Opportunities and Some Lessons Learned from a Career in Behavior Analysis

Carol Pilgrim¹

Published online: 23 September 2015

© Association for Behavior Analysis International 2015

Keywords Careers · Gender · Women · Professional development

Dr. Carol Pilgrim is professor of psychology at the University of North Carolina Wilmington. Dr. Pilgrim has contributed substantially to behavior analysis through her leadership, teaching, and research. She has served as president of its major organizations, including ABAI (as well as its Southeastern ABA chapter), the Society for the Advancement of Behavior Analysis, and Division 25 (Behavior Analysis) of the American Psychological Association. She also served as secretary of the Society for the Experimental Analysis of Behavior, and as a board member of that organization for 8 years. She has advanced the dissemination of behavior analysis and the vitality of its journals in her roles as chair of the Publication Board of ABAI, editor and associate editor of *The Behavior Analyst*, co-editor of the *Experimental Analysis of Human Behavior Bulletin*, and associate editor of the *Journal of the Experimental Analysis of Behavior*. She has served on the board of directors of the Cambridge Center for Behavioral Studies and other organizations, and chaired numerous committees. Dr. Pilgrim is known, in addition, as a stellar teacher and mentor. She has been recognized with numerous awards, including the North Carolina Board of Governors Award for Excellence in Teaching and the ABAI Student Committee Outstanding Mentor of the Year Award. Dr. Pilgrim's research expertise and contributions traverse both basic experimental and applied behavior analysis. Her health-related research has brought behavior analysis to the attention of scientists and practitioners in cancer prevention, and she is noted for her innovative work on the development and modification of relational stimulus control in children and adults.

This article is part of a special section in *The Behavior Analyst* titled "Prominent Women in Behavior Analysis." Interviews were conducted by Melissa R. Nosik or Laura L. Grow.

✉ Carol Pilgrim
pilgrim@uncw.edu

¹ Department of Psychology, University of North Carolina Wilmington, Wilmington, NC 28403, USA

History and Background

Can you Tell us a Little About How you were Introduced to Behavior Analysis and What Motivated you at the Time to Pursue it as a Career?

I had a basic introduction to behavioral approaches even in a high school psychology course. Of course, those beginnings were very general. When I started my undergraduate career at Virginia Tech in Blacksburg, I was actually a double major, focusing on psychology and philosophy. My early psych classes were all the usual courses you would expect as a freshman, but for my philosophy major, in my spring quarter as a freshman, I took a class called “The Nature of Man” (which shows you how long ago this was!). We read books by several major philosophers – the class was an introduction to different philosophical approaches - and among them was Skinner’s *Beyond Freedom and Dignity*. It provided the most coherent approach to thinking about important issues that I had bumped into anywhere. I was immediately “hooked”, and wanted more. Perhaps ironically, I then dropped the philosophy major (where I had “discovered” Skinner) and focused exclusively on psychology, with an eye to as much behavioral psychology as I could find at the time. I had the great opportunity while at Virginia Tech to work with Scott Geller. He was really the only behaviorally oriented faculty member there at the time. His lab wasn’t focused solely on behavior analysis, but enough so that I had a great introduction to basics with him. I was committed to a behavior analytic approach by the time I graduated and went on to continue my education at the University of Florida.

You Attended Graduate School at the University of Florida for your Doctoral Training, Can you Take a Moment to Describe the Graduate Program (e.g., Department, Number of Students, Dynamics, Coursework, Advisement, etc.)?

I can’t say enough about that program at the time I was there. I still feel fortunate to have been a student at UF, and the training I received there continues to be a major influence – perhaps the major influence - on how I approach things today. The Psychology Department as a whole had graduate programs in all of the typical flavors of psychology for that era, except that there was a recognized program in Experimental Analysis of Behavior (not so typical, unfortunately). There were four faculty members in the EAB program at that time: Hank Pennypacker, Ed Malagodi, Marc Branch, and Jim Johnston. All four were effective and inspiring teachers, and it was a very tight-knit program. To give a good feel for the dynamics of the program though, I have to emphasize that my fellow student colleagues were equally effective and inspiring as teachers (Fig. 1).

