your ABA Newsletter for more information as the saga unfolds.

ABA Financial Update

By Dr. Maria E. Malott, Executive Directory/Secretary Treasurer

ABA International's financial growth has been strong for the past ten years, allowing the Association to develop its infrastructure and services, meet the needs of the membership, and support accelerated growth. In 2005, ABA experienced its most financially successful year in its history. Revenue totaled \$1,497,920, and expenses \$1,108,094, for a profit margin of 26%. What follows is an account of 2005 income and expenses, as well as financial forecast for future years.

Income

Figure 1 shows income sources in 2005. The annual convention is by far the most significant source of income, followed by membership, international efforts, and publications.

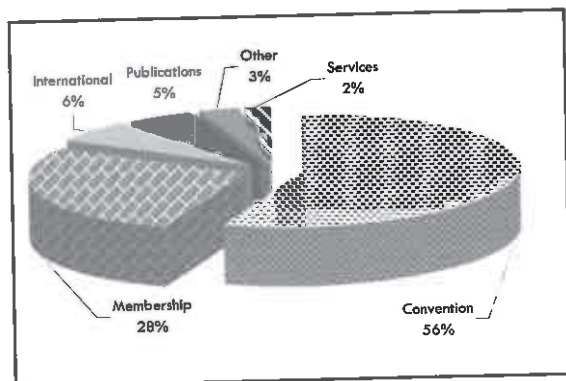


Figure 1: 2005 ABA income by category.

Fifty-six percent of the Association's revenue comes from the annual convention, including on-site continuing education, bookstore sales, and other convention-specific services. Trends for the annual convention continue to be positive. Registration has grown an average of over 5% annually since 1979. Over the past five years, however, the rate of growth has increased to an average of about 9% annually. At the 2006 Atlanta convention, ABA's registration totaled 3,960 members. Figure 2 shows registration trends since 1977.

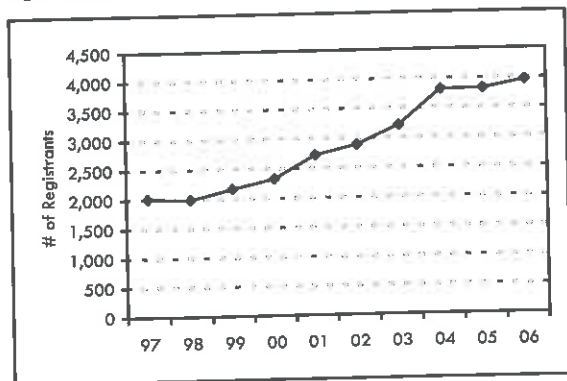


Figure 2: ABA convention registration by year, 1977-2006.

Annual submissions can be a good predictor of convention attendance. After four years of relative stability, submissions in 2007 increased 12% from the previous year, as shown in Figure 3. Based on this growth, it is possible that we will experience record registration in San Diego next year.

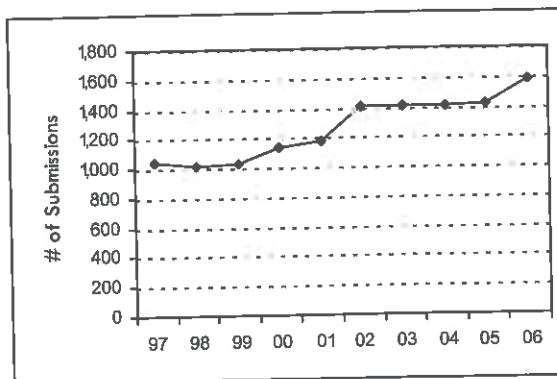


Figure 3: ABA convention submissions by year, 1997-2006.

Furthermore, attendees have consistently indicated a high level of satisfaction with the annual convention. Follow-up surveys are sent each year to all convention attendees with valid e-mails, with responses consistently received by about 22% of those surveyed. Figure 4 shows that, on average, 94% of respondents have rated the convention overall as excellent to very good for the past eight years.

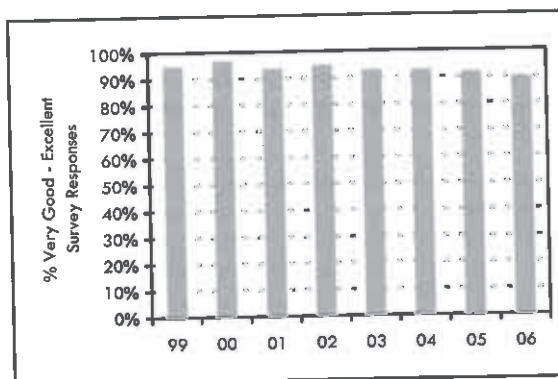


Figure 4: Percent of survey respondents who rate the ABA annual convention overall as Excellent-Very Good, 1999-2006.

Membership is the Association's second greatest source of income, accounting for 28% of annual revenue. ABA's membership growth has averaged 11% annually since 1978. Over the past ten years, however, the rate of growth has averaged about 6% annually. In 2006, ABA reached a historical record of 4,953 members. Figure 5 shows membership trends for the past ten years.

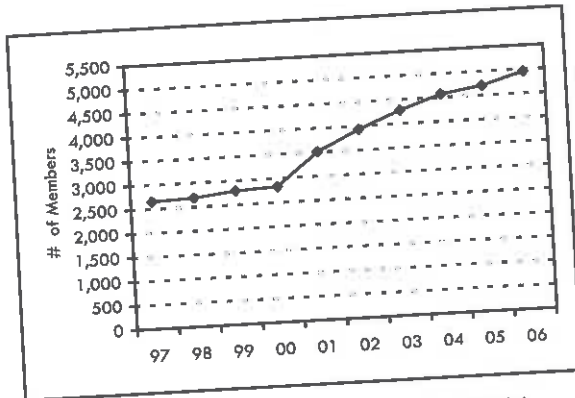


Figure 5: ABA membership by year, 1997-2006.

Although growth trends have been high, ABA membership is directly dependent on the annual convention, as many people become members to take advantage of registration discounts. The ratio of membership to convention attendance is 1.15 members per attendee, while comparable organizations have a ratio of 4.07 members to convention registrant. This ratio of member to registrant is a unique characteristic of our organization and makes ABA's financial stability highly dependent on the success of the annual convention. And although our financial success has been remarkable in recent years, failure in the annual convention could significantly threaten ABA's existence.

Because of this financial vulnerability, ABA has begun over the past several years to diversify its income sources. Our most successful effort to this end has been the establishment of international conferences, which now represent ABA's third largest source of income and generate 6% of annual revenue in the years held. The 2005 conference in Beijing, for example, had a profit margin of 24%, taking into account the labor costs of all of us in the administrative office. Early indicators for the 4th international conference in Sydney, Australia are positive, as well, and we look forward to seeing everyone in Sydney on August 12 – 14, 2007.

ABA is also experimenting with specialized conferences to meet to the ever increasing needs of its members. The Progress and Challenges in the Behavioral Treatment of Autism conference will be held February 2 – 4, 2007 at the Boston Sheraton in Massachusetts. In addition, ABA will organize an educational conference in 2008 tentatively titled Evidence-Based Practices, Scientifically-Based Instruction and Educational Effectiveness. The intent is that these types of smaller, more selectively focused events will be of service to members and at the same time effectively diversify ABA's income sources, making the organization ever more valuable to members and less vulnerable to financial instability.

Publications are the fourth source of income for ABA, accounting for 5% of revenue. The good news is that, as mentioned in President Tom Critchfield's cover article in this issue, ABA will launch a new journal in 2008 specially targeted for practitioners. In addition, while

subscriptions to many behavioral journals have decreased over the past several years, institutional subscriptions to *The Behavior Analyst* (TBA) have remained stable; of course individual distribution has increased with membership growth but this does not generate additional income as the journal is included with membership. On the other hand, *The Analysis of Verbal Behavior* (TAVB) has experienced accelerated growth: subscriptions have increased in 405% from 2000 to 2006. Figure 6 shows the yearly trends of TAVB subscriptions.

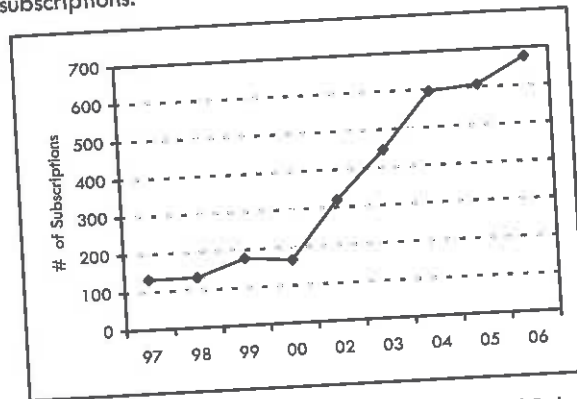


Figure 6: Subscriptions to *The Analysis of Verbal Behavior* by year, 1997-2006.

Expenses

Figure 7 shows the distribution of expenses for 2005. ABA's major expense is human resources, followed by the annual convention, administration, publications, property, international conferences, and other expenses.

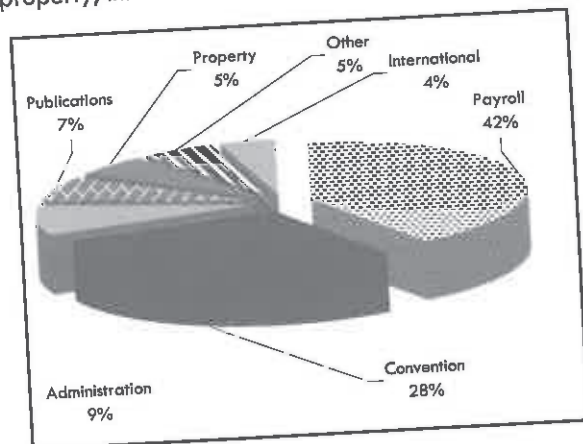


Figure 7: 2005 ABA expenses by category.

The ABA office has increased its human resources very conservatively over the years. As needs increase, part-time employees or students are hired until it is absolutely obvious that a full-time position is necessary and sustainable. This is one reason that ABA has been so successful in keeping human resource costs low. In 2005, ABA's labor costs were 28% of revenue and for the past ten years have averaged just under 29%, well below industry standards. A review of other behavioral

organizations showed labor costs ranging from 41 – 49% of revenue, although it should be noted that this was not an exhaustive comparison. Additional ABA staff was hired at the end of 2005 and in 2006 and ABA's labor to revenue ratio will increase. Currently, the Association has 15 employees—the equivalent of 12 full-time positions. In January 2006, ABA's Executive Director/Secretary Treasurer role became a full-time position. Significant staff growth has taken place in the areas of technology and membership services.

