BRIEF REPORT

Representation of Women in Behavior Analysis: An Empirical Analysis

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As in other disciplines, women were underrepresented in behavior analysis in its early decades. Over the years, multiple articles have documented increasing trends in women’s representation in behavior analysis in areas such as contributions to the scholarly literature and participation in professional associations. The purpose of the present article was to extend this line of investigation by more comprehensively evaluating the participation of women in behavior analysis in a variety of areas and by analyzing participation by age cohort and career point to detect progress that might be masked by overall patterns. Our data indicate that substantial progress has been made in the participation of women in our discipline.

Keywords: behavior analysis, gender, leadership, editorial appointments, publication trends

There has been an increase in women’s representation in many disciplines since certain barriers to educational opportunities have been removed (National Science Foundation, 2017). One such barrier was the restriction on women’s acceptance into higher education training programs. In 1972, Title IX of the United States Education Amendments prohibited federally funded university programs from gender discrimination in their admissions process (Department of Justice, 1972). Since then, the overall percentage of women earning bachelors, masters, and doctoral degrees has, as expected, substantially increased and continues to trend upward (American Psychological Association Women’s Programs Office, 2006; Howard et al., 1986; National Science Foundation).

The representation of women in the discipline is not a new topic to behavior analysis. In 1983, Poling et al. published the first of several periodic assessments in which authors evaluated the state of women in behavior analysis. The primary data sources in these articles have included (a) women’s publications in Journal of Applied Behavior Analysis (JABA), Journal of the Experimental Analysis of Behavior (JEAB), and The Behavior Analyst (TBA); Iwata & Lent, 1984; Laties, 1987; McSweeney, Donahoe, & Swindell, 2000; McSweeney & Swindell, 1998; Myers, 1993; Neef, 1993; Poling et al., 1983) and (b) women’s participation in the Association for Behavior Analysis International (ABAI, 2017; Myers, 1993; Poling et al., 1983; Simon, Morris, & Smith, 2007).

As mentioned above, Poling et al. (1983) first evaluated women’s contributions to the scholarly literature (i.e., authorship, editorial board appointments); Laties (1987), Myers (1993), and Simon et al. (2007) published subsequent analyses. Collectively, the data from these investigations have shown increasing trends for women’s representation as authors and editorial board members for JABA, JEAB, and TBA. The greatest increases in women’s participation have been seen in JABA, a publication in which by 2005, more than 50% of the authors were women. In the basic and conceptual journals, JEAB and TBA, respectively, upward trends were modest but consistent, and by 2005, more than 25% of the authors were women.


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Poling et al. (1983) also first evaluated women’s participation in various ABAI functions. The authors reported ABAI data from 1982 that included the percentage of women who were members (student and affiliate members, 50%; full members, 28%), delivered invited addresses (14%), were first authors of symposia (30%), and were first authors of posters (38%). As a follow-up, Myers (1993) reported ABAI data through 1991 that included the percentage of women who were members (student members, 60%; full members, 31%), delivered invited addresses (15%), and were invited symposia speakers (31%). Women’s representation across these categories was virtually identical from 1982 to 1991, except that an upward trend was evident in student membership. Simon et al. (2007) published the most recent analysis of ABAI data as an update and expansion of Poling et al. The authors reported upward trends in ABAI data from 1975 through 2005 for the percentage of women who were members (62%) and delivered presentations (e.g., posters, 59%, invited addresses, 35%)\(^1\), as well as their authorship status (e.g., first authors). Simon et al. further evaluated more prestigious categories of participation (e.g., invited addresses) by area of specialization (applied, basic, conceptual) and reported that women’s representation was lagging, particularly in the basic and conceptual domains.

To date, a number of authors have reported increasing trends in women’s participation in behavior analysis across all of the metrics that have been evaluated. In addition, data specific to applied behavior analysis have reflected greater progress, whereas basic and conceptual areas and overall data that capture more prestigious achievements (e.g., invited speakers, professional recognition) have reflected underrepresentation.

The purpose of the present article was to provide an updated analysis of women’s representation in behavior analysis that includes more comprehensive categories and an analysis of participation by age cohort and career point to better detect changes that might be masked in aggregate analyses. The categories of analysis include ABAI fellows, professional awards, leadership roles, invited presentation speakers, editorial board appointments to behavior-analytic journals, authorship in behavior-analytic journals, new faculty hires at ABAI-accredited training programs, and behavior-analyst certification. Each category of analysis is reported separately, followed by a comprehensive analysis anchored by career milestones, including four earlier career milestones (i.e., certification, faculty appointments, publications, earlier career awards) and four later career milestones (i.e., invited presentation speakers, editorial board appointments, leadership roles, later career awards).

Method

Gender Coding

For each category, individuals were coded as women if their first names were conventionally female (e.g., Cathleen, Linda) and as men if their first names were conventionally male (e.g., Wayne, Jim). For unconventional first names and when only first and middle initials were available, online searches were used to locate a profile or photo for gender determination. We were able to identify gender for all participants.

Categories and Data Collection

Professional recognition. Fellows of ABAI and awards presented to behavior analysts by behavior-analysis professional organizations were evaluated to determine the gender of behavior analysts who received such professional recognition. The names and gender of each fellow and award recipient were recorded for subsequent analysis.

ABAI fellows were identified between the program’s inception in 2004 through 2016 from the ABAI website (www.abainternational.org/constituents/fellows). A longer time period was used for this analysis because of the low number of fellows overall ($n = 94$). Awards given by behavior-analytic professional organizations to behavior analysts from 2012 to 2016 (i.e., the past 5 years) were identified through publicly available websites. To provide an accurate account of recognition of women in behavior analysis, only awards exclusively given to behavior analysts were included. The awards included in

\(^{1}\) These data represent the data point from 2005 for each category. The exact percentages were not reported by Simon et al. (2007) but were identified using a data-extraction program called DigitizeIt, Braunschweig, Germany.
the analysis were the Distinguished Service Award and Scientific Translation Award by the Society for the Advancement of Behavior Analysis (SABA); the B.F. Skinner New Research Award (Basic and Applied), the Fred S. Keller Behavioral Education Award, the Nathan H. Azrin Distinguished Contribution to Applied Behavior Analysis Award, the Med Associates Distinguished Contribution to Basic Behavior Analysis Award, the Society for the Experimental Analysis of Behavior (SEAB) Don Hake Basic/Applied Research Award, the SEAB Applied Behavior Analysis Dissertation Award, and the SEAB Basic Behavior Analysis Dissertation Award by the American Psychological Association (APA) Division 25. The qualifying awards were then categorized as earlier or later career awards, depending on when one would likely receive them. Earlier career awards included the B.F. Skinner New Research Award, the SEAB Applied Behavior Analysis Dissertation Award, and the SEAB Basic Behavior Analysis Dissertation Award; the other awards were categorized as later career awards. Point-by-point interobserver agreement (IOA) was assessed by having a second, independent evaluator code the gender of all fellows and award recipients; IOA was 100%. The data from these analyses are presented as the percentage of women award recipients in each area (ABAI fellows, earlier career awards, later career awards).