It’s no surprise to me now that many of these characters are major leaders in behavior analysis, and no surprise that I continue to learn from them. Of course, at the time, we were just all students of the field, trying to figure it out together. We were a close group of students and faculty, and our lives were pretty much 24/7 behavior analysis. When we weren’t in class or doing things for school, we were at the local watering hole talking and arguing about behavior analysis continuously. I always felt badly for any partners of students in the program who weren’t themselves behavior analysts; even world events, movies, and the successes (or lack thereof) of the Gators

Fig. 1 Carol Pilgrim

were necessarily debated from a behavior-analytic perspective. It was a tremendous opportunity for honing our verbal skills, with generous help from each other as students and from the faculty. Another special characteristic of the program at that time was the lack of division between applied behavior analysis, basic or experimental work, theory, and practice. We were all immersed in all of that, all of the time. All of the students (from first year to fifth) took all of the courses (sometimes even more than once), making for an important integration of the facets of our field - in a way that I think is not all that common today. The training we received at UF laid the foundation for everything I've been able to do as a behavior analyst, in ways I could not have predicted, and my life continues to be enriched by the professional colleagues and friends I made there.

At the University of Florida, Who was your Major Professor and How Did this Relationship Influence you?

When I started the program, Jim Johnston was my major advisor, and he was instrumental in my developing interests in basic human operant research, which I continue to this day. Early in my time at UF, I also joined Hank Pennypacker's research team, where we conducted analysis, synthesis, and dissemination of breast self-examination training. This work continued throughout my graduate school years, and provided an important basis for a series of collaborations with physicians at the UNC School of Medicine when I took a faculty position at UNCW; our focus in that work had shifted to training medical students and nurses in breast exam skills. Towards the latter part of my time at UF, Jim moved to Auburn University, so Hank was officially my dissertation advisor. I consider them both to be major professors, and both had a major impact on my training and development as a behavior analyst. Not everyone has the opportunity for first-hand experience with two different styles of graduate mentoring.

Were There Any Other Professors in Graduate School that Strongly Influenced you?

Absolutely - I consider Marc Branch and Ed Malagodi to be critically important influences as well. I had foundational coursework with each of them, but perhaps more importantly, there was extensive interaction between all of the faculty and students throughout the entire training experience at UF. As one more formal case in point, we had a program-wide seminar that met once per week every semester; every student and professor attended the seminar. In this way, we became familiar with the type of work each member of the program was conducting, and we got to hear and discuss new ideas as people were having them. Topics and discussions were wide-ranging, while thoroughly behavior-analytic, and as students, we benefitted from learning the priorities, perspectives, and shaping styles of each faculty member, as brought to bear on a common issue each week. The seminar experience was so valuable that we have recreated it as a central piece of our master's program here at University of North Carolina, Wilmington, where we are fortunate enough to have several UF graduates as faculty members.

Early in your Career, Who were your Primary Leadership Role Models in the Field?

There were many, really. In fact, I would have to say that most all of the leaders in ABAI at the time were important in influencing me in some way, as ABAI provided another essential training ground in my development as a behavior analyst. Of course, the EAB faculty members at UF (Hank, Marc, and Jim) were also major leaders in the field at the time. This provided a powerful model for us that part of our career should contribute to the growth and development of the field more broadly, when the opportunity to serve arises. As I got involved with ABAI and journal editing, other early leadership influences included Mike Perone, Dan Bernstein, Jack Marr, Rick Shull, and David Eckerman, all of whom were important figures in helping me learn the ropes. Sigrid Glenn was a role model and influence, through getting to work with her in different capacities. As I become more involved with ABAI, Maggie Vaughn, Judy Favell, Andy Latall, and Maria Malott all had a role in helping me figure out how things worked. With respect to my own research, the list of role models and influences would be even longer. In my experience, behavior analysis is special as a field in that we have such a wealth of individuals to learn from and who give every indication of enjoying the chance to help others.