Previously, ABA's technology needs were fulfilled by students; today we have three computer-related full-time positions: a systems analyst, a programmer, and a database administrator. This growth was born of the complexity of data-based systems, Web interfaces, and the automation of internal processes. As an organization with members from all over the United States and 40 other countries and given the increasing complexity of ABA systems, ABA has had no alternative but to develop a strong technology infrastructure to better serve its members. Substantial improvements have taken place on the technology front. In 1993 ABA had two computers that were insufficient for our needs and incompatible with one another (a Mac and an IBM). Today ABA's technology is maintained on six servers, with internal and external networks, wireless access, and 14 computer stations. The annual convention, which in the past ran on one or two non-networked computers, now uses a dedicated server and 24 on-site computer stations. ABA's Web site (2006-to-date) has been visited by 165,441 individual Internet Protocol (IP) addresses, the closest measure we have to discrete visitors, and has received over 2,110,500 hits. In 1993, most ABA processes were paper based; in 2006, 76% of membership payments, 71% of convention registration, and nearly 100% of program submissions were made electronically.

What was one full-time position in membership services/finances in 1993 has grown into four positions: membership services, vendor relations, receivables, and finance. These positions attend to the multiple and complex transactions with and requests from our members. For instance, every day on the average, the ABA staff receives nearly 1,000 e-mails (1,400 including spam), receives and responds to about 100 telephone calls, and completes an average of 60 financial transactions.

An area that will have to grow as we diversify is convention/event assistance. The ABA office has only had one convention coordinator role for many years, despite the increasing complexity of the annual convention and the diversification of events. International conferences, for instance, have been managed thus far with current, and increasingly stretched, resources. Our on-site staffing for the annual conventions has also increased to meet growth and needs. Seasonal convention staff (mainly students, in addition to the regular ABA staff) has grown from six in 1996 to 24 in 2006 while volunteers increased from eight to 80 during the same period.

Staff hours for the past 12 months (October 2005 – September 2006) totaled over 27,000, of which 32% were spent in annual convention planning and execution, 28% in Web and technology development and support (mainly for member services), 14% for administration, 9% for finances, 8% in various services (such as job placement and continuing education) and 6% for Council-related follow up. Only 3% of staff hours were given to international development, including the execution of the Beijing international conference and delegations activities. The percentage of labor allocated to international efforts is even less in the years when ABA does not hold an international conference. Figure 8 shows the allocation of staff hours for ABA services.

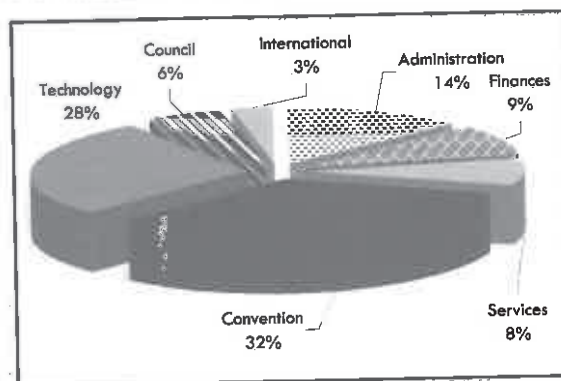


Figure 8: Staff hour allocation, October 2005 – September 2006.

Future Financial Developments

From 1992 to 1994 ABA's finances were in the red and projections for financial stability were discouraging. Since then, ABA has made significant gains in the development of its financial system. As of December 31st, 2005 ABA had assets totaling \$1,625,995, including \$359,470 in fixed assets from the building bought in 2002. ABA has prospered for the past 12 years by managing projections conservatively and successfully. Since 1995 ABA's income has averaged 10% higher than projected and expenses, 3% lower than projected. And we expect another successful year in 2006. The rate of financial growth is projected to slow to about a break-even point over the next three years as new programs approved by the Executive Council in response to members needs are implemented. These efforts, which will increase expenses, include, among other initiatives, investing in public relations efforts, developing a practitioner journal, planning additional events to serve the membership, investing in the annual convention program, and moving the annual convention to larger venues. However, ABA's philosophy will continue to emphasize fiscal responsibility and managed growth, and we look forward to meeting future challenges and continuing to serve the ABA membership for years to come.

News from the Field

ABA Student Committee News and Updates: Fall 2006

By Marianne Jackson

Your Student Representatives

- Current: Marianne Jackson, University of Nevada, Reno
- Elect: Corina Jiménez-Gómez, Utah State University
- Past: Christy Alligood, West Virginia University

Mission of the ABA Student Committee

The ABA Student Committee is an organization that represents the interests of the student members of ABA and draws its participants from the student membership. The mission of this committee is to ensure that the student membership is provided opportunities for professional growth, collaboration, and contribution within ABA and the professional community as a whole. Additionally, the ABA Student Committee is responsible for collecting and disseminating information of interest to the student membership.

Upcoming Convention: ABA 2007 in San Diego

The Student Committee is currently preparing the Professional Development Series for the upcoming convention. As usual, we have had a great response from the ABA membership and have been able to put together some outstanding events. The planned events will include:

- A panel discussion on effective oral presentations and posters
- A conversation hour with prominent women in behavior analysis
- A panel discussion on finding and obtaining grant funding
- A panel discussion on perspectives of the future of behavior analysis
- A panel discussion on finding and surviving postdoctoral research positions
- A panel discussion on applied internship opportunities
- A panel discussion on non-traditional research areas and their role in behavior analysis
- A panel discussion on applying to graduate school with representatives from various schools
- A panel discussion on advice from the recently hired
- A panel discussion on research in non-university settings
- A symposium on aspects of being a Board Certified Behavior Analyst
- A poster on the activities of the ABA Student Committee for the ABA Expo
- The Student Committee business meeting

We will also continue to present our introductory series of talks on topics suggested by the student members. This year these will include the topics such as the Quantitative Analysis of Behavior, Pivotal Response Treatment, Using Behavior Analysis to Progress through Graduate School, and Behavior Analysis around the World.

This year, at the request of students, an e-mail will be sent to all students outlining the Student Committee-sponsored events and their placement in the convention schedule.

Students are also encouraged to attend the Student Committee business meeting, where we will discuss topics for Professional Development Series events at the 2008 ABA convention.

Contests and Awards

As a service to the student membership, a number of organizations within ABA sponsor annual contests and awards. These awards are offered by:

- Applied Animal Behavior SIG
- Autism SIG
- Behaviorists Interested in Gambling (BIG SIG)
- Health, Sport, and Fitness SIG
- Human Operant SIG
- Verbal Behavior SIG

In addition, SABA offers two annual fellowships: The Sidney W. and Janet R. Bijou Fellowship and Experimental Analysis of Behavior Fellowship. Information on individual awards, requirements, and award amounts can be found on the ABA Web site (www.abainternational.org/aba/Studentinfo/awards.asp). We encourage all student members to participate in these contests as they provide students with needed financial assistance and, most importantly, are excellent résumé items.

Future Goals

The ABA Student Committee continues its commitment to the development of a convention agenda that promotes the success and professionalism of the student membership. In addition to our Professional Development Series, we are also developing the following initiatives in response to comments or requests from our student members:

- Increasing accessibility to work opportunities in behavior analysis around the world.
- The find-a-roommate program (to assist students in locating someone with whom to share the cost of attending ABA).

Further information on these initiatives will be posted on the ABA Web site as they are developed.

Student Involvement

It is the committee's aim to provide informative, accurate, and important information to the student members attending the annual convention. To this end, we are in the process of recruiting new program representatives for 2006-2007. Individuals interested in these positions should respond to the e-mail notification and/or contact the student representatives directly (e-mail address below).

Additionally, the Student Committee continues with its commitment to encourage student participation in the elections process. A large portion of the ABA membership consists of students, yet the student membership consistently abstains from participating in the ABA elections each spring. The student representative is your voice and vote on matters discussed at the Executive Council meetings and, as such, is an important way to have your voice heard. We would like to remind all student members that the nominations for the next student representative begin in October.

The ABA Student Committee always has volunteer opportunities available for ABA's student members. As such, we invite anyone who wishes to become involved in the Committee's activities to contact your student representative (Marianne Jackson at mariannejackson78@hotmail.com) with your interests and a brief statement of the type of involvement you desire. Further information on the structure and activities of the student committee can be found on the ABA Web site at the following address: www.abainternational.org/aba/student_committee.asp.

Behavior Analysis Society of Illinois

By Selma Martinez

The Behavior Analysis Society of Illinois (BASIL) has seen a significant increase over the last two years at its annual conference. We believe that this increase has been due to the increase in awareness of the efficacy of ABA as well as the Chicago School of Professional Psychology (CSOPP) being recognized by the Behavior Analysis Certification Board as an approved program for board certification.

Our last annual conference included close to 200 participants, over 20 presentations, and six workshops over three days. Our featured speakers included Gina Green, Karen Pryor, and Jack Michael.

Presently, we are commencing plans to restructure our organization in order to better reflect a standard business model. For example, revising of our bylaws to better reflect our mission, defining specific criteria for full membership, and increasing board meeting frequency. Additionally, we plan on increasing the organization's exposure to local agencies and developing a database for consumers to better identify the qualifications and

experience of each board certified provider in the state of Illinois, including years of experience, specialization, supervisor (for BCABAs), employer, ages served, etc. We feel that this information will provide consumers the information necessary for them to make an informed decision when hiring a behavior analyst.

At the conference business meeting, the following elected officers were announced:

- President: Selma Martinez, M.S.Ed., BCBA
- Treasurer: David A. Pyles, Ph.D., BCBA
- Secretary: Ro Ecklund, BCBA

We are looking forward to our April 2007 conference!

Heartland ABA

By Dr. Steve Taylor

Chapter Information

The Heartland Association for Behavior Analysis (HLABA) was approved as an ABA local chapter in May 2006. HLABA's purpose is to promote the analytic science of behavior and its associated technologies within the Heartland (Nebraska, Iowa, and surrounding area). Information about HLABA is available on the ABA Chapters Web site (www.abainternational.org/chapters.asp). Our officers are:

- President: Steve Taylor
- Vice-President: Bobby Buckner
- Secretary-Treasurer: Anney Fahrenholz
- Representative-at-Large: Judy Matthews
- Immediate Past President (appointed): Joe Evans

Ludwig Receives Award for Excellence in Teaching

Each year, the University of North Carolina Board of Governors presents its Award for Excellence in Teaching, created in 1994 to encourage, identify, recognize, reward and support excellent teaching within the university. The award is presented annually to one faculty member from each UNC institution.