**Professional organization leadership.** Three major behavior-analysis organizations—ABAI, the Behavior Analyst Certification Board (BACB), and the Association for Professional Behavior Analysts (APBA)—were evaluated for representation of women in leadership roles (i.e., organization presidents) from 2012 to 2016. Each organization represents one data point per year, so we included 5 years of data to provide a large enough sample size for analysis. Point-by-point IOA was assessed by having a second, independent evaluator code the gender for all of the presidents (n = 15); IOA was 100%. Data were collected using publicly available information such as websites, newsletters, and convention programs. The data from this analysis are presented as the percentage of organization presidents who were women.

**Invited presentation speakers.** The programs of four behavior-analysis conventions that regularly feature many invited behavior-analytic speakers were reviewed to determine the gender of those speakers. Convention programs were obtained from publicly available websites from the 2014, 2015, and 2016 annual conventions of ABAI, APBA, Berkshire Association for Behavior Analysis and Therapy (BABAT), and California Association for Behavior Analysis (CalABA). A 3-year time period was used because the sample size was large enough to provide a recent representation of speakers while still accounting for changes in organization systems that could impact speaker invitations. Invited events that were coded included keynotes, invited single-presenter events, invited tutorials, and award presentations. Invited panel sessions, invited symposia, workshops, or any invited presentation given by a nonbehavioral professional were excluded. In addition, Society for the Quantitative Analysis of Behavior tutorials were excluded from ABAI and Organizational Behavior Management Network invited speakers were excluded from CalABA, because they constituted separate events that were colocated with a partner association. Each invited presenter was coded for his or her gender, age cohort (i.e., 25–34, 35–44, 45–54, 55–64, 65 and over), and area of professional emphasis (i.e., applied, basic, conceptual) per presentation. Age cohort and area of professional emphasis data were primarily collected from each invited presenter by way of a survey sent to them for this purpose and secondarily through publicly available information. Point-by-point IOA was assessed by having a second, independent evaluator code the gender of 40.2% (n = 68) of the unique invited speakers (n = 169); IOA was 100%. The data from these analyses are presented as the percentage of invited presentation speakers who were women.

**Editorial board appointments.** Data on women who were appointed to the editorial boards of JABA, JEAB, and TBA were obtained from journal websites or printed journal issues. Data were collected for the most recent complete publication year (2016) and the first year in which all three journals were simultaneously available and had public editorial boards (1979). The earliest year that the journals all had editorial boards was selected to anchor the analysis of progress to the same point in time. The name and gender of each editorial board member (i.e., editors, associate editors, executive editors, specialty area editors, reviewers) was recorded for each journal for both target years. Point-by-point IOA was assessed by hav-
ing a second, independent evaluator code the gender for 25.2% \((n = 37)\) of the editorial board members \((n = 147)\); IOA was 100%. The data from this analysis are presented as the percentage of editorial board members who were women from each journal per year.

**Publication trends.** Data on women who were either the first or corresponding authors of articles published in *JABA*, *JEAB*, and *TBA* were collected for the most recent publication year (2016) and the first year in which all three journals were simultaneously available (1978). The earliest year that the journals were published was selected to anchor the analysis of progress to the same point in time. All articles were coded for gender of the first or corresponding author for *JABA*, *JEAB*, and *TBA*. Point-by-point IOA was assessed by having a second, independent evaluator code the gender of the first or corresponding author for 30.3% \((n = 95)\) of all articles reviewed \((n = 314)\); IOA was 100%. The data from this analysis are presented as the percentage of women who were first or corresponding author per year.

**Faculty hires.** Program coordinators of 24 ABAI-accredited graduate training programs were surveyed by email to identify the gender and the area of professional emphasis (i.e., applied, basic, conceptual) of their recent tenure-track faculty hires. Twenty representatives (83.3%) of the coordinators responded and were included in the analysis. The coordinators were asked to report the name of the faculty member hired, the year of their hire, and their area of professional emphasis. All faculty were then entered into a spreadsheet and coded for gender. The data from this analysis are presented as the percentage of new hires between 2012 and 2016 who were women and the number of women in each area of professional emphasis.

**Board-certified behavior analysts (BCBAs).** Data were obtained on the gender composition of BCBAs\(^2\) who were credentialed in 2016 (i.e., the representation of recently certified BCBAs who are women). We have only reported data from 2016 because it represents the best indicator of the current gender distribution of new BCBAs. Overall data on gender composition of BCBAs only reflect current and active BCBAs and do not account for attrition. The data from this analysis are presented as the percentage of BCBAs credentialed in 2016 who were women.

**Career-milestone analysis.** Each of the aforementioned categories was classified along a continuum of earlier-to-later career milestones (see Figure 1, x axis). Data were collected on the overall percentage of women represented in each category.

**Results**

**Professional recognition.** A total of 94 individuals have been granted ABAI-fellow since the program’s inception in 2004; 17.0% \((n = 16)\) of ABAI fellows are women. Later career awards were given to 29 individuals from 2012 through 2016; women were the recipients of 17.2% \((n = 5)\) of those awards. Earlier career awards were granted to 20 individuals from 2012 through 2016; women were the recipients of 35.0% \((n = 7)\) of those awards (see Figure 1).

**Professional organization leadership.** Over the past 5 years, 53% \((n = 8)\) of the presidents of ABAI, APBA, and the BACB combined were women.

**Invited presentation speakers.** Overall, 27.9% of the invited presentations at ABAI, APBA, BABAT, and CalABA from 2014 through 2016 were delivered by women \((n = 264)\). BABAT accounted for the majority (37.1%, \(n = 98\)) of the invited presentations, followed by ABAI (26.8%, \(n = 71\)), CalABA (18.6%, \(n = 49\)), and APBA (17.4%, \(n = 46\)). Invited presentations delivered by women primarily represented an applied area of professional emphasis (70%), followed by basic (17%) and conceptual (13%) areas. Figure 2 depicts gender distributions by the age cohort of the speakers who delivered invited presentations. The percentage of invited presentations delivered by women shows visible increases across older to younger age cohorts. In the 65+ age cohort, 18% of the invited presentations were delivered by women \((n = 71)\). In the 55 to 64 age cohort, 21% of the invited presentations were delivered by women \((n = 62)\). In the 45 to 54 age cohort, 26% of the invited presentations were delivered by women \((n = 65)\). In the 35 to 44 age cohort, 43.9% of the invited presentations were delivered by women \((n = 57)\). In the 25 to 34 age cohort, 44.4% of the invited presentations were delivered by women \((n = 9)\).

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\(^2\) Including individuals who hold the BCBA credential, as well as the doctoral-level designation (BCBA-D).
Editorial board appointments. Figure 3 depicts the percentage of women editorial board members of JABA, JEAB, and TBA in 1979 and 2016. Women editorial board members at JABA increased from 25.0% (n = 14) in 1979 to 41.0% (n = 30) in 2016. Women editorial board members at JEAB increased from 7.7% (n = 3) in 1979 to 29.4% (n = 15) in 2016. Women editorial board members at TBA decreased from 50% (n = 6) in 1979 to 30.4% (n = 7) in 2016. Of note is that each of these journals has appointed women as editors in chief. In 1979, TBA appointed Julie Vargas as its editor-in-chief, the first female editor-in-chief of any behavior-analytic journal. JABA has since appointed three women as editor-in-chief: Nancy Neef (1993); Cathleen Piazza (2008), and Dorothea Lerman (2011). JEAB appointed the journal’s first woman as editor-in-chief (Amy Odum) in 2016.