Describe your First Job in Behavior Analysis After Graduate School

The description could be a long one, because my first job after graduate school is the one I still have! (Of course, a few things have changed since my start date...) I was still a student in Gainesville when a job opening was announced in the Psychology Department at UNC Wilmington. My colleagues, Mark Galizio, on the faculty at UNCW at the time, and Mike Perone, who had just recently moved from UNCW to West Virginia University, encouraged me to apply. The interview went well enough, I

guess, and I jumped at the chance when offered the position. I remember that first year as being a challenge – writing lectures every night to stay one step ahead of my students (we taught a 4/4 load at that time and I had all new preps), working to establish my human operant lab, traveling to Chapel Hill every week or so for the breast exam training project, serving on committees, and writing up my dissertation. It's good I was young at the time! Despite the hard work though, I had good support and felt I had found a good spot for beginning my career.

What Did you Learn as a Result of Going on the Job Market for the First Time After Graduate School?

In a nutshell, my major lesson was the realization that just being on top of your content area might not be sufficient for getting a job. At the time I applied for the UNCW position, graduate training included little in the way of preparing for interviews, meetings with deans, start-up requests, or negotiations. I ended up wishing that I had been better prepared for everything, and consider myself lucky to have found a welcoming environment in my first interview. Many training programs are more careful today to attend to these critical dimensions of professional development, either directly within the academic department or more centrally through seminars and short courses offered by the Office of the Graduate School. ABAI has also played host to an excellent professional development series, which I would highly recommend to those in the process of job seeking.

Advice and Guidance

Describe your Primary Approach to Managing People (e.g., Providing Feedback, Problem Solving)

I'm not sure that I have any great insights on this count – “managing” people really boils down to the careful use of reinforcement and shaping (although it's surprising to me sometimes that not all behavior analysts are particularly skillful at applying reinforcement in their dealings with others!). I can speak first about working with my graduate students. I try to have lots of opportunity for interaction with my students - I work either one-on-one or in small groups (depending on the task at hand) at least a couple of hours a week with each of my students, in addition to lab meetings and seminars or classes. During that time we target set tasks based on where the student is in the research process – summarizing literature, outlining ideas, developing experimental questions or methods, etc. I like to have students start writing right away, because that gives me the best sense of baseline skills and understanding, and it provides a rich source of behavior for further shaping. We spend a lot of time discussing the written work, both in terms of its content and with respect to behavior-analytic terminology and writing style. Focus on the writing allows corrective feedback to be phrased in terms of improving writing effectiveness, which can be less likely to come across as individual criticism. There are always dimensions that can be reinforced, which is critical, of course, as well as dimensions that need to be targeted for improvement, and I like to emphasize indications of progress across meetings. Obviously problems need to be

addressed when they arise, but as a rule, I work to make the tone of these meetings positive and fun. Certainly I make every effort to convey my own enthusiasm for the research process, and I hope to become a good conditioned reinforcer to boot. I work hard with my students to help them learn that asking good questions can be just as important (or more) than supplying answers; this can both move them forward in their studies and facilitate our interactions as we work together. I take mentoring students very seriously. It's one of the pieces of what I do that is dearest to me. There is nothing quite like seeing students, some with very little background in the field, bloom into true scientific thinkers and behavior analysts. I love that. With respect to working with groups other than students, I find the same general strategies to be effective. After identifying goals and organizing concrete targets, it's important that everyone have an opportunity to contribute and that individual contributions are recognized as a plan is developed and implemented. I still find at least some face-to-face interactions to be optimal for the group to review progress, critically analyze problems and alternatives, and develop a common focus – guess I'm sort of old-fashioned that way. Virtual options for group interactions at a distance have obviously opened a new range of possibilities.

What Advice Did your Mentor Give that Still Influences you Today?