Faculty members at Appalachian State University who excel in teaching, especially at the undergraduate level, were honored, including Timothy Ludwig. "There comes a point during most every class period that the energy you provide to your students is delivered back to you," he said. "My career at Appalachian is built on this interaction. In short, my teaching philosophy is to let my students invigorate me, motivate me to innovate, and challenge me to challenge them."

Tim Ludwig (LR 1986) is a full professor at Appalachian State University where he is a University Deans

Distinguished Graduate Faculty in the nationally recognized Industrial/Organizational Psychology-Human Resources Management Masters program. Dr. Ludwig earned his M.A. at Wake Forrest University and Ph.D. at Virginia Tech. He is currently serving as the President of the Organizational Behavior Management Network (www.obmnetwork.com). Dr. Ludwig is an associate editor of the *Journal of Organizational Behavior Management* (JOBM) and his research has been cited in numerous textbooks. Currently, Dr. Ludwig's research is investigating the integration of human performance technology with behavior analytic principles to improve employee quality, productivity, and safety in industry. Dr. Ludwig has been a faculty member at Appalachian State for 12 years teaching General Psychology and I/O Psychology senior-level and graduate courses.

2007 Penn ABA Conference News Update!

April 19th & 20th, 2007

The conference will take place at:

Sheraton Station Square
300 West Station Square Drive
Pittsburgh, PA 15219-1122
(412) 261-2000

For more information about the Sheraton Station Square Hotel, visit:
<http://www.starwoodhotels.com/sheraton/property/overview/index.html?propertyID=693>

A block of rooms have been reserved for \$129/night (single & double occupancy) with a "cut-off date" of 5:00 p.m., Tuesday, March 20, 2007, so make your reservations early!

To receive this rate, when making a reservation at Sheraton Station Square, you must specify attendance at the "Pennsylvania Association for Behavior Analysis Conference."

More conference updates coming soon!
www.pennaba1.org

Wisconsin ABA

By Dr. Corrine Donley

It appears that Wisconsin Association for Behavior Analysis in its infancy is progressing in "fits and starts." The challenges are great—the most serious being the great geographic distances among behavior analysts and the second being the time factor. The yahoo e-list remains our best option for communication. The chapter's participation at the ABA International convention in 2006 was one of the main accomplishments. However, the lack of a quorum led to a delayed election of officers and no movement on central issues facing us.

Several members have been involved in publications and events around the state, but as a formal organization, a fall general meeting and a spring conference are our most pressing concerns.

We are recruiting new members: students, affiliate, and full. Eligibility for membership is based on fulfilling the requirements for membership in ABA (but not necessarily belonging to ABA currently) and paying fees of \$15 for affiliate or full membership and \$6 for student membership. Current goals are to:

- increase an awareness of the variety of approaches encompassed in, and the effectiveness of ABA throughout Wisconsin;
- promote standards of excellence within the Wisconsin ABA community; and
- support efforts to expand the use of ABA in various applications throughout the state.

Fred Keller

Drs. Peter Harzem and Sherman Yen are currently editing a book, tentatively titled *An Untold Personal Story of Fred. S. Keller*. His warmth and humor have inspired hundreds of us. You are cordially invited to contribute personal stories you wish to share. Items may be of any length and pictures are welcomed.

Please send your manuscripts and photographs to Sherman.yen@aaasf.org. The deadline is December 31, 2006. We plan to first prepare a CD with book format following.

The CDs will be distributed free of charge during ABA conferences in 2007.

Opportunities for Behavior Analysts

Other opportunities are available on the ABA Web site: www.abainternational.org/start/jobs.aspx.

Applied Behavior Consultants (ABC)

(www.abcreal.com) has an immediate opening for a Clinical Administrator in Sacramento, California. A doctorate (or near completion) in applied behavior analysis is required. It is expected that the candidate would eventually be a BCBA and licensed. Salary and benefits commensurate with experience and training. Additionally, ABC has openings for Behavior Analysts in both Northern and Southern California. Contact: Brenda Terzich at: bterzich@appliedbehavior.com or Joseph Morrow: jmorrow223@aol.com.

C.A.R.D. (The Center for Autism and Related Disorders)

is among the largest and most experienced providers of Applied Behavior Analysis services in the world. We presently have offices in the United States, the United Kingdom, Australia, and New Zealand and provide services around the world. The bulk of our clinical work involves intensive behavioral programs for young children with autism, but we are currently expanding our services to include older children and young adults between the ages of 10 and 21. Due to the continuous worldwide demand for our services, we always have positions available ranging from entry-level therapists to clinical supervisors at the bachelor's, Master's, and doctoral levels. Moreover, we have openings available in many different regions of the U.S., as well as overseas. The opportunity for professional development at C.A.R.D. is tremendous. We have an on-site graduate, BCBA, and BCABA program for those driven to further their educational careers in behavior analysis. In addition, we are continually engaged in a variety of interdisciplinary research projects, providing opportunities for research experience for our employees.

For more information, call our headquarters at (818) 345-2345 or visit our Web site at www.centerforautism.com/employment/positions. E-mail resumes to employment@centerforautism.com.

Clinical Psychology and Applied Behavior Analysis Department of Psychology at Indiana University South Bend (IUSB) seeks to make an entry level, tenure-track appointment in clinical psychology. APA-accredited clinical or counseling Ph.D. or Psy.D. and applied behavior analysis certification preferred. Teach three courses per semester including Abnormal Psychology and General Psychology and other courses in the candidate's area of specialization, and maintain a vigorous program of research.

Send a letter of interest, vita, a statement of teaching and research interests, copies of graduate transcripts, (p)reprints, and three letters of reference to: Dé Bryant, Chair, Clinical Psychology Search Committee, Department of Psychology, Indiana University South Bend, 1700 Mishawaka Avenue, South Bend, IN, 46615 or electronically to dbryant@iusb.edu.

Full information at: <http://www.iusb.edu/~sbpsy>.

Questions may be sent to dbryant@iusb.edu. IUSB, an EEO/AA employer, is committed to employing qualified faculty who will enhance the rich diversity of our academic community.

Spectrum Center has been serving children with special education needs since 1975. We operate non-public schools and satellite programs that provide services to students in the San Francisco Bay Area. Our programs are designed for students ages 3-22 who have challenging behavior and special educational needs representing a wide array of disabilities, including severely handicapped, autism, and emotionally disturbed (ED). We provide a menu of educational services that are outcome-driven; research-based, and utilize positive behavior management strategies. Our ultimate goal is to facilitate the student's successful transition back into public schools.

Due to our continued growth, we are looking for Behavior Analysts to fill the following positions: Senior Clinician and Education Coordinator. Please submit your resume/vita to hr@esa-education.com or to: Spectrum Center, 16360 San Pablo Ave, San Pablo, CA 94608.

For more information please regarding Spectrum Center, please visit our Web site at www.spectrumschools.com or call Janet Medina at 510-741-5440.

TheraCare is a multi-service healthcare and education organization that provides rehabilitation, developmental and educational services in the 5 boroughs of New York City; in Westchester, Putnam, Rockland, Orange, Nassau, and Suffolk counties; and throughout New Jersey and Connecticut. Our ABA program is community based with services provided in the child's natural environment, which may include homes, day care centers, and schools/community centers. We have the following openings available in our ABA program:

ABA Supervisor: Provide clinical supervision and training for ABA staff; interview potential new employees; oversee ABA program.

Lead Teachers: Develop individualized programs and instructional materials; provide on-going training to teachers in the field; facilitate team meetings and provide training to parents.

ABA Teachers: Provide direct service to children; collaborate in individualized planning and programming with providers and therapists in other disciplines; implement individualized education programs developed by multi-disciplinary professional teams; maintain records for children in caseload.

Send your resume/cover letter to:

michelebarc@theracare.com. TheraCare is an EEO employer. Learn more at www.theracare.com.

Calendar of Upcoming Conferences

For more details, please visit the Web sites indicated and the Affiliated Chapters section of the ABA Web site.

January 2007

Israel ABA ♦ January 6-7 ♦ Emek Yezreel College, Israel

Florida ABA/OBM Network Conference ♦ January 18-19 ♦ Hyatt Sarasota ♦ <http://fabaworld.org/>

February 2007

ABA AUTISM CONFERENCE* ♦ FEBRUARY 2-4 ♦ SHERATON BOSTON, MA ♦ www.abainternational.org/autconf

California ABA ♦ February 8-10 ♦ Hyatt Regency San Francisco Airport, Burlingame, CA ♦ www.calaba.org

North Carolina ABA ♦ February 21-23 ♦ Blockade Runner Hotel, Wrightsville Beach, NC ♦ www.nc-aba.com

EABA Conference (hosted by Polish ABA) ♦ Dates TBA ♦ Warsaw, Poland

March 2007

Texas ABA ♦ March 2-3 ♦ Dallas, TX ♦ www.unt.edu/behv/txaba

Virginia ABA ♦ March 3 (tentative) ♦ James Madison University Harrisonburg, VA ♦ www.v-aba.org

Behavior Analysis Association of Michigan ♦ March 22-23 ♦ Ypsilanti, MI ♦ www.baam.emich.edu

April 2007

Behavior Analysis Society of Illinois ♦ April 6-8 ♦ Holiday Inn Select, Naperville, IL

Pennsylvania ABA ♦ April 19-20 ♦ Sheraton Station Square, Pittsburgh, PA ♦ www.pennaba1.org

May 2007

33RD ABA ANNUAL CONVENTION* ♦ MAY 25-29 ♦ MANCHESTER GRAND HYATT, SAN DIEGO, CA ♦ www.abainternational.org

August 2007

4TH INTERNATIONAL CONFERENCE* ♦ AUGUST 12-14 ♦ HILTON SYDNEY, AUSTRALIA ♦ www.abainternational.org/sydney

New Jersey ABA Conference ♦ Dates TBA ♦ Busch Campus Center, Rutgers University

*ABA Sponsored Event

GRADUATE RESEARCH FUNDING AVAILABLE IN EVIDENCE-BASED EDUCATION



The Wing Institute is launching a new program to provide funding for graduate students doing research in evidence-based education.