Publication trends. Figure 4 depicts the percentage of women authors (first or corresponding) in JABA, JEAB, and TBA in 1978 and 2016. Women authors in JABA increased from 17.7% (n = 11) in 1978 to 61.5% (n = 36) in 2016; they increased in JEAB from 7.0% (n = 6) in 1978 to 35.2% (n = 19) in 2016; and decreased in TBA from 27.0% (n = 4) in 1978 to 24.2% (n = 8) in 2016.

Faculty hires. Between 2012 and 2016 there were 37 new faculty hires at the 20 ABAI-accredited training programs that responded to our survey. Of the new faculty, 51.4% (n = 19) were women, 18 of whom reportedly worked in the applied area and one in the basic area of behavior analysis.

Certification. In 2016, there were 3,584 newly certified BCBAs, 88.0% (n = 3,154) of whom were women.

Career-milestone analysis. Figure 1 depicts the percentage of women represented in each career milestone across the following nine categories (listed from earlier career to later career milestones): certification (88%), faculty hires (51.3%), first or corresponding author publications in JABA, JEAB, and TBA (40%), earlier career awards (35%), editorial board appointments (33.6%), invited presentation speakers (28%), leadership roles (52%), later career awards (17.2%), and ABAI fellows (17%).

Discussion

The primary purpose of this article was to provide an updated analysis of women’s representation in behavior analysis in a number of areas and to provide further analyses anchored by career milestones and age cohorts to better detect the changes in women’s representation over time. As seen in Figure 1, we found that women are more represented in categories of analysis that typically occur earlier in a career (i.e., certification, 88%; new faculty hires,
and that milestones that typically do not occur until later in a career (i.e., ABAI fellow status, 17%; later career awards, 17.2%) are much less represented by women. This is not surprising in that the individuals represented in the data for later career milestones began their careers in an era of the discipline that was predominantly male, whereas the individuals represented in the earlier career milestones represent the more contemporary era in behavior analysis in which the majority of new behavior analysts are women. Based on these findings, one might predict that some of the individuals represented in earlier career categories will begin appearing in later career categories, resulting in an increase in women’s representation in later career categories over time.

Other variables associated with some of our categories of analysis might impact women’s representation in each area. As an example, Simon et al. (2007) evaluated gender of ABAI-program coordinators and found no systematic variations related to the percentage of invited women presenters. As discussed by Myers (1993) and Simon et al., another example might be barriers to professional career advancement (e.g., family responsibilities, sexism). Although these variables may impact the rate at which women’s contributions emerge over time in more prestigious categories of analysis by interfering with earlier career activities, this has not been directly evaluated in behavior analysis. The NSF (2017) found that female scientists (i.e., assistant professors, full professors, members of the National Academy of Arts and Sciences) with and without children were reported to have similar publication rates.

A secondary purpose of this article was to introduce additional categories to be considered in analyses of gender representation within our discipline that are anchored in time. For example, the introduction of an analysis of faculty hires over the past 5 years was important in this type of analysis because faculty members are perhaps more likely to obtain the later career milestones represented in each of the categories of data (i.e., publication, editorial board appointment, career awards, invited presentations, ABAI fellows). Another example is the age-cohort analysis of invited presentation speakers, which also happens to be a category that attracts a great deal of attention because of its visibility to the profession. Simon et al. (2007) included

Figure 2. Gender, by age cohort, of speakers who delivered invited conference presentations at the 2014–2016 ABAI, APBA, BABAT, and CalABA conferences. Graphs from top to bottom represent the following successive cohorts: 65+, 55–64, 45–54, 35–44, and 25–34.
A primary limitation of the present analyses relates to the unknown denominators that might be relevant in each analysis category. For example, Myers (1993) reported comparison data between female first authors in *JEAB* (15%) that was lower than the percentage of women in various other areas (i.e., general population, doctorates in psychology, experimental psychology, full members of ABAI) and concluded that women in *JEAB* as authors were underrepresented. However, Neef (1993) disputed this type of evidence as a metric for underrepresentation because of the many variables (e.g., abil-

Figure 3. Mean percentage of women editorial board members in *Journal of Applied Behavior Analysis* (JABA), *Journal of the Experimental Analysis of Behavior* (JEAB), and *The Behavior Analyst* (TBA) in 1979 and 2016.

Figure 4. Mean percentage of women authors (first or corresponding) in *Journal of Applied Behavior Analysis* (JABA), *Journal of the Experimental Analysis of Behavior* (JEAB), and *The Behavior Analyst* (TBA) in 1978 and 2016.
ity, interest) that could impact the data. McSweeney et al. (1998) expanded upon previous data by using differences between comparable journals (authors would be similar in intelligence, background preparation, motivation to publish, etc.) as a more viable indicator of representation beyond trends within a journal. Another example pertains to new faculty hires. Without data on the number and gender of applicants for those positions, it is impossible to fully evaluate equal representation. For example, 51.3% of new hires being female is a promising statistic, but would be less so if it were evident that the applicants for those positions were predominantly female.

In addition, there are two potential limitations to our analysis of career milestones. We assigned the temporal position of milestones based on their likely occurrence within a career, as well as on reports from other authors. For example, Neef (1993) stated, “the candidates normally eligible for editorial positions are experienced authors with multiple publications” (p. 358). Based on this information, we assigned authorship to an earlier career point than editorial board appointments. Thus, the order of career milestones likely has variation across professionals, so Figure 1 may not be exactly as depicted on an individual basis for this reason. The other limitation is related to the varying time frames that were used for some of the categories. In some cases (i.e., leadership, fellows, recognition), data were taken from a larger number of years to increase the sample size for meaningful data analysis and in other cases data were taken from a fewer number of years when the sample size was large enough to reflect the current status of women in behavior analysis.

A variable that has not yet been determined in this line of research is the quantitative goal for women’s representation in behavior analysis. One approach to determining the goal is based on parity, which is defined as “the state or condition of being equal” (oxforddictionaries.com). This goal would be 50% representation, which appears reasonable, as women represent approximately 50% of the general population. For example, Figure 4 shows that women have reached and even exceeded parity on authorship in JABA. These data imply that an important achievement has been made. However, the limitation of parity as a goal is its insensitivity to gender distribution within a specific workforce (e.g., applied behavior-analytic researchers).

The second approach for determining the quantitative goal in this line of research is based on proportionality, which is defined as “the quality or correspondence in size or amount to something else” (oxforddictionaries.com). In this approach, the relevant percentages would be calculated from the number of women engaging in a specific activity (e.g., research) that could lead to an outcome (e.g., publication) compared to the total number of individuals engaging in that activity. For example, although women now author 61.5% of JABA articles (see Figure 4), indicating that the parity goal has been met, we cannot determine whether the goal of proportionality has been met without knowing the gender distribution of researchers likely to be engaged in research suitable for JABA. Thus, women still might be underrepresented in this area.