I received a great deal of advice from mentors that continues to influence me – more than I even realize, I'm sure. Still, there are three particular examples – related thematically, as I think about it – that have provided ongoing guidance, especially when I'm facing some puzzle and deciding how to proceed. I doubt the “advisors” even remember the instances. The first will sound a little corny, but I remember speaking with Hank Pennypacker once about a dilemma. It involved trying to use one of the early Apple computers in my thesis work, when I have no programming background whatsoever. Hank listened patiently to my frustrations, and then offered, “well, you can figure it out.” It's a funny form of advice, empowering in a way, and it still serves me well. Most issues in life will yield to the same sort of task analysis, and ordering of steps, that we would bring to bear in a behavioral approach. And I did collect my thesis data on that computer! I received the second piece of advice that I still reflect on often from Marc Branch, after accepting his invitation to serve as associate editor for JEAB. In describing the responsibilities of the position, he was clear on one point in particular; “JEAB AE's don't count votes.” His point, at least as I took it, was that at the end of the day, a decision must be based on your own best analysis – informed by others – but your own call. Reflecting on that advice has served me well with respect to decisions of all sorts – far beyond the realm of editorial decisions that Marc had targeted. I received the third, enduring piece of advice shortly after the conversation with Marc just described, again as I took on the AE position. It appeared originally in a JEAB editorial by Phil Hineline, and I spoke with him about it subsequently. The point was again short and sweet; in describing the JEAB editorial process, one of Phil's points was that, “We're here to publish papers.” My take-away was a broader orientation to which I still subscribe. It's easy to find problems and errors; the real goal is to find and improve strengths, to make whatever the subject is better so that it can serve its function optimally. Collectively, these mentors helped me learn to take on problems, to make my own call, and to try to make things better – that's advice I can live with!

Of All of the Roles you have Served in our Field, What are Some of the Activities you have Valued the Most?

This is a tough question. I feel that I've had so many opportunities, more than I could ever have dreamed, and everyone has been valuable to me. In fact, I probably wouldn't have taken on these roles if I didn't think they were valuable in the first place. As I mentioned previously, I take great pleasure in working with students and teaching. Sometimes I feel like I have the best job in the world. I loved my roles in working with ABAI. It's an organization that I feel passionately about, and to be able to work with so many talented people throughout the ABAI organization has been meaningful to me in many ways. One of the most rewarding things about holding a leadership position in behavior analysis is the contact you have with the range of exceptional work that behavior analysts are doing. You get to experience the excitement that is not always captured in journals or formal conference presentations, seeing and hearing the work first-hand, meeting the people who conduct the work and benefit from it, feeling the passion responsible for getting complicated projects off the ground. The experience was similar in editing. By working directly with a range of authors and scientists, you become enmeshed with research or conceptual questions that you would never have thought about yourself, and you have the opportunity to help get those studies or conceptualizations out to others. I wouldn't trade any of those opportunities.

What Advice Can you Offer to People Considering Becoming a Student in a Behavior Analysis Program on Choosing Training Programs and Advisors?

Even within behavior analysis, there are so many types of training programs. Every one of the programs that I've had the opportunity to learn about firsthand has had its own feel and special characteristics. One piece of advice to students would be to visit the program and spend time there with the current students and faculty; you'll learn much more about the program than what you can read on the website (which is not to say that doing your website homework first is unimportant!). It is so important to find a program that will be a good fit – graduate school is challenging enough even when you love your choice, and as I described in my own case previously, you can't imagine now just how big an impact your graduate program will have on your development as a behavior analyst. If it's not possible to visit, be sure to interact in other ways with the faculty and the students that are already in the program. It can also be useful to realize that feeling comfortable with a program or its people doesn't necessarily mean it's the best fit; a good graduate program should be challenging and provide experiences that are even outside of one's "comfort zone," at least on occasion. All of that said, my main advice for selecting a program would be to search for comprehensive training that emphasizes basic experimental, applied, and conceptual behavior analysis, as well as practice. Program descriptions should highlight each of these foci, required coursework should cover the range, and optimally, there will be program faculty trained and conducting work in each area. I can't overemphasize that this entire package is critical to becoming an effective behavior analyst, no matter what the target position post-graduation. And on the topic of career goals going into graduate school, it's not at all unusual to see student's goals shift over the course of their training. I try to encourage my students to be clear about their interests going in, but not exclusively focused on

any one research topic, and to look toward developing new interests (really the whole point of more training). Of course, discovering new opportunities only underscores the importance of broad-based training.