The program will support research on the multiple aspects of evidence-based education, including efficacy, effectiveness, implementation and monitoring. Applications are welcome from a variety of disciplines (behavior analysis, education, psychology, etc.) and across a broad range of research perspectives.

Grants vary in size; the maximum grant is \$ 5,000 per annum.

Applications available: October 15, 2006
Application deadline: March 1, 2007
Funding decisions: April 1, 2007

The Wing Institute is an independent, non-profit foundation dedicated to the promotion of evidence-based practices and policies.

For more information e-mail: funding@winginstitute.org or go to our web site at www.winginstitute.org to download the application.

2006 SABA Donors

We want to take this opportunity to thank all of the ABA members who contributed to SABA in 2006 to help build our funds. This list reflects donations received from January through November 10, 2006.

\$2,375

Student Presenters Fund:

Dick Malott (through t-shirt donations)

\$500-\$1,000

International Endowment:

Aubrey Daniels

Greg Stikeleather

Unrestricted Fund:

Greg Stikeleather

\$100 - \$499

Bijou Fund:

Greg Stikeleather

International Endowment:

D. Reed Bechtel

Andrew Bondy

Thomas Brigham

Noel Crooks

Barbara Esch

John Esch

R. Douglas Greer

Peter Killeen

Jeff Kupfer

Suzanne Letso

Maria Malott

Richard Malott

Harold Miller

Christine Morse

Kenji Okuda

John Roll

Masaya Sato

Constance Saxe

Greg Stikeleather

Beth Sulzer-Azaroff

Janet Twyman

Hiroaki Uemura

Student Presenters Fund:

Andrew Bondy

Alyce Dickinson

Barbara Esch

Debora Harris

Sandra Harris

Robert Holdsambeck

Yash Manchanda

Thomas C. Mawhinney

Ray Miltenberger

Kaname Mochizuki

Edward Morris

Paul Neuman

New England Center for Children

David Roll

Masaya Sato

Greg Stikeleather

Texas Young Autism Project

Unrestricted Fund:

Saul Axelrad

Peter Castagnaro

John Esch

Sigrid Glenn

William Helsel

Yoshito Kawahara

M. Jackson Marr

Michael Miklos

Kacy McDonough

New England Center for Children

Robyn Redinger

Kurt Salzinger

Greg Stikeleather

Troy Zarcone

\$1 - \$99

International Endowment:

Marc Adams

Scott Ardoin

Robert Babcock

Pancho Barrera

Julie Bates

William Baum

Judy Blumenthal

Jerre Brimer

Adrienne Brusco Maviglia

Stephanie Burchfield

Ivy Chong

Amy Christensen

Stephanie Contrucci Kuhn

Joanna Cresswell

Joslyn Cynkus

Stephanie Davidoff

Alex Dominguez

Corrine Donley

Erick Dubuque

Megan Duffy

Lisa Falke

Leilani Feliciano

Janice Gaboury

Jacob Gewirtz

Nicholas Golden

Gary Goldwater

Leonard Green

Crystal Harms

Robert Hawkins

Nancy Hemmes

Philip Hinline

Andy Hucks

Allison Jay

Jennifer King

Victor Laties

Lewis Lipsitt

Kim Lucker

Kirsty MacIver

V. Thomas Mawhinney

Kelly Ann McDonough

Heather McGee

William McIlvane

Lori Miller

Jay Moore

Christine Morse

Robin Nuzzolo-Gomez

Amanda Pack

Sara Pahl

Sandee-lee Parker

Luis Perez-Gonzalez

Cindy Poscablo

David Powsner

Melanie Rose

Scott Sanders

Susan Schneider

Lorie Schultz

Susan Silvestri

Kristin Skousgard

Jennifer Skundrich

Janet Solorzano

Mimi Spruill

Michael Stoutimore

SWABA / Beteende-analysgruppen

Matthew Taylor

Martti Tuomisto

Raymond Weitzman

Matthew Welch

Dean Williams

Kelle Witt

Rita Wolpert

Carolyn Zemlick

Tracy Zinn

Student Presenters Fund:

Leigh Adams

Robert Alexander

Debi Alvey

Rich Anderson

Erik Arntzen

Megan Atthowe

Jennifer Austin

Amy Ayres

Robbie Baldus

Tamara Bannon

F.J. Barrera

Tim Barrett

Lisa Barsness

Roger Bass

Ken Beck

J.T. Blackledge

Andrew Bondy

Sebastien Bosch

Bruce Boyer

Charlie Brandt

Joy Brewster

Thomas Brigham

Jerre Brimer

Frank Buono

Mary Burke

Charles Butler

Suzanne Casson

Peter Castagnaro

Rodney Cavanaugh

Kathy Chovanec

Kim Church

Regina Claypool-Frey

Christy Coffman

Craig Coles

Marilyn Colon

Ivy Craig

Noel Crooks

Kathy Culig

Aubrey Daniels

Kip DenHartigh

Robert Dlouhy

Corrine Donley

Angie Drake

Amy Drayton

Amy Durgin
 Kim Dwyer-Moore
 Auður Eiríksdóttir
 Amy Eriksmoen
 Barbara Esch
 John Esch
 Stephanie Etie
 Steve Eversole
 Michael Fabrizio
 Frances Faizarano
 Jamie Feddock
 Andree Fleming-Holland
 Terje Fredham
 Tim Fuller
 Rachel Gale
 Stephen Gallagher
 Beth Gartland
 Brooke Gieber
 Sigrid Glenn
 Francisco Gomez
 Heather Grada
 Ashley Greenwold
 R. Douglas Greer
 Arne Gulbrandsen
 Amanda Guld
 Andrew Hacks
 Dawn Hamlin
 Curtis Harris
 Jenny Hayes
 Linda Hayes
 William Helsel
 William Heward
 Philip Hine
 Jill Holleder
 Jane Howard
 Martha Hubner
 Cloyd Hyten
 Carl Indovina
 Nissa Intarachote
 Marianne Jackson
 Kathryn Jann
 Chrystal Jansz
 Karen Jewett
 James Johnston
 Melissa Katz
 Kate Kellum
 Amy Kenzer
 Lee Kern
 Maria Lynn Kessler
 Tracy Kettering
 Alice Keyl

Jamie Kirkpatrick
 Jen Klapatch
 Kevin Klatt
 Tara Klein
 Carla Lagorio
 Peter Lamal
 Ed Langford
 Victor Laties
 May Lee
 Yanerys Leon
 Suzanne Letso
 Jon Lokke
 Roberta Lowenstein
 Timothy Ludwig
 Kerrie Lum Lock
 Susan Makdisi
 Lisa Manthey
 Alonna Marcus
 Mike Marroquin
 Zoila Martinez
 Bill Matthew
 Jennifer McComas
 Tami McDowell
 Heather McGee
 William McIlvane
 Frances McSweeney
 Fae Mellichamp
 Raimund Metzger
 Caio Miguel
 Harold Miller, Jr.
 Vanessa Mizutowicz
 Jay Moore
 Adriana Morales
 Ljanne Moroz
 Nicholas Mui Ker Lik
 Kat Mulcahy
 Shelley Mullen
 Shobana Musti-Rao
 Helen Nagle
 Adel Najdowski
 Albert Neal
 Jessica Nelson
 Cheryl Newbold
 Duong Nguyen
 Paul Niesen
 Kendra Ortega
 Jessica Paredes
 Valeria Parejo
 Erin Pesek
 Anna Petursdottir
 Brady Phelps

Melinda Pieniazek
 Jeanine Plowman Stratton
 Matt Porritt
 Patrick Quinn
 Bethany Raiff
 Christine Ratcliff
 Carrie Reali
 Claire Rich
 Susan Richardson
 Jennifer Ritter
 Joanne Robbins
 Val Rodgers
 Sandra Rogers
 Mario Romano
 Deborah Roy
 Marilyn Rumph
 Abraham Saenz
 Michael Salazar
 Cathy Sales
 Trevor Salami
 Masaya Sato
 Lia Schillinger
 Jeannine Schmelzkopf
 Cary Schwencke
 Gabriel Searcy
 Tracy Seawright
 Patrick Sheehan
 Bryan Shelton
 Gabriela Sierra
 Valdimar Sigurdsson
 J. Silva
 Callie Simms
 Michelle Smigel
 Jessie Snider
 Melinda Sota
 James Squires
 Peter Sturmey
 Beth Sulzer-Azaroff
 Alice Symmes
 Jonathan Tarbox
 Timber Ridge Group, Inc.
 Matthew Tincani
 Karen Titus
 James Todd
 Jessica Tomasi
 David Trejo
 Masako Tsurumaki
 Janet Twyman
 Carlos Vazquez
 Tore Vignes
 Tracy Walsh

Ben Washburn
 Jonathan Weinstein
 Raymond Weitzman
 Andrew Wether
 Criss Wilhite
 Ginger Wilson
 Thomas Woelz
 Jennifer Woyner
 Laraine Zanatta
 Troy Zarcone
 Tara Zuckerman
Unrestricted Fund:
 Saul Axelrod
 Nicholas Berens
 Aaron Bozzorg
 Marc Branch
 Bruce Brown
 Eric Burkholder
 Peter Castagnaro
 Amy Christensen
 David Coleman, Jr.
 Michael Davison
 Iser DeLeon
 John Esch
 Deirdre Fitzgerald
 Bradley Frieswyk
 Kaneen Geiger
 Leonard Green
 Robert Guild
 David Hatfield
 Kerri Kaelin
 Naohiro Kaneko
 Robert Karen
 Kate Kellum
 Carolyn Lea
 Lewis Lipsitt
 Susan Markle
 Susan Marshall
 Gerald Mertens
 Cynthia Pietras
 Kathleen Quill
 Cathy Sales
 Kurt Salzinger
 Kimberly Schreck
 Walter Stanley
 Stephen Sundby
 Joanna Tyler
 Jason Vlastescu
 Sherman Yen

Progress and Challenges in the Behavioral Treatment of Autism: An ABA International Conference Registration Form

February 2-4, 2007; Boston Sheraton, Boston, MA

This single-track conference will feature 14 invited presentations by prominent researchers and authorities on the treatment of autism and representatives from the May Institute and the New England Center for Children (recipients of the SABA Award for Enduring Programmatic Contributions to Behavior Analysis). Two poster sessions will provide forums for over 170 autism researchers to share their recent work. The conference will close with a Round Table discussion by representatives of ABA International's organizational members.