We should acknowledge the difficulty of determining whether gender proportionality has been achieved in an area. Although data on the gender of ABAI members and BCBAAs, for example, might appear to be the appropriate starting point, these data sets are too broad for calculating metrics in specific areas (e.g., leaders in the discipline, editorial board members) and are not comprehensive enough to be representative of all the individuals who engage in these activities. What is needed are data on the number and gender of the individuals engaged in these activities; such data are not presently available and must be collected specifically for this purpose. Consequently, it is impossible to determine proportional representation by women retroactively (e.g., representation of women authors in the early 1980s).

Although we do not yet have access to the data required for determining proportional women’s representation of behavior analysts, it is indisputable that this line of investigation, including the current longitudinal and cohort analyses, suggests that clear progress has been made. That said, it is likely that factors still exist within the discipline and society at large that function as barriers to the career advancement of some women. It is therefore important to periodically reassess the progress demonstrated in this article. We encourage future researchers interested in this topic to determine whether parity or proportionality is the appropriate goal.
and how to collect data for evaluating progress toward that goal.

References


fellows-of-abai.aspx


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Today is an exciting time for women in behavior analysis. Over the years, multiple articles have documented increases in women’s participation in behavior analysis (e.g., McSweeney and Swindell 1998; McSweeney et al. 2000; Myers 1993; Poling et al. 1983; Simon et al. 2007). Contemporary data, however, depict an even more striking degree of participation. For example, 82.2 % of Behavior Analyst Certification Board® (BACB®) certificants are female,\(^1\) including 68.3 % of those who are certified at the doctoral level (i.e., BCBA-D\(^TM\)). These data represent a 148 % increase in female certificants over the last 15 years. The Association for Behavior Analysis International (ABAI) reported that 52 % of their full members in 2014 were women (personal communication ABAI, April 7, 2015).\(^2\) Female authors accounted for 55.5 % of authors who published in the *Journal of Applied Behavior Analysis (JABA)* in 2014. These data represent a 142 % increase since the first volume of *JABA* was published in 1968. In addition, 27.1 % of authors who published in the *Journal of the Experimental Analysis of Behavior (JEAB)* in 2014 were female. These data represent a 115 % increase since the average from 1978 to 1982. Given the representation of women in behavior analysis, a demographic population that is typically a minority in other scientific disciplines (National Science Foundation 2015), has increased substantially over a relatively short period of time (~20 years), we thought it an important time to provide accounts from the perspectives of prominent women who experienced behavior-analytic academic training and professional environments over this period of time and get advice based on what they learned.

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\(^1\)Gender reporting is not a requirement; data reflect only those who reported (1.81 % of BACB certificants did not report gender).

\(^2\)Gender reporting is not a requirement; data reflect only those who reported.
The following special section includes interviews with seven prominent women in behavior analysis. A two-part process was used to determine the interviewees for the special section. First, we developed a list of women that are current or former: (a) ABAI fellows, (b) editors or associate editors of JABA or JEAB, or (c) ABAI presidents. These criteria resulted in a list of 21 women. Second, a consensus process was used to select a group of interviewees who were representative of a combination of different characteristics, including (a) academic training environments, (b) areas of expertise, and (c) work settings. The process included grouping the women that met all three criteria \((n=4)\), two criteria \((n=8)\), and one criterion \((n=9)\) and identifying their representative characteristics. When there was overlap in a category (i.e., attended the same university training program, were at the same stage in their career, worked in similar settings), we selected the woman that had a second or third characteristic (e.g., early vs. mid-career and applied vs. basic research).

Following from this review process, we interviewed Judy Favell, Linda LeBlanc, Frances McSweeney, Anna Pétursdóttir, Carol Pilgrim, Beth Sulzer-Azaroff, and Bridget Taylor. Each interviewee was asked 15 questions organized in two general categories (training history and advice to others). Questions within the history category were selected to provide readers with information about the training environment and the variety of experiences that were a part of each woman’s career (e.g., first exposure to behavior analysis, graduate training experience, what they learned in their first job interview). The category of advice to others (e.g. how to be an effective leader, provide feedback, select graduate programs, handle mistakes, and having families) was selected to provide mentorship on a variety of topics from the perspective of these women.

Collectively, the interviewees have made valuable and enduring contributions to behavior analysis in different areas of practice and research. For example, these women have (a) published 682 journal articles, book chapters, and books; (b) held a total of 74 appointments as editors or associate editors of top-tier journals in behavior analysis; and (c) have served in 39 elected leadership positions in national and international organizations. In addition, their many professional contributions have included sustained positive impacts on service delivery and public policy in behavior analysis.

Although there were a number of commonalities among some interviewee responses, three views shared by all include the importance of mentorship, of understanding behavior analysis in a historical sense, and of having foundational knowledge of basic principles of behavior. These three commonalities might seem especially useful given how they could be applied to the growing number of training programs for behavior analysts. For example, the emphasis on mentorship might suggest that not only is it important to have experience with a mentor during graduate training, but also to incorporate specific training for students into coursework on mentorship approaches. This illustrates only one of many potential implications for current practices that follow from these interviews.

The complete interviews (Favell, forthcoming; LeBlanc, forthcoming; McSweeney, forthcoming; Pétursdóttir, forthcoming; Pilgrim, forthcoming; Sulzer-Azaroff, forthcoming; Taylor, forthcoming) provide accounts of events that were part of each of these successful women’s careers and might serve as a guide for other behavior analysts in their own professional development. In addition, we hope this special section might serve as a springboard for future manuscripts featuring other prominent leaders’ guidance to be included in our historical record.
Author Note  We are grateful to Judy Favell, Linda LeBlanc, Frances McSweeney, Anna Pétursdóttir, Carol Pilgrim, Beth Sulzer-Azaroff, and Bridget Taylor for sharing their histories and providing such thoughtful guidance in these interviews. We also thank Jim Carr for his generous guidance during this project.

The content of this article does not reflect an official position of the Behavior Analyst Certification Board.

Ethics Statement

Conflict of Interest  The authors declare that they have no competing interests.

References


A Career in Behavior Analysis: Notes from the Journey

Judith E. Favell

Judith E. Favell received her bachelor’s degree in psychology from Illinois Wesleyan University in 1966, and earned her Ph.D. in developmental and child psychology from the University of Kansas in 1970. Throughout her career as a clinician, researcher, teacher, lecturer, and administrator, she has focused on the understanding and treatment of serious behavior disorders, such as self-injurious and aggressive behavior in individuals with autism and other intellectual and developmental disabilities. Her work has encompassed not only clinical domains, but also organizational, regulatory, legal, and policy issues, through testifying, chairing national task forces, serving as an expert witness, and writing guidelines and policies governing treatment in behavior analysis. Dr. Favell has authored numerous articles, monographs, chapters, and books; edited a leading journal and several newsletters; and served on the editorial boards of many others. She has presented extensively both nationally and internationally on a wide variety of topics related to serving individuals with intellectual, developmental, and emotional challenges. Her offices have included President of the Association for Behavior Analysis International (ABAI), President of the American Psychological Association’s Division on Developmental Disabilities, and President of the Behavior Analysis Certification Board.