Is it Important to have Some Experience with a Same Gender Role Model?

It can be tremendously helpful to have a same-gender role model, but I don't think it is essential to have a same-gender primary advisor. There are many dimensions that make a good match between a student and a major professor in graduate school, and I wouldn't list gender as the most important. Having experience with a same-gender role model is valuable though, and easier to come by now than used to be the case. When I was a graduate student, there were no female faculty members in our program. I had only one course from a woman during my graduate training. Our students today have much greater opportunity to rub shoulders with female faculty or female role models at conferences or female editorial board members when submitting manuscripts. My experience in behavior analysis is that most all of our female leaders are open to informal mentoring opportunities, and the ABAI professional development series, already mentioned, has hosted events on this topic as well.

What are Some Leadership Characteristics that have Been Most Valuable to you?

It sounds a bit clichéd, but I do think being a good listener is a critical component of being a good leader. I think understanding reinforcement is another important piece of the puzzle, so behavior analysts should have a leg up. Being enthusiastic and committed to the goals related to your leadership are critical. I don't think I could be very good at something if I didn't care much about it, so a good rule of thumb for me has always been to join only those projects that are important to me (which means learning to say 'no' sometimes). Whenever possible, taking the time to solicit input from all involved, to hear all voices, is often key, as is a willingness to consider alternative approaches and perspectives. Concurrent with the data collection, however, it's important to keep an eye on action steps, so providing a structured framework (e.g., target calendars and deadlines; prioritized goals) can be useful. A healthy sense of humor and some thickened skin probably never hurts either!

Can you Speak to Any Barriers that you Faced and How you Dealt with them?

This is another dimension on which I feel like I have been fortunate. I honestly can't identify barriers I've experienced in my career due to gender. I have friends and colleagues who have certainly had different histories, and I don't mean to say that I have not encountered barriers, but those I've needed to deal with have had little to do with gender, in my best assessment. Regardless of the source though, the best course of action will necessarily depend on the specifics of the situation. Almost always, a "barrier" boils down to behavior on the part of one or more individuals. The soundest approach, as usual, is to work through a careful task analysis - what is the obstacle exactly, what are the problematic behaviors on whose part(s) specifically, and which of the principles of behavior that we know, love, and teach might be brought to bear? Learning to consider an honest analysis of our own behavior is an important skill. There

is always room to ask whether you can do something differently that might help move through the barrier. In some cases the answer will be no, but approaching an issue in this manner can be useful. I like to think in terms of shaping. It might be difficult to remove a barrier in one fell swoop, but working on small steps can be useful with some roadblocks, especially if they are recognized and attended to early on, before becoming fully entrenched. Sometimes even simple steps like inviting a “barrier” for coffee can go a long way (especially in contrast to email). I’m convinced that learning to apply a sound analysis to our own life situations is an essential, and learnable, professional skill. Of course, the reality is that despite the best analyses, some barriers are not particularly moveable. In those cases, a frank assessment of priorities (i.e., reinforcers) is required in deciding on next steps. Is the barrier a bothersome irritant in an otherwise supportive environment, or does it impact career and life opportunities in meaningful ways? If the latter holds true on balance, it may be time to seek new opportunities.

In this Time of Growth in Behavior Analysis, What Advice do you Give to Behavior Analysts of the Future?

Your question certainly comes at an interesting time. I worry a lot about higher education right now, for example, given trends in the U.S. All signs seem to be pointing to the conclusion that a career in the academy is going to be a lot tougher or at least a lot different. I suppose my best general advice for behavior analysts, regardless of career path, harkens back to our earlier discussion – I’d put an emphasis on seeking out as strong and comprehensive a training program in behavior analysis as possible, and adding to that as broad a range of experiences as can be arranged. The foundations will be critical to one’s mastery of the field – an essential starting point – and a breadth of work experiences can set the stage for recognizing and taking advantage of new opportunities. Behavior analysts have made tremendous strides in certain areas of research and application, but there are so many important targets, and we have a unique and powerful approach to offer. I’m hardly the first to make a case for the potential that lies with translational research efforts. Continuing to extend the range of our scientific questions and applications will be key to furthering our field as a science and to securing its place in society. At the same time, behavior analysts of the future might well find career benefits in opportunities to apply our conceptual and methodological framework in new domains.