Mail form and payment to: Association for Behavior Analysis International; 1219 S. Park St., Kalamazoo, MI 49001
Telephone: (269) 492-9310; Fax: (269) 492-9310

Personal Information

NAME (First, middle, last)

ADDRESS

ADDRESS

CITY, STATE, COUNTRY, POSTAL/ZIP CODE

WORK TELEPHONE # (please include area/country codes)

WORK FAX # (please include area/country codes)

HOME TELEPHONE # (please include area/country codes)

CELL PHONE # (please include area/country codes)

E-MAIL

Conference Name Badge

NAME (as you would like it to appear on your badge)

AFFILIATION (where you work or go to school)

Pre-Registration

Pre-registration will end January 15, 2007. After that date, you must register on-site at the conference.

Cancellation

A processing fee of \$35 will be charged for registration refunds requested prior to January 3, 2007. After this date, no refunds will be granted.

Conference Registration

(Friday, February 2 – Sunday, February 4, 2007)

Pre-Register (until January 15, 2007)

☐ \$175

Register On-Site:

☐ \$190

Continuing Education for up to 12 credits

☐ \$60

Method of Payment

Make checks payable to **ABA**, or charge to your:

☐ Visa ☐ MasterCard ☐ American Express
☐ Discover

If paying by credit card, please include:

NAME (as it appears on your card)

Billing Address

BILLING CITY, STATE, ZIP/POSTAL CODE, COUNTRY

CARD NUMBER

EXPIRATION DATE

SIGNATURE

Don't Miss This Opportunity To:

- Meet and confer with practitioners, parents, professionals, and experts in the field
- Earn CE Credits
- Learn about advances and research in the treatment of autism

Consider Joining ABA Special Interest Groups

Applied Animal Behavior

Jennifer Sobie: jennifer.l.sobie@wmich.edu

Autism

Mary Jane Weiss: weissnj@rci.rutgers.edu

Behavior Analyst Online

Joseph Cautilli: jcautilli@cctckids.com

Behavioral Gerontology

Linda LeBlanc: Linda.LeBlanc@wmich.edu

Behavioral Medicine

Joseph Cautilli: jcautilli@cctckids.com

Behaviorists for Social Responsibility

Richard Rakos & Mark Mattaini: bfsr@bfsr.org

Behaviorists Interested in Gambling

Mark Dixon: mdixon@siu.edu

Jeff Weatherly: jeffrey_weatherly@und.nodak.edu

Clinical

Ann Branstetter: adb121f@smsu.edu

Crime and Delinquency

Lonny R. Webb: Lonny.R.Webb@state.or.us

Development and Behavior Analysis

Jacob L. Gewirtz: gewirtz@fiu.edu

Martha Pelaez: marthapn@aol.com

Direct Instruction

Cathy Watkins: cwatkins@toto.csustan.edu

Experimental Analysis of Human Behavior

Cynthia Pietras: cynthia.pietras@wmich.edu

Health, Sport and Fitness

Michael A. Kirkpatrick: mkirkpatrick@wju.edu

Instructional Design

Guy S. Bruce: guybruce@maplecity.com

Interbehaviorists

Tom Sharpe: sharpe@unlv.nevada.edu

Organizational Behavior Management Network

John Austin: john.austin@wmich.edu

Parent-Professional Partnership

David Celiberti: dacnys@aol.com

Positive Behavior Support

Matthew Tincani: tincanim@unlv.nevada.edu

Rehabilitation and Independent Living

Michael Mozzoni: mmozzoni@neurorestorative.com

Sex Therapy and Educational Programming

Bobby Newman: darkoverlordaba@prodigy.net

Spanish Speaking/SIG Español

Mapy Chavez-Brown: mapy.chavez-brown@wagner.edu

Speech Pathology and Applied Behavior Analysis Group

Barbara Esch: barbesch@gate.net

Standard Celeration Society

Michael Fabrizio: michael_fabrizio@cablespeed.com

Teaching Behavior Analysis

Patrick Williams: williamsps@gmail.com

Verbal Behavior

Bill Potter: wPotter@athena.csustan.edu

BEHAVIOR ANALYST ONLINE



Committed to Saving Behavior Analysis Today and in the Future

Advertising in the BAO Journals

Advertising is available in all BAO Journals. All advertising must be paid for in advance. Make your check payable to Halina Dziewolska. The ad copy should be in our hands at least three weeks prior to publication. Copy should be in MS Word or Word Perfect RTF format and advertiser should include any graphics or logos with ad copy.

The prices for advertising in one issue are as follows:

- 1/4 Page: \$50.00
- 1/2 Page: \$100.00 (vertical or horizontal)
- Full Page: \$200.00

If you wish to run the same ad in multiple issues for the year, you are eligible for the following discount:

- 1/4 Pg.: \$40 per issue
- 1/2 Pg.: \$75 per issue (vertical or horizontal)
- Full Page: \$150.00 per issue

An additional one time layout/composition fee of \$25.00 is applicable.

For more information, or to place an ad, contact Halina Dziewolska, Director of Advertising, by phone at 1-215-462-6737 or via e-mail at halinadz@hotmail.com.

ABA Membership Information

Membership Benefits

Members of ABA International enjoy reduced convention registration fees, subscriptions to *The ABA Newsletter*, and access to on-line membership services. Additional benefits are included in the member type description.

Full Members - Full member dues help support the involvement of undergraduate and graduate students in behavior analysis. **Additional Benefits:** voting rights on ABA business matters and to participate in the nominations and election of officers and a subscription to *The Behavior Analyst*. **Requirement:** A Master's degree in experimental or applied behavior analysis or contributions to the field of behavior analysis. Submissions are subject to review by the Membership Committee. Send vita and course records when requesting this status for the first time.

Emeritus Full Members - for individuals who have been approved for full membership status and are over the age of 65. **Requirement:** Send verification of age when applying for this status for the first time.

Supporting and Sustaining Full Members - Through increased dues, Sustaining and Supporting Full members encourage the involvement of undergraduate and graduate students in the science and practice of behavior analysis. **Additional Benefit:** Citation in the *ABA Newsletter* and the *Convention Program Book*.

Full Member Status Determination

First time applicants for full, supporting full, or sustaining full membership must show evidence of at least a Master's degree in psychology or a related discipline. Your application must include your vita and the following completed check list (please check one and include the requested information):

- ☐ My training included a minimum of one year's supervised experience in behavior analysis, and my graduate project, thesis, or dissertation was in experimental or applied behavior analysis. Applicant's vita must include a description of supervised experience, as well as specific topic areas to which the applicant was exposed.
Name of supervisor: _____
Organization in which supervised experience occurred: _____

- ☐ I have had two or more years of supervised experience in experimental or applied behavior analysis. Applicant's vita must include a description of the experimental or applied experience, as well as specific topic areas to which the applicant was exposed.
Name of supervisor: _____
Organization in which supervised experience occurred: _____

- ☐ I have made significant contributions to the knowledge in behavior analysis as evidenced by research publications, presentations at professional conventions, or by other comparable means, as reflected in my attached vita.

Please note that additional information regarding the nature of supervised experience may be requested before voting member status can be determined.

Name: _____

Affiliation: _____

Affiliate Members - for individuals who have an interest in behavior analysis or have completed undergraduate credit, but do not meet the full member education requirements. Dues help support the involvement of undergraduate and graduate students in the science and practice of behavior analysis. **Additional benefit:** subscription to *The Behavior Analyst*. **Requirement:** Send a letter of recommendation from a voting member of ABA International.

Emeritus Affiliate Members - for individuals who are over the age of 65 but do not have voting rights. **Requirement:** Send verification of age when applying for this status for the first time.

Sustaining and Supporting Affiliate Members - Through increased membership dues, Sustaining and Supporting Affiliate members provide additional support to encourage the involvement of undergraduate and graduate students in the science and practice of behavior analysis. **Additional Benefit:** Citation in the *ABA Newsletter* and the *Convention Program Book*.

Chapter/Adjunct Member - members of an ABA-affiliated chapter. **Requirement:** A letter from the chapter confirming chapter membership must be sent annually at the time of membership renewal.

Student Members - full-time undergraduate or graduate students, residents, or interns. **Additional benefits:** subscription to *The Behavior Analyst* and free resume on-line posting in the job placement directory. **Requirement:** Send verification of full-time student, intern, or resident status with your application.

Membership Fees for International Members

ABA International offers discounted fees for members who live in countries with per capita income of less than 75% of the United States'. Fees have been divided into four categories:

Category A fees are for members in countries with income per capita within 75 - 100% of the US'. These countries include: **Austria, Belgium, Bermuda, Canada, Cayman Islands, Denmark, Finland, France, Germany, Guam, Iceland, Ireland, Japan, Netherlands, Norway, Sweden, Switzerland, United Kingdom, and the United States.**

Category B fees are for members in countries with income per capita between 50 - 75% of the US'. These countries include: **Australia, Hong Kong, Italy, Kuwait, New Zealand, Singapore, Spain, and United Arab Emirates.** Members in Category B will receive a 25% discount on membership dues.

Category C fees are for members in countries with income per capita between 25 - 50% of the US'. These countries include: **Bahrain, Cyprus, Greece, Israel, Portugal, Qatar, Saudi Arabia, and South Korea.** Members in Category C will receive a 40% discount on membership dues.

Category D fees are for members in countries with income per capita <25% of the US'. These countries include: **Argentina, Bangladesh, Brazil, Chile, China, Colombia, Costa Rica, Ecuador, Georgia, India, Jordan, Malaysia, Mexico, Nigeria, Paraguay, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Turkey, and Venezuela.** Members in Category D will receive a 60% discount on membership dues.

Members in Category B will receive a 25% discount; in Category C, a 40% discount; and in Category D, a 60% discount. Income per capita information was obtained from the World Bank Group, 2005. Source data is available on the Web <http://www.worldbank.org/data/quickreference/quickref.html> or by calling ABA.

Your membership fee category is based on your permanent residency as determined by ABA and your mailing address. If your resident country is not listed above, but you feel that you qualify for reduced membership based on the income per capita of your country of residency, contact the ABA office at mail@abainternational.org; (269) 492-9310; or by fax at (269) 492-9316.