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 was an undergraduate at Illinois Wesleyan University in Bloomington, and explored a variety of majors, sifting through the possibilities of trying to understand and effect
social change, until I arrived at the psychology department. The psychology department, with Roger Ulrich, John Mabry, and Tom Stacknick, was very well regarded but was controversial because it taught “radical behaviorism.” I enrolled in a class in operant conditioning and behavior analysis, which was heavily focused on basic principles and research and utilized lab animals in demonstration of these. I was mesmerized, awe struck. As I applied the principles with those animals their behavior was so lawful and predictable, and the effects seen with methods such as positive reinforcement was so formidable, I knew I was witnessing my version of “creation.” That was the epiphany, and I never looked back. Operant conditioning and behavior analysis were the means we would use to solve some of the social issues that I was so interested in, and importantly to do so in a scientifically based manner. Through the decades that have followed, those basic revelations and convictions have never dimmed.

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

At KU, I was enrolled in the Human Development and Family Life (HDFL) Department which was derived from a home economics background but was transformed into a scientifically based behavioral program. This transformation occurred under the leadership of Francis Horowitz, a singular visionary and administrator. Dr. Horowitz hired Donald Baer, Montrose Wolf, Todd Risley, James Sherman, and Barbara Etzel into the faculty of HDFL and those individuals formed the heart of the operant conditioning and behavior analysis program. When I was a student, this department was just beginning, a small program of perhaps 15 to 20 students, which included both basic research as well as applied behavior analytic research in a broad range of learning labs. The history of the HDFL Department was recently celebrated at its fiftieth Anniversary which will yield authoritative accounts of its development and impact.
For purposes of this discussion, a very salient feature of the HDFL Department from my perspective was the close interactions of the faculty and students. We worked and learned side by side with our mentors. Discussions (often as lively as they were enlightened) occurred well beyond the classroom, in labs and halls and across all hours and days. The faculty were extraordinarily gifted and formidable, but they were also in relatively formative stages of their own careers. They, and even the students, did not yet have all the answers. We plowed into finding them together. To arm us for the task, we were given a respectable array of conventional courses and requirements, but also a focus on fundamental and functional knowledge in our field, both principles and methods, and the science behind it. Best of all, we were learning in the midst of the emergence of that knowledge and technology. Thus, we learned the foundations and fundamentals, but we also saw them launch whole new endeavors, from early education, to reform of living environments to the teaching family model, and much more.

The time was charged with ideas, electric with the energy of discovery, bursting with excitement at the effects that were being achieved, and heady with the conviction that we were on our way to changing the world. Those circumstances and times are difficult to replicate, but I hope training has retained some of the sense of wonder and promise to fuel the lifelong careers of students.

At the University of Kansas, Who was Your Major Professor and How did this Relationship Influence You?

Jim Sherman was my major professor for my doctorate at KU, and I cannot say enough about Jim and his influence. He was a superb teacher in all areas, teaching not only content, but discipline in addressing issues. I must say, one of his most powerful features was the way he motivated us: we wanted to earn his praise; we did not want to disappoint him. His opinion mattered.

Were there Any Other Professors in Graduate School that Strongly Influenced You? Early in Your Career, Who were Your Primary Leadership Role Models in the Field?

Barbara Etzel had a major influence on me as a mentor, and as a friend. Todd Risley and Mont Wolf were extremely influential, both in graduate school and in the decades beyond. Our field has offered a rich array of role models and leaders. Those individuals, too many to mention, have been the beacons by which we all see and steer.

Describe Your First Job in Behavior Analysis After Graduate School

Having had superb training at KU and intending to pursue a career in research, Jim Favell and I thought a time-limited postdoc experience in the real world would be helpful to our future endeavors. We joined the staff of an institution for people with intellectual and developmental disabilities in North Carolina (Western Carolina Center). Our aim was to experience clinical issues first hand, and the facilities’ goal was to discern what behavior analysis could do for its individuals. Our 20 “time limited” years at the Center represented the ultimate learning lab for both parties. From my experience in treating individuals with significant behavioral challenges, I was exhilarated and
humbled on a daily basis, experiencing the power of our behavioral tools and the realities and mysteries that limited our outcomes. From working within a complex organization, I learned the myriad of influences and counter contingencies that impact behavior change within that organizational context. I could go on and on. In short, in that first job, I learned about the point where the rubber hits the road: where behavior analysis meets the real world, hopefully to the benefit of both. Some of my lessons are described in my comments below.

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

As I indicated earlier, I came from an amazing and pristine academic environment where behavior analysis was the organizing focus. We thought the KU environment was the way the world worked. To our shock, much of the world did not share our view. We had to learn how to navigate and negotiate in circles that did not agree with us. That was a revelation to me. It was hard to understand that people were serious about other branches of psychology, and that behavior analysis could be disregarded or disrespected. To effectively interface with the rest of the world, we had to change, not our values and principles, but our style. For example, we had to moderate our use of technical terms, we needed to be less dogmatic, and we needed to listen to others. We also had to learn what the conditions and contingencies were that made people behave and believe as they did (an early exposure to functional analysis in the real world). I also realized that I had to attend to what was around me and accept that other people had important, productive, and wise contributions to make. The principles of learning were true and valid and behavior analysis served us well. However, we also had to open our arms and understand that medicine, pharmacology, psychology, and other disciplines had contributions to make. I learned that behavior analysis does not need to have all of the answers; we need to know how to obtain the answers. Our strength is in using our science to gain those answers: formulate the questions, then answer them empirically and systematically in a scientifically and socially convincing manner.

Advice and Guidance

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

Over a 40-year career, I have made many, many mistakes and hopefully learned a modicum of lessons about managing people. Through all of this, two basic tenants keep revealing themselves. First, approach managing people the same way we do with individuals we serve. This involves employing basic principles and methods that are well known to behavior analysts: functional assessment, shaping, fading, the use of feedback, positive reinforcement, and so on. While an essential part of behavior analytic practice, it is surprising to see slippages in their use with staff, colleagues, and generally in interpersonal interactions. Perhaps the most commonly neglected, in my view, is the use of positive reinforcement. While I surely do not claim to practice this perfectly or even well, I do try to use it as a goal and ideal toward which I strive.
The second tenant comes from a different literature but resembles the first. The Golden Rule is, I think, a wise and functional test of approaches to management and beyond. Asking whether we would appreciate or tolerate something done to ourselves will surely aid in decisions about how to manage others. I am convinced that practicing these two simple tenants could serve as a foundation, if not a fix for many of the mysteries of good management.

What Advice did Your Mentor Give That Still Influences You Today?

I have had an amazing array of mentors and friends, whose advice has shaped my career and life. However, four words of advice from Todd Risley stands out: “Do good, take data.” This phrase encompassed much of what Todd exhorted us to do. Our job is to change the world in a positive, meaningful way: “do good.” It cannot be about what is popular, easy, self-satisfying, or aimed at promotions or publications. The focus must be on what is good for other people. That is the first part. The second is how to achieve those ends: “take data.” We must use our empirical and scientific tools to gain answers about how to do good, how to improve lives. In short, Todd’s mandate to us was to effect meaningful, measurable change, simple as that. I have heard many wise words over many years, none more parsimonious nor apt than that.

Of All of the Roles You Have Served in Our Field, What are Some of the Activities You Have Valued the Most?