What Advice do you have for Female Students or Young Professionals Who are Planning to have Children? Is this Advice Different When Given to Men? Please Share your Experience or Thoughts on this Topic

I was afraid that you were going to ask this question! I don’t have children myself, so I certainly can’t claim to have any particular expertise to offer on this important issue. I will take this opportunity to mention though that not having children was absolutely the right choice for me personally. While it clearly would not be the appropriate route for everyone, I think it’s important for students, female and male alike, to consider that whether to have children is every bit as much a choice as is when to have them. This hardly needs saying, but few decisions will have as big an impact on one’s life and career options as being a parent; thus, a serious review of, and planning for, all

ramifications is in order. My experience is that students will often have a clear position on whether they plan to have children or not by the time of graduate school, but I've also had a number of questions from my own students and others about my decisions and how I feel about them now. As it turns out, lots of the students I interact with just haven't known many women who chose not to have kids, or at least haven't had the opportunity to know them well. I can then serve as one happy example of the category - and one who wouldn't change a thing - which I think helps make the option seem more viable. I should be clear that I would never try to advise a student about her own best choice on an issue of this magnitude - it's far too personal a decision, and a function of a great many variables. In fact, I can't think of a circumstance where I would be likely to bring up the topic at all, though I'm happy to relate my experiences if asked. I don't think I would give any different advice to male versus female students, although I can say that I've never had a male student broach the subject.

With respect to the issue of timing where children are concerned, the factors are again often complex. All things being equal though, experience indicates that having a child prior to graduation will certainly add extra pressures and strains to those already replete in a rigorous graduate training program. Unfortunately, the same is often still true for women in academics who choose to have children prior to achieving tenure. As a whole, universities are better now about allowing accommodations to the tenure clock when children are born, but this varies by institution, and can differ for women and men. Even where accommodations are possible, the reality is that utilizing such an option can bring its own additional biases, real or perceived. I'm afraid it continues to be true in much of academia that women who meet all requirements for tenure prior to having children have a more straightforward path.

Are There Any Other Topics that you Could Elaborate on that Specifically Pertain to your Mentorship Practices with Female Professionals?

It's an interesting question, really. Every mentoring relationship is different, of course, in terms of what might be needed or how I can be useful, and I've probably encountered more differences between individuals within a gender than across. That said, one set of issues that I've seen come up more often with my female graduate students and junior colleagues than with their male counterparts concerns finding that right balance in voicing or promoting one's own views, say during group discussions or projects. Reticence to interrupt the flow of conversation sometimes needed to interject a point and too much self-editing (or concern about the contribution that the point might add) can limit effectiveness in many of the situations common to the lives of graduate students, academicians, and professionals more generally. I don't mean to say that this issue is exclusive to women - it certainly is not - but I've seen its limiting effects more frequently with the women than with the men for whom I have served as mentor, and it has thus become a target for mentoring practices in those cases. The specific strategies vary necessarily, depending on the nature of the mentoring relationship (e.g., student versus colleague), but all involve discussing the importance of being an active contributor, all involve direct feedback on the frequency and level of contributions, and all involve recognition (and hopefully reinforcement) for instances and improvements. For my students, for example, I'll actually count comments made during a seminar discussion. When I can be part of the discussion, I'll ask explicitly for input from

particular individuals, and reinforce accordingly. Creating a safe environment for the exchange of ideas can also be key to providing for shaping opportunities. Again, these strategies are hardly unique to female mentees, but extra encouragement with them seems to go a particularly long way.

Compliance with Ethical Standards The author of this manuscript declares no conflict of interest regarding this manuscript. In addition, human or animal participants were not employed for this manuscript, so informed consent was not necessary.