How to Become a Member

To become a member of the Association for Behavior Analysis International, fill out the ABA 2007 Membership Form, include payment and all supporting documentation, and mail to the ABA office. If you are paying by credit card, you may fax your Membership Form with all supporting documentation to the ABA office at (269) 492-9316. **Please fill out and send both sides of the form.** You may also apply for membership online at: <http://www.abainternational.org>.

NOTE: The term of membership is January 1 through December 31 of the membership year(s).

ABA 2007 Membership Form

Mail form and payment to: 1219 South Park Street; Kalamazoo, MI 49001-5607. Telephone: (269) 492-9310; Fax: (269) 492-9316

MEMBERSHIP DUES

Please circle:	Category A		Category B		Category C		Category D	
	1-Yr	3-Yr	1-Yr	3-Yr	1-Yr	3-Yr	1-Yr	3-Yr
Membership Type:								
Sustaining Affiliate								
Sustaining Full	\$280	\$812	\$210	\$609	\$168	\$487	\$112	\$325
Supporting Affiliate								
Supporting Full	\$152	\$441	\$114	\$331	\$91	\$265	\$61	\$176
Affiliate								
Full	\$115	\$333	\$86	\$249	\$69	\$200	\$46	\$133
Chapter-Adjunct	\$45	\$131	\$41	\$119	\$41	\$119	\$41	\$119
Emeritus	\$45	\$131	\$41	\$119	\$41	\$119	\$41	\$119
Student	\$45	NA	\$41	NA	\$41	NA	\$41	NA

- Category A: United States and all other countries not listed in categories b, c, and d.
 Category B: For countries with income per capita of 50%-75% of the US, including Australia, Hong Kong, Italy, Kuwait, New Zealand, Singapore, Spain, and United Arab Emirates
 Category C: For countries with income per capita of 25%-50% of the US, including Bahrain, Cyprus, Greece, Israel, Portugal, Qatar, Saudi Arabia, and South Korea
 Category D: For countries with income per capita of <25%-of the US, including Argentina, Bangladesh, Brazil, Chile, China, Colombia, Costa Rica, Ecuador, Georgia, India, Jordan, Malaysia, Mexico, Nigeria, Paraguay, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Turkey, and Venezuela

PERSONAL INFORMATION

TITLE: ☐ Dr. ☐ Prof. ☐ Ms. ☐ Mrs. ☐ Mr.

LAST NAME: _____

FIRST NAME & M.I.: _____

AFFILIATION: _____

GENDER: ☐ Male ☐ Female

AGE ☐ <25 ☐ 25-34 ☐ 35-49 ☐ 50-64 ☐ >65

ADDRESS (for all ABA mailings): _____

CITY: _____

STATE/PROVINCE: _____

POSTAL ZIP CODE: _____

COUNTRY: _____

CITIZENSHIP: _____

WORK TELEPHONE #: _____

HOME TELEPHONE #: _____

FAX #: _____

E-MAIL: _____

WEBSITE: _____

JOURNAL SUBSCRIPTIONS

Journal	Student	Individual
ANALYSIS OF VERBAL BEHAVIOR	<input type="checkbox"/> \$21	<input type="checkbox"/> \$28
THE BEHAVIOR ANALYST [®]		<input type="checkbox"/> \$45

Shipping: Int'l orders add \$7 for AVB or \$14 for TBA

May we have your permission to contact your institution or university library on your behalf to request the journals?

☐ YES ☐ NO LIBRARY: _____

[®]Dues for all membership categories include subscriptions to The ABA Newsletter and The Behavior Analyst, except chapter/adjunct dues, which do not include The Behavior Analyst.

STUDENT MEMBER INFORMATION

STUDENT TYPE: ☐ HIGH SCHOOL ☐ UNDERGRAD ☐ MASTER'S ☐ DOCTORAL ☐ POST DOC

NAME OF SCHOOL YOU ATTEND: _____

PROGRAM NAME: _____

EXPECTED GRADUATION DATE: _____

VERIFICATION OF STUDENT STATUS

I, _____, certify that _____ is a full-time student, intern, or resident at (insert name of institution) _____.

Faculty Signature: _____ Date: _____

METHOD OF PAYMENT

Total Amount for Dues & Subscriptions \$ _____
 Make checks payable, in US dollars, through a US bank, to ABA or charge to your:

☐ Am. Express ☐ MasterCard ☐ Visa ☐ Discover

If paying by credit card, please fill in the following:

Name on card: _____

Card Number: _____

Expiration Date: _____

Signature: _____

Payment of dues is subject to current federal, state and local tax regulations. To determine the tax-exempt status of your payment, contact your local office of federal, state, or local tax information. All funds are in U.S. dollars. Overpayments and discounts not taken by the applicant will be considered donations to ABA unless a request for a refund is received by the ABA office in writing.

Personal information such as age and annual income will be kept confidential. This information is collected for the purpose of membership data analysis only. Supporting Full and Sustaining Full members contribute to the development of ABA through higher fees, and meet the requirements of Full membership.

Reason for membership:

- ☐ Encouraged by University Program
- ☐ Family members exposed to behavioral treatment
- ☐ Maintain certification status
- ☐ Obtain *The Behavior Analyst*
- ☐ General interest in behavior analysis
- ☐ Required by employer

Degree Held

Most recent degree received: _____

Year Received: _____

Conferring Institution: _____

Certification

Are you a certified behavior analyst?

- ☐ Yes ☐ No

If yes, by whom? _____

Position Title

Please check the one box that most closely describes your job title:

- ☐ 01 Administrator
- ☐ 02 Student
- ☐ 03 Consultant / Staff Trainer
- ☐ 04 Professor / Academic
- ☐ 05 Psychologist / Therapist
- ☐ 06 Researcher
- ☐ 07 Social Worker
- ☐ 08 Speech / Language Pathologist
- ☐ 09 School Teacher
- ☐ 10 Parent
- ☐ 00 Other: _____

Primary Activity

Please check the one box that most closely describes the majority of your work:

- ☐ 01 Administration
- ☐ 02 Clinical
- ☐ 03 Consulting / Staff Training
- ☐ 04 Research
- ☐ 05 Student
- ☐ 06 Teaching
- ☐ 07 Retired
- ☐ 00 Other: _____

Primary Discipline

Please check the one box that most closely describes your field of study:

- ☐ 01 Behavior Analysis
- ☐ 02 Behaviorology
- ☐ 03 Communication Disorders
- ☐ 04 Education
- ☐ 05 Medicine
- ☐ 06 Organizational Management
- ☐ 07 Pharmacology
- ☐ 08 Psychology
- ☐ 09 Social Work
- ☐ 00 Other: _____

Annual Income Range

- ☐ <\$15,000
- ☐ \$15,000-\$34,000
- ☐ \$35,000-\$54,000
- ☐ \$55,000-\$74,000
- ☐ \$75,000-\$99,000
- ☐ \$100,000-\$149,000
- ☐ >\$150,000

During the past 12 months did you receive funding for behavioral research? Note: This information may be shared with persons or agencies/organizations engaged in efforts to support and promote behavioral research.

☐ Yes ☐ No

What source provided the funding?

What was the amount of funding?

\$_____ over _____ year(s)

What is the subject of your funded research?

During the past 12 months have you served as a member of a grant review committee? ☐ Yes ☐ No**ABA SIGs of which you are a member (M) or are interested in (I).**

- ☐ Applied Animal Behavior
- ☐ Autism
- ☐ Behavior Analyst Online
- ☐ Behavioral Gerontology
- ☐ Behavioral Medicine
- ☐ Behaviorists for Social Responsibility
- ☐ Behaviorists Interested in Gambling
- ☐ Clinical
- ☐ Crime and Delinquency
- ☐ Development & Behavior Analysis
- ☐ Direct Instruction
- ☐ Evidence-Based Practice
- ☐ Experimental Analysis of Human Behavior (EAHB)
- ☐ Health, Sport, & Fitness
- ☐ Instructional Design
- ☐ Interbehaviorists in ABA
- ☐ OBM Network
- ☐ Parent-Professional Partnership
- ☐ Positive Behavior Support
- ☐ Rehabilitation & Independent Living
- ☐ Sex Therapy & Educational Programming (STEP)
- ☐ SIG Español
- ☐ Speech Pathology & ABA
- ☐ Society for the Quantitative Analyses of Behavior (SQAB)
- ☐ Standard Celeration Charting
- ☐ Teaching Behavior Analysis
- ☐ Verbal Behavior

ABA affiliated chapter(s) of which you are a member (M) or are interested in (I):

- ☐ ABA Colombia
- ☐ ABA España
- ☐ ABA India
- ☐ ABA of Argentina
- ☐ ABA of Brazil (ABAB)
- ☐ Alabama ABA
- ☐ Asociación Latinoamericana de Análisis y Modificación del Comportamiento (ALAMOC)
- ☐ Australian Association for Cognitive Behaviour Therapy
- ☐ Behavior Analysis Association of Michigan
- ☐ Behavior Analysis Society of Illinois
- ☐ Behaviour Analysis in Ireland
- ☐ Berkshire Association for Behavior Analysis and Therapy

- ☐ Blackstone Valley ABA
- ☐ California ABA
- ☐ Chicago ABA
- ☐ Chinese ABA
- ☐ Connecticut ABA
- ☐ Delaware Valley ABA
- ☐ Experimental Analysis of Behaviour Group UK
- ☐ Florida ABA
- ☐ Georgia ABA
- ☐ German Society for Behavioral Medicine and Behavior Modification
- ☐ Greater Boston ABA
- ☐ Hawaiian ABA
- ☐ Heartland ABA
- ☐ Icelandic ABA
- ☐ Israel ABA
- ☐ Italian Association for the Analysis and Modification of Behavior
- ☐ Japanese ABA
- ☐ Kansas ABA
- ☐ Korean ABA
- ☐ Manitoba ABA
- ☐ Maryland ABA
- ☐ Mid-American ABA
- ☐ Middle East ABA
- ☐ Missouri ABA
- ☐ Nevada ABA
- ☐ New England Society of Behavior Analysis & Therapy
- ☐ New Jersey ABA
- ☐ New York State ABA
- ☐ New Zealand ABA
- ☐ North Carolina ABA
- ☐ Northwestern ABA
- ☐ Norwegian ABA
- ☐ Ontario ABA
- ☐ Pennsylvania ABA
- ☐ Philippines ABA
- ☐ Polish ABA
- ☐ Polish ABT
- ☐ Russian ABA
- ☐ Sociedad Mexicana de Análisis de la Conducta
- ☐ Southeastern ABA
- ☐ Swedish ABA
- ☐ Taiwan ABA
- ☐ Tennessee ABA
- ☐ Texas ABA
- ☐ Venezuelan ABA
- ☐ Vermont ABA
- ☐ Virginia ABA
- ☐ Wisconsin ABA

Participation is needed on ABA Boards & Committees. Please indicate where you would be willing to volunteer:

- ☐ Affiliated Chapters
- ☐ Education
- ☐ Membership – Recruitment & Retention
- ☐ Program – Program Committee
- ☐ Professional Affairs
- ☐ Publications
- ☐ Science Policy & Research

ABA 2007 Convention Registration Form

Mail form and payment to: ABA, 1219 South Park Street; Kalamazoo, MI 49001 Telephone: (269) 492-9310. Fax: (269) 492-9316

Contact Information

NAME (Last, first, middle initial)

PREFERRED MAILING ADDRESS (for all ABA mailings)

PREFERRED MAILING ADDRESS 2

CITY, STATE, COUNTRY, POSTAL/ZIP CODE

WORK TELEPHONE # (please include area and/or country codes)

HOME TELEPHONE # (please include area and/or country codes)

FAX # (include area and/or country codes) ☐ Home ☐ Work

E-MAIL

Convention Name Badge

Print your name as you would like it on your badge:

Print your affiliation (where you work or go to school)

Continuing Education

Will you be attending convention events to earn BACB credits?