I hope that there has been some level of value in roles such as policy development, governance (most specifically of the BACB), and administration. But to me, my role as a clinician has been the most valued and satisfying, both as a direct clinician and in the role of overseeing those services. It has allowed me to experience directly, to see, feel, and touch, the power of behavior analysis: the change that it can make, the outcomes it can achieve. Since my first days experiencing it in the animal lab, I have never failed to marvel at the effects of our principles and procedures, the wonder of the good it can do, the challenge of clinical problems left to solve. The further removed we become from the locus and process of this change, the less in tune we may become to our roots, our mission and our future.

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

Other authors in this series have been far more intimately involved in training programs, including for women, and can offer much more expert advice. From my perspective, access to the right mentors is of paramount importance. Students are not only choosing a training program, they are launching a career. Negotiating the decisions and actions of that career is a complex task with significant consequences. I would hope that the role of a mentor can go beyond the usual academic and professional issues, providing help with questions of what career options are not only available but right for the student, how those options integrate with the student’s other plans and proclivities, what the student finds truly important, reinforcing, and sustainable among life’s other goals. At the training phase of life, it would seem that students could benefit from a version of life coaching, not only academic and professional counseling.
From this perspective, the gender of the mentor is less relevant than the mentor’s ability to help students address these broader issues. Regardless of gender, I think it important to have access to people who have realistic grounding in the advice they are giving. Norms certainly have and are changing, but it appears to me that women generally still shoulder a broad array of diverse roles and activities in their lives. In an informal survey I conducted of KU grads some time ago, they reported that handling the multiple and competing role and responsibilities of their professional and personal lives was one of the most significant challenges they faced. Mentors should be able to support students in preparing for and navigating such challenges, and doing so from a position of “walking the walk.”

What are Some Leadership Characteristics that Have Been Most Valuable to You?

As I review leadership skills and characteristics across professionals I admire, a number of dimensions rise to the top. To me, these are relevant regardless of the activity or enterprise, whether clinical, administrative, educational, regulatory, or other. Some of these I evidence, others I aspire to; all are important.

One is knowledge. It is very simple; you cannot lead effectively if you do not fully understand the content of the enterprise. The second characteristic is passion. The effort must be highly valued, absolutely vital to you in order to succeed. This is particularly true when the goal is difficult to achieve, and requires sacrifice, intense effort, and courage. Most important ones do. Third is elbow grease. Effective leaders work hard, typically harder than those they lead. They set the pace, they provide the model, and they help shoulder the load, all vital to both leading and enlisting the collaboration of their team. The fourth set of characteristics involves interpersonal skills that govern interactions between the leader and all associated with an effort. Of the myriad of behaviors to select from, responsiveness in communication tops the list, in my view. Being responsive to input and feedback is part of this equation; being honest and constructive in giving it is the other.

It is very difficult to distill my thoughts on this question, but these touch briefly on what kind of a leader I would like to work for and who I would like to be: knowledgeable, passionate, industrious, and communicative.

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

I find it absolutely unconscionable that women, anyone, are continuing to face barriers to equality, particularly in settings that should be leading the way in advancing society and enforcing the law.

It makes me feel deeply grateful that my professors, colleagues, and staff over the years were wise, equitable, and expected and supported equal treatment for all. While I was surrounded by enlightened individuals, it was clear that others were struggling with a variety of challenges in their workplaces, including gender biases. In response, some years ago, ABAI instituted a mentorship program to assist women in dealing with concerns of this sort as well as providing advice and support on other issues. Though I found the experience worthwhile, I am not clear on the actual results or fate of this effort, but it may be worthwhile for ABAI and APBA to revisit the possible benefits of such a program today.
In this Time of Growth in Behavior Analysis, What Advice Do You Give to Behavior Analysts of the Future?

The future of behavior analysis is bright indeed. My simple suggestion rests on building on this momentum, not significantly correcting its course. First, I believe we must stay true to our scientific roots. The economic and social climate of today exerts constant pressure toward adjusting our methods and standards towards resorting to easy, popular, unproven, or quick “fixes.” Resisting these considerable influences and remaining faithful to our empirically sound, evidence-based strategies are critical to our future effectiveness and efficacy. Further, I believe we need to continue to insure our relevance. Autism is and will continue to be a legitimate focus of our efforts, but should not consume all of our attention nor convey to others that it is the only area in which we can contribute. Likewise, I hope our research and practice avoids replications that do not materially advance knowledge and practice, but instead that we “push envelopes” toward achieving ever more meaningful outcomes that substantially change lives and society.

The future of our profession rests on these and other basic foundations. But in addition, I would suggest that our future relevance and acceptance as a profession also rests on our behavior as individuals. We as individual behavior analysts can be living models of what our profession stands for and our role and importance in society. Our standing as part of society’s future rests in part on others’ contact and interactions with individual behavior analysts. Our behavior as “ambassadors” can convey the rational, relevant way in which behavior analysis can contribute to the solutions to society’s needs, modeling not only the best of our methods, but the results of our actions.

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

As I mentioned previously, sometime ago I surveyed professionals about the greatest challenges they faced in their careers. Across a broad spectrum of circumstances, the near unanimous answer was the challenge of balancing professional and personal responsibilities, notably with respect to having children. No easy or formulaic answers are possible, but a few very basic issues and suggestions may be considered.

Our profession of applied behavior analysis offers a rich array of alternative roles which feature differing requirements and commitments, some more amenable to the needs of child rearing than others. Thus, in addition to referencing one’s own skills and preferences against potential positions in the field, these should be evaluated for their suitability in caring for children. These dimensions would presumably include such basics as time requirements, typical schedules, and the flexibility that childcare requires. In my own career being responsible for services for individuals with high-risk and dangerous behavior on a 24-7-365 basis, their needs often competed with those of my own children. On the other hand, roles and schedules that have the benefit of being more circumscribed and routinized may not afford the flexibility that both your children and your own reinforcers require.

In addition to considering the requirements and commitments associated with potential professional activities, an appraisal of one’s “support system” is essential.
All parents, women and men, partnered and single, need help in raising children. Yes, it takes a village. Such support encompasses partners, family members, friends, paid caregivers, and others across a broad social spectrum. Maintaining that support in ways and to the extent a parent needs is indeed a substantial challenge. Challenging though it is, it certainly can be done. Part of the lesson is anticipating these realities and applying organizational principles familiar in our profession, now to one’s own life.

Realistic and rational planning and decision making in both professional and personal domains is essential in child rearing. It must also be matched with a recognition and constant reminder that the expectation and standard is not perfection. Knowledge as a behavior analyst does not equate to flawless behavior. Uncertainty and mistakes are inevitable (and very instructive) and help make raising children the humbling and wondrous experience it is!

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My Mentors and their Influences on My Career

Linda A. LeBlanc

Linda A. LeBlanc, Ph.D., BCBA-D, MI Licensed Psychologist, is the Executive Director of Research and Clinical Services at Trumpet Behavioral Health. She received her Ph.D. in child clinical psychology in 1996 from Louisiana State University and completed her internship and postdoctoral fellowship at the Kennedy Krieger Institute and Johns Hopkins University School of Medicine. She served as a professor on the psychology faculties at Claremont McKenna College (1997–1999), Western Michigan University (1999–2008), and Auburn University (2009–2012) before becoming the Executive Director at Trumpet. She has served on the boards of directors of several national and regional professional associations and is a Fellow of the Association for Behavior Analysis International. She has served as an associate editor of the Journal of Applied Behavior Analysis, Behavior Analysis in Practice, and the Analysis of Verbal Behavior and Education and Treatment of Children and has authored many articles and book chapters on behavioral treatment of autism, technology-based behavioral interventions, behavioral gerontology, and system development in human services (Fig. 1).

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?

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

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As an undergraduate Psychology student, I enrolled in a practicum class working with children with intellectual disabilities and autism. I was lucky that Louisiana State University (LSU) has a very behavioral Psychology department and offered relevant behavioral coursework for undergraduate students. I later became involved in research during my undergraduate work. My interest in behavior analysis was really as a tool for improving the lives of those with disabilities and the world view seemed to fit very well with my interests and scientific viewpoint. My view of my career has always been that of a clinical psychologist who specialized in disabilities across the lifespan.

You attended graduate school at Louisiana State University for your doctoral training, can you take a moment to describe the graduate program (e.g., department, number of students, dynamics, coursework, advisement, etc.)?

My program was an APA approved PhD program in clinical psychology. There were three tracks – adult, child, and medical/neuropsychology. I specialized in child psychology but did some portion of my training in each of the three areas. It was one of the few behavioral child clinical psychology programs in the country along with those at Kansas, SUNY Binghamton, and WMU where I later taught. There were about 10–12 students in each cohort. The clinical program was behavioral, but the overall department included a mix of many theoretical orientations. There was a cognitive psychology program, a developmental psychology program, a social psychology program, and a school psychology program which was also very behavioral. My curriculum included everything from psychotherapy to psychometrics and advanced statistics plus all of the behavioral assessment and treatment courses. My training was much more eclectic than most people who go to behavior analysis programs where the curriculum is exclusively behavioral theory and application. The majority of my exposure to behavior analysis came from my research efforts, my behavior therapy courses, and my school psychology courses.

At Louisiana State University, who was your major professor and how did this relationship influence you?

Johnny Matson was my major professor. Johnny was very influential at a national level during the de-institutionalization years in many of the efforts to transition individuals served as developmental facilities to community based programs. He was a strong advocate for the right to effective treatment and the importance of identifying
and treating mental health issues in those with intellectual disabilities. His background, efforts, and mentorship had a huge influence on my values (e.g., science, a behavioral approach, a love of data) and my commitment to working with those with intellectual disabilities and advocating for their rights. He definitely anchored my efforts as part of important social impact that could occur in the lives of vulnerable individuals. Johnny also was a journal editor and gave me many opportunities to review papers and books early in my career.

All of these activities contributed to my appreciation for scientific research, the context and history of intellectual disabilities and behavioral services, and the leaders in our field who brought about big change. Johnny was also the primary reason that I became a professor. I had a terrible fear of public speaking which led me to think that I would not enjoy being a professor in spite of the fact that I loved research. Johnny recognized that I could potentially have a career as a professor and he took action to help me overcome my fears. He explained that the best way to overcome my fear was to teach frequently and habituate to the experience. He assigned me to teach full time in my last year of graduate school and he was absolutely right! I soon came to love the experience.

Were there any other professors in graduate school that strongly influenced you?

Dr. Timothy Vollmer also had a strong influence on me and created many opportunities for me as well. Dr. Matson told me one day that the School Psychology program had hired a great new professor that was going to be a really successful researcher (i.e., Dr. Vollmer). He indicated that I should volunteer extra time to do research with him and that I should learn all that I could from him. I approached Tim soon after he arrived at LSU and offered to work on any projects that were available to me. I was serving consumers with severe problem behavior that I thought might benefit from his research projects and we began to collaborate. Tim had expertise in severe problem behavior and research methodology. I was fortunate to work with him when he had few other students so I received many direct training opportunities where we sat side-by-side collecting data, analyzing progress, and taking turns working directly with clients during sessions. Dr. Mary Lou Kelley also had a great influence on me during graduate school. She was the only female professor in my graduate program at that time. She had three young children, was a productive researcher, a great teacher and had an independent clinical practice. She was juggling all of the balls successfully and with a smile. She was a Kansas and West Virginia (WVU) graduate who taught me how to appreciate family context and the critical impact that this context has on children and their families. She taught me about the importance of the environment on the evolution or resolution of all forms of behavior problems and psychopathology in children and family systems.

Early in your career, who were your primary leadership role models in the field?

My female role models were Dr. Cathleen Piazza, Dr. Judy Favell, and Dr. Alyce Dickinson. Cathleen was my internship supervisor at the Kennedy Krieger Institute. She taught me so much and was such a great role model of a supervisor and productive researcher. One of the most influential things that I recall her saying to me was that clinical services and research should not be considered separate things. All of our clinical services are important enough to warrant careful scientific examination to be certain that our efforts lead to good effects. I have definitely tried to follow that good advice. Dr. Judy Favell was definitely a role model, though I never met her or worked directly with her until we were both on the Board of Directors of the Association of
Professional Behavior Analysts. Early on I was aware of the powerfully effective work that she was doing in public policy, which is an important responsibility for all leaders in our field. I have always admired her values and knowledge, her presentation style, and the marvelous way that she interacts socially with people. She can turn a difficult situation into a very positive interaction very quickly! Dr. Alyce Dickinson also has always been amazing to me. She was the ONLY female full professor at Western Michigan University when I arrived there. She was successful in academic and business environments that were almost entirely male dominated and she provided great advice to me about how I might handle those kinds of situations.

Describe your first job in behavior analysis after graduate school.

I had to complete an internship as part of my degree and I stayed for a post-doctoral fellowship at the Kennedy Krieger Institute in Baltimore. That probably doesn’t count as a first job since I was still in training at the time. My first non-trainee position was as a visiting assistant professor position at Claremont McKenna College, a small private undergraduate college in Claremont, California. I taught behavioral psychology courses to undergraduate students and ran an autism clinic while Professor Marjorie Charlop was on sabbatical for the year. I also began consulting with a local agency that served adults with intellectual disabilities. They were struggling to identify dementia in their older consumers and I was one of the few professionals who had a strong interest and some expertise in this area. These jobs provided great opportunities for me to learn about supervision, teaching, and consulting.

What did you learn as a result of going on the job market for the first time after graduate school?

I learned a lot about how to give a job talk and present yourself effectively to others who might or might not share your theoretical orientation. Because I took a 1-year visiting assistant professor position as my first job, I was right back on the job market having interviews the next year. This built some fluency and experience in interviewing situations that has allowed me to coach and support others on this skill later in my career. Having this experience has really informed my own training and advisement of students who wanted to pursue academic careers. As a mentor, I provided opportunities to practice job talks with feedback well in advance of an interview so that the student can be as comfortable and successful as possible on their interviews.

Within your history you have spent many years training behavior analysts in academic roles and currently in a clinical role training strong scientist/practitioners. Can you tell us the story of that path through your career?