☐ Yes ☐ No Certificant #: _____

Method of Payment

Make checks payable, in US dollars through a US bank, to ABA, or charge to your:

☐ American Express ☐ MasterCard ☐ Visa ☐ Discover

If paying by credit card, please fill in the following:

Name as it appears on your card

Card Number

Expiration Date

Signature

Billing Address (if different from above)

Convention Registration

A discount is available for early payment of registration fees. If your registration is postmarked by March 9, 2007, send the amount listed in the "before" column. You may register for the entire convention or for just one day.

To register for the convention at the member rates, you must be a member for the 2007 calendar year. To renew your membership, please fill out the separate ABA 2007 Membership form. If you do not wish to renew your membership for 2007, you must register as a non-member. **All attendees, including presenters and authors, must register for the convention.**

Registration for the Entire Convention

(Saturday 5/27 – Tuesday 5/30) Circle your membership category from the list below.

Fill in the appropriate amount: \$ _____

Category	Before 3/11	3/10-5/1*
Sustaining, Supporting, Full or Affiliate	<input type="checkbox"/> \$118	<input type="checkbox"/> \$138
Emeritus and Student	<input type="checkbox"/> \$59	<input type="checkbox"/> \$69
Chapter-Adjunct	<input type="checkbox"/> \$152	<input type="checkbox"/> \$172
Non-member	<input type="checkbox"/> \$280	<input type="checkbox"/> \$300

One-Day Registration. Circle day(s) attending:

Saturday 5/27 Sunday 5/28
Monday 5/29 Tuesday 5/30

Circle your membership category from the list below and fill in the appropriate amount (fee X # of days): \$ _____

Category	Before 3/11	3/10-5/1*
Sustaining, Supporting, Full or Affiliate	<input type="checkbox"/> \$59	<input type="checkbox"/> \$69
Emeritus and Student	<input type="checkbox"/> \$59	<input type="checkbox"/> \$69
Chapter-Adjunct	<input type="checkbox"/> \$79	<input type="checkbox"/> \$89
Non-member	<input type="checkbox"/> \$104	<input type="checkbox"/> \$114

Donation to Support Student Presenters.....\$ _____

Total Payment Enclosed:.....\$ _____

*On-site Registration: All Student, Emeritus, and one-day registration fees will increase by \$10. Affiliate, chapter-adjunct, full, sustaining, and supporting and non-member registration fees for the entire convention will increase by \$20 on-site.

Pre-Registration will end May 1, 2007. No registration forms received by the ABA office after this date will be processed.
On-site registration will open at 5:00 pm May 24.

Cancellation Fee: A \$25 processing fee will be charged for registration refunds up to May 1, 2007. After May 1, no refunds will be granted.

Discounts that are not taken will be considered donations to ABA unless a written request is submitted.

Journal of the Experimental Analysis of Behavior

Website: seab.envmed.rochester.edu/jeab E-mail: jeab@indiana.edu

EDITOR

Leonard Green

EXECUTIVE EDITOR

Victor G. Laties

ASSOCIATE EDITORS

Michael Dougher
Douglas Elliffe
Gregory Madden
Harold L. Miller, Jr.

EDITOR FOR BEHAVIORAL PHARMACOLOGY

Jonathan L. Katz

EDITOR FOR BEHAVIORAL NEUROSCIENCE

David W. Schaaf

REVIEW EDITOR

M. Jackson Marr

BOARD OF EDITORS

Brent Alsop
Carlos F. Aparicio
Alan Baron
James Barrett
Warren K. Bickel
Arturo Bouzas
A. Charles Catania
Philip Chase
Russell Church
John W. Donahoe
J. Gregor Fetterman
Gene M. Heyman
John M. Hinson
Pauline J. Horne
Christine E. Hughes
Steven R. Hursh
Peter Killeen
Kris N. Kirby
Stephen E. G. Lea
Karen M. Lionello-DeNolf
James S. MacDonall
James E. Mazur
Margaret McDevitt
Anthony P. McLean
Jay Moore
Allen Neuringer
M. Christopher Newland
David C. Palmer
William L. Palya
Cynthia J. Pietras
Carol Pilgrim
Howard Rachlin
Phil Reed
Ruth Anne Rehfeldt
John M. Roll
Kenneth Silverman
William Temple
Manish Vaidya
John Wixted
James Woods
Clive D. L. Wynne

Consider a subscription to the journal for original research relevant to the behavior of individual organisms. Review articles and theoretical papers also considered for publication. Six issues published yearly by the Society for the Experimental Analysis of Behavior.

— SEPTEMBER 2006 —

Terry W. Belke, W. David Pierce, and Ian D. Duncan. Reinforcement value and substitutability of sucrose and wheel running: Implications for activity anorexia

Amy L. Odum, Ryan D. Ward, Christopher A. Barnes, and K. Anne Burke. The effects of delayed reinforcement on variability and repetition of response sequences.

Chad M. Galuska, Gail Winger, Steven R. Hursh, and James H. Woods. Assessing unit-price related remifentanyl choice in rhesus monkeys.

Gregory A. Lieving, Mark P. Reilly, and Kennon A. Lattal. Disruption of responding maintained by conditioned reinforcement: Alterations in response-conditioned-reinforcer relations.

James E. Mazur. Choice between single and multiple reinforcers in concurrent-chains schedules.

Michael E. Young, Joshua S. Beckman, and Edward A. Wassermann. Pigeons' discrimination of Michotte's launching effect.

Hirofumi Shimizu. Testing response-stimulus equivalence relations using differential responses as a sample.

Dean C. Williams, Mark D. Johnston, and Kathryn J. Saunders. Intertrial sources of stimulus control and delayed matching-to-sample performance in humans.

— NOVEMBER 2006 —

Michael Davison and William M. Baum. Do conditional reinforcers count?

Ryan D. Ward, Ericka M. Bailey, & Amy L. Odum. Effects of *d*-amphetamine and ethanol on variable and repetitive key-peck sequences in pigeons.

Phil Reed and Theresa A. Morgan. Resurgence of response sequences during extinction in rats shows a primacy effect.

Robert Whelan, Dermot Barnes-Holmes, and Simon Dymond. The transformation of consequential functions in accordance with the relational frames of more-than and less-than.

Tom Randell and Bob Remington. Equivalence relations, contextual control, and naming.

BEHAVIOR ANALYSIS: TRIBUTES TO P. B. DEWS, R. T. KELLEHER, AND W. H. MORSE

M. Jackson Marr. A major trio

James E. Barrett. Behavioral determinants of drug action: The contributions of Peter B. Dews, Marc N. Branch, Roger T. Kelleher, behavior analyst.

Michael D. Zeiler. An architect of the golden years

— TECHNICAL NOTE —

Brian D. Kangas and Marc N. Branch. Stability of pigeon body weight under free-feeding conditions

Enter your personal subscription before December 31 and receive all six 2006 issues. And make certain your library subscribes. Individuals, \$30.00; students, \$15.00; institutions, \$152.00. Subscribers outside the U.S. should add \$12.00 for postage. Please send orders and checks (payable to JEAB) to

JEAB, Devonia Stein
Psychology Department
Indiana University
1101 E. Tenth Street
Bloomington, IN 47405-7007 USA

American Express, VISA, and MasterCard orders are accepted.

Reservation Request

Manchester Grand Hyatt San Diego
One Market Place, San Diego, CA 92101

For reservations call: (800) 233-1234; Fax: (619) 358-6729; On-line: www.abainternational.org/convention

The Manchester Grand Hyatt San Diego looks forward to welcoming you! In making your reservation, we request that you guarantee your arrival by either...

1. Enclosing a check or money order covering the first night's stay.
2. Note the entire number of your major credit card below (American Express, Diner's Club, Visa, Discover, MasterCard, or Carte Blanche). Be sure to include the expiration date and the cardholder's signature.

The Manchester Grand Hyatt San Diego regrets that it cannot confirm your reservation without one of the above guarantee methods. Deposits will be refunded only if appropriate cancellation notification is given (a 72 Hour Cancellation Policy applies).

Group Name: **Association for Behavior Analysis**

Guest Name _____

Affiliation _____

Address _____

City, State, Zip _____

Daytime Phone _____

Fax # _____

Email Address _____

Arrival Date _____ Time _____ Departure Date _____

Sharing with _____
(Please send only one reservation request per room)

Group Rates (please check)

- ☐ Single/Double Rooms (1-4 people) \$125 PER NIGHT
☐ Triple/Quad Rooms (3-4 people) \$155 PER NIGHT

Requested Room Type: ☐ one king bed ☐ two double beds ☐ no preference

Non-Smoking room preferred: ☐ yes ☐ no

Special requests/accommodations _____

Check or money order enclosed \$ _____

☐ American Express ☐ MasterCard ☐ Visa ☐ Diner's Club ☐ Carte Blanche ☐ Discover Card

Credit Card Number _____ Expires _____

Cardholder Signature _____

This signature authorizes the Manchester Grand Hyatt San Diego to charge the above account for one night's room deposit.

Cut off date: May 1, 2007

A limited number of rooms are available at these rates. Once this limit is reached, the group rate is no longer available. Reservation requests and rates are based on availability. Executive rooms and suites are available. Call Reservations for details.

Association for Behavior Analysis - May 25 - 29, 2007

Check-in time is 3:00 PM

Check out time is 11 AM.

Help us help you!

To expedite your check-in, please let us know: ☐ bed type preference ☐ time of arrival ☐ credit card to be used
Additional travel information and link to on-line reservations available at www.abainternational.org/convention

2007 ABA International Conference Registration Form

August 12-14, 2007; Hilton Sydney, Australia

Join behavior analysts from around the world at ABA's 4th international conference in Sydney, Australia. This vibrant and diverse city boasts wonderful options for tourists, whether visiting the opera house or a beach. Program details will be available on line in January. Don't miss this opportunity to network with and learn from the world's leading behavior analysts!

Mail form and payment to: Association for Behavior Analysis International; 1219 S. Park St., Kalamazoo, MI 49001
Telephone: (269) 492-9310; Fax: (269) 492-9310; Register on line: www.abainternational.org/sydney/index.aspx

Personal Information

NAME (First, middle, last)

ADDRESS

ADDRESS

CITY, STATE, COUNTRY, POSTAL/ZIP CODE

WORK TELEPHONE # (please include area/country codes)

WORK FAX # (please include area/country codes)

HOME TELEPHONE # (please include area/country codes)

CELL PHONE # (please include area/country codes)

E-MAIL

Cancellation

A processing fee of \$120 will be charged for registration refunds.

Student Information*

Student Type:	<input type="checkbox"/> High School	<input type="checkbox"/> Undergrad <input type="checkbox"/> Doctoral	<input type="checkbox"/> Master's <input type="checkbox"/> Post Doc
---------------	--------------------------------------	---	--

Name of School You Attend: _____

Program Name: _____

Expected Graduation Date: _____

Verification of Student Status

I, _____, certify that _____

is a full-time student at (institution) _____

Faculty Signature: _____ Date: _____

Conference Registration

(Sunday, August 12 – Tuesday, August 14, 2007)

Register by May 11, 2007:

Regular: ☐ \$400

**Australian or New Zealand
Full-time Students*:** ☐ \$250

Register after May 11, 2007:

Regular: ☐ \$450

**Australian or New Zealand
Full-time Students*:** ☐ \$275

*Student Information and Verification of Student Status must be completed to register

Conference Name Badge

NAME (as you would like it to appear on your badge)

AFFILIATION (where you work or go to school)

Method of Payment

Make checks payable to **ABA**, or charge to your:

☐ Visa ☐ MasterCard ☐ American Express ☐ Discover

If paying by credit card, please include:

NAME (as it appears on your card)

Billing Address

BILLING CITY, STATE, ZIP/POSTAL CODE, COUNTRY

CARD NUMBER

EXPIRATION DATE

SIGNATURE

The Analysis of Verbal Behavior Order Form

If you are interested in a behavioral analysis of language, *The Analysis of Verbal Behavior* is the ideal journal for you. No other journal offers this unique contribution to the empirical and conceptual analysis of verbal behavior. *The Analysis of Verbal Behavior* (ISSN 0880-9401) publishes original papers relevant to the elementary verbal operants, autoclitics, multiple control, private events, rule-governed behavior, epistemology, scientific verbal behavior, language acquisition, language assessment and training, second languages, pedagogy, the verbal behavior of nonhumans, and verbal behavior research methodology.

Make checks payable to: ABA, 1219 South Park Street; Kalamazoo, MI 49001-5607
Order online at: <https://apps.abainternational.org/onlinestore/>

Prices include domestic shipping and handling

	Individual	Student	Institution	Unit Cost	Quantity	Total Cost
Separate Volumes						
Volume 23 (2007).....	\$ 28.00	\$ 21.00	\$ 67.00	x _____	= \$ _____	
Volume 22 (2006).....	\$ 28.00	\$ 21.00	\$ 67.00	x _____	= \$ _____	
Volume 21	\$ 28.00	\$ 21.00	\$ 67.00	x _____	= \$ _____	
Volume 20	\$ 28.00	\$ 21.00	\$ 67.00	x _____	= \$ _____	
Volume 19	\$ 28.00	\$ 21.00	\$ 67.00	x _____	= \$ _____	
Volume 18	\$ 28.00	\$ 21.00	\$ 67.00	x _____	= \$ _____	
Volume 17	\$ 28.00	\$ 21.00	\$ 67.00	x _____	= \$ _____	
Volume 16	\$ 28.00	\$ 21.00	\$ 67.00	x _____	= \$ _____	
Volume 15	\$ 28.00	\$ 21.00	\$ 67.00	x _____	= \$ _____	
Volume 14	\$ 28.00	\$ 21.00	\$ 67.00	x _____	= \$ _____	
Volume 13	\$ 28.00	\$ 21.00	\$ 67.00	x _____	= \$ _____	
Volume 12	\$ 28.00	\$ 21.00	\$ 67.00	x _____	= \$ _____	
Volume 11	\$ 28.00	\$ 21.00	\$ 67.00	x _____	= \$ _____	
Volume 10	\$ 28.00	\$ 21.00	\$ 67.00	x _____	= \$ _____	
Volume 9	\$ 28.00	\$ 21.00	\$ 67.00	x _____	= \$ _____	
Volume 8	\$ 28.00	\$ 21.00	\$ 67.00	x _____	= \$ _____	
Volume 7	\$ 28.00	\$ 21.00	\$ 67.00	x _____	= \$ _____	
Volume 6	\$ 28.00	\$ 21.00	\$ 67.00	x _____	= \$ _____	
Volume 4	\$ 28.00	\$ 21.00	\$ 67.00	x _____	= \$ _____	
Volume 1, 2, & 3 bound together	\$ 4.00	\$ 4.00	\$ 4.00	x _____	= \$ _____	
* International Shipping Fee, per volume.....	\$ 4.00					
Set						
Volumes 1-21 (does not include vol. 5)	\$ 357.00	\$ 357.00	\$ 922.00	x _____	= \$ _____	
* International Shipping Fee, complete set	\$ 160.00	\$ 160.00	\$ 160.00	x _____	= \$ _____	
SUBTOTAL						\$ _____
6% Sales Tax (Michigan Residents Only).....						\$ _____
TOTAL						\$ _____

Name: _____ E-mail: _____

Street Address: _____ ZIP Code: _____

City: _____ State: _____ Country: _____

Phone: _____ Fax: _____

Credit Card #: _____ Expiration: _____

☐ Visa ☐ MasterCard ☐ AmEx ☐ Discover Signature: _____



Society for the Advancement of Behavior Analysis (SABA) Donations

General Information

SABA was chartered in 1980 as a non-profit corporation devoted to the welfare and future of behavior analysis. SABA exists to secure and administer private funds in support of behavior analysis. These activities include, but are not limited to, the advancement of basic knowledge about behavior analysis and the applications of that knowledge to problems of developmental disabilities, and other areas.

SABA supports behavior analysis through both independent projects that it initiates and through underwriting activities of the Association for Behavior Analysis (ABA). The nine Directors of SABA also are members of the Executive Council of ABA.

Contributions

Individuals can donate to specific SABA funds or make unrestricted donations. As well, a \$59 donation to the Student Presenters Fund sponsors the registration of one senior student presenter for the ABA convention. Planned giving through SABA's Legacy program allows you to arrange gifts of cash, securities, or other property for the benefit of behavior analysis. The Society's Board of Directors works with specific programs to be supported with funds received by SABA.

The **International Endowment Fund** is allocated to support the dissemination of behavior analysis outside of the United States.

Unrestricted funds are used to support the SABA award ceremony at the ABA convention and other regular SABA activities.

The **Student Presenters Fund** supports registration fees for senior student presenters of a paper or poster at the ABA annual convention.

The **Legacy Planned Giving Program** allows you to plan for long-term support of the field.

Advantages of Giving

The Society provides advantages to donors and to behavior analysis because:

- It is private and non-profit, existing solely for the benefit of behavior analysis.
- It is directly accountable to the behavior analysis community through its permanent connection with ABA's Executive Council.
- It allocates unrestricted gifts to help advance behavior analysis in areas which otherwise might not be funded.

- It is flexible in working with donors to see that any specific requests they have will be honored within the guidelines of the Society.
- Its gifts are tax deductible.
- Its small size and low overhead ensure that gifts are directed to programs and not to administrative costs.

Tax Status

As a non-profit organization, SABA is exempt from federal income tax under Section 501 (c)(3) of the 1986 Internal Revenue Code as amended.

Contributions to SABA qualify for tax deductions to the full extent provided by law. The IRS identification number assigned to SABA is 38-2325364.

Ethical Standards

The Society is deeply committed to the philosophy, science, and practice of behavior analysis and will support only those activities and programs consistent with this commitment. Behavior analysis activities and programs supported by SABA must in turn conform to the ethical guidelines promulgated by the Association for Behavior Analysis. Such programs also must be consistent with the Association's policy on social justice.

The Society safeguards privacy rights and confidential information. The Society neither accepts nor grants favors for the personal gain of any individual, nor does it accept favors where a higher public interest would be violated. The Society avoids actual or apparent conflicts of interest and, if in doubt, seeks guidance from appropriate authorities.

Gifts should be made to:

Society for the Advancement of Behavior Analysis, Inc.
1219 South Park Street
Kalamazoo, MI 49001

SABA welcomes inquiries about gifts of any type by writing to the above address, by calling (269) 492-9310, by sending a fax to (269) 492-9316, or by E-mailing the ABA office at mail@abainternational.org.

Donate Now!

ABA will match the first \$10,000 in donations made to the SABA International Fund through December 31, 2006.

ASSOCIATION FOR BEHAVIOR ANALYSIS INTERNATIONAL
4TH INTERNATIONAL ABA CONFERENCE

HILTON SYDNEY
SYDNEY, AUSTRALIA

SYDNEY 2007

AUGUST 12-14

**AUS
TRA
LIA**

 Association for Behavior Analysis
International



Association for Behavior Analysis
International

1219 S. Park Street
Kalamazoo, MI 49001

PRST STD
US POSTAGE
PAID
KALAMAZOO MI
PERMIT NO. 82