When I was finishing my post-doctoral fellowship, I found that I really loved the clinical services arena. I was not at all sure that I wanted to be a professor, unless I could also provide clinical services as well. I had always viewed myself as becoming a practicing clinical psychologist and applied researcher. However, I thought it might be fun to try teaching if the opportunity came along and I valued the potential to create impact at a larger scale by teaching others how to do what I could do. I knew that if I didn’t try teaching first, the opportunities would likely not present themselves later. I actually had to decide between a Clinical Director position on the east coast and the academic position on the west coast. I gave teaching a try and really liked enjoyed the experience as long as I could simultaneously oversee clinical services. In all of my positions, I have created opportunities to directly provide and manage clinical services.
– sometimes as a training experience for my students, sometimes as a community outreach contract. That allowed me to have the best of both worlds while I was in academia. After many rewarding years as a professor, I had the opportunity to join a human services agency where I could mentor hundreds of people and oversee the services for well over a thousand! That scale of impact was very appealing to me so I joined Trumpet and have loved the new opportunities, new challenges, and direct connections with families.

Advice and Guidance

Describe your primary approach to managing people (e.g., providing feedback, problem solving).

I am a strong proponent of copious amounts of praise and direct, supportive feedback. If you are constantly telling people what they do well and you can phrase the need for change as an opportunity to see them do even better, then people generally appreciate and value feedback. I tend to take a structured approach to managing people: we should all make the effort to be organized, use each other’s time well, and make expectations clear with sufficient supports to ensure that people can meet those expectations. I also prefer to set the bar high and reinforce approximations to that desired performance level while fading prompts. For example, if you need to write a program to teach a child a skill, I would want every critical component of that program present and well-constructed. For a new student or clinician, I might help them write most of the program so that they have the experience of seeing and helping to produce a final product of great quality. Later opportunities will involve less of my help and more independence, hopefully with the same quality of product resulting from the effort.

What advice did your mentor give that still influences you today?

Johnny used to encourage me to stop and plan rather than “just do.” He made it clear that he thought I could be successful in lots of endeavors, but that I would be happiest and most impactful in the field if I took the time to think about the career and path that I wanted and then planned my activities to directly move me down the path to success. He suggested that I should be structured and systematic about the opportunities I pursued. It was important for me to hear that because I was a young student and could be impulsive. I started graduate school at age 20 and finished my Ph.D and was a professor by age 26, so I likely would not have made such well-reasoned choices without his council. Also, Cathleen Piazza used to tell me that clinical work and research, for those of us that are applied researchers, should be fully integrated efforts. You should always be thinking about experimental design in your clinical work because we always want to make sure our interventions are working and worth the effort that is being devoted to them. I have tried to share both of these pieces of good advice with my students over the years. Now they will know the original sources of the wisdom!

Of all of the roles you have served in our field, what are some of the activities you have valued the most?

I really valued the opportunity to be an associate editor and reviewer for multiple journals. It was really a great opportunity for me to build fluency in research skills. Many professionals conduct a study for their thesis or dissertation and then never again
– usually because they did not reach a level of fluency with their research efforts. Collaborating with other people is one way to build this repertoire because each paper or project becomes another exemplar to learn about asking a research question, using an experimental design, and writing effectively about your efforts. Reviewing others efforts in the editorial process is another great way to see how other researchers do things such as framing the question, methods, experimental design. Being a reviewer also can teach you how to provide direct feedback in the nicest way possible, because you are handling manuscripts that are very personal to people. My first review for JABA happened because Dr. Wayne Fisher was the discussant for the very first presentation that I gave at a conference. I was so nervous that I thought I might literally be sick, but Wayne was so nice and positive in his comments. After my presentation, Wayne asked if I would be so kind as to consider being a guest reviewer for him if he mailed me a manuscript. As if I would be doing him a favor instead of what was clearly the reverse! I remember how he phrased that and when I ask someone to do a review for me, I try to remember to approach it as a valued favor that they might do for me rather than just another thing to scratch off of the task list. I have also really valued the role of teacher and mentor. As much as I was afraid of public speaking at first, Johnny was right and conquering that fear allowed me to realize that I really do love teaching. I love thinking about how to craft a training experience that really prepares a person to succeed in their chosen career after they graduate, whether that career is in the academy or in human services. Hopefully there will be many more useful roles for me to serve in our field.

What advice can you offer to people considering becoming a student in a behavior analysis program on choosing training programs and advisors?

This is general advice, for future students as well as those graduating and choosing a job. It is important to work with someone that you like and who clearly has your best interests at heart. It doesn’t really matter if it is a male or female mentor or boss, but that person has to care as much or more about what they can do to help you meet your goals than about what you are going to do to help them meet theirs. Sometimes professors admit students because the student can help them advance their already existing research agenda rather than approaching the efforts collaboratively. If you choose such a professor, it is important to make sure your goals are very well aligned with what that person’s goals because your experience is already preset when you start.

Is it important to have some experience with a same gender role model?

Of course I think it is important to observe, reflect and emulate the role models of your own gender particularly on things where gender matters. However, those role models don’t have to be people you interact with everyday. It could be someone in the field (e.g., Judy Favell), another professor in your graduate program (e.g., Mary Lou Kelley), or someone more senior in your applied setting. I would focus less on the fact that the role model has to be the same gender and more on the fact that the role model has to be a great human being that you can readily admire.

What are some leadership characteristics that have been most valuable to you?

Over time I have become a more direct leader. That is, I have become more comfortable and willing to address issues with people that I supervise. People have learning histories with feedback that are not always positive and I definitely had that same history. This can lead to people being reluctant to give feedback or approaching feedback very indirectly. This can mean that the supervisee misses the point of the
feedback or has no specific plan for what needs to change and how they would make that change. As a new supervisor, providing feedback was initially somewhat aversive and I probably vacillated between being too indirect and subtle with feedback and too direct and annoyed while giving feedback. The most important leadership skill is being able to provide direct feedback to people in a way that conveys how much you value them and their success. A second important leadership skill is seeking feedback for your own performance so that you can more clearly recognize the impact that you have on others. You also have to take the feedback that others provide as pertinent to your behavior rather than your personal value. That is, the onus is on the leader to reflect on their relationships, seek and use feedback, and value the environment that you create for other people on a daily basis.

Can you speak to any barriers that you faced and how you dealt with them?

Well that definitely can be an issue in academic settings, although plenty of other issues can arise in social environments or in non-academic situations. Being effective at your primary duties and responsibilities can be a buffer against certain challenges. For example, evidence that you teach well helps to balance out the more negative ratings and experiences that women have tend to have compared to their male teacher counterparts. But difficult situations can arise when you least expect them. I remember teaching an upper level undergraduate class at Western Michigan University. One student was doing relatively poorly in my class and had spotty attendance. One day he received a low grade on a test in class and stormed out of the room, flinging the door open so hard that the knob went through the drywall on the other side. He was a big guy and I definitely planned what I would say if he returned at the end of class if I were alone in the room. All of my colleagues were supportive, especially Alyce Dickinson who gave me great advice for this situation and others. I have also encountered situations in which men interacted inappropriately with younger females in our field. I think it is really important to speak up about these situations if they are going to impact your students or colleagues or you directly. There are some relatively prolific behavior analysts that behave inappropriately towards female students and young professionals at conferences. When I see these situations occur, I address it directly and immediately. I choose to take this role and am not afraid that my career will suffer for my actions, but those younger woman may fear reprisal if they speak up on their own behalf. It is important to not let everything little thing get to you, but pick your battles and be willing to fight the ones that matter for yourself and other women. Now that I am in the private sector as an executive, I am often the only woman in the room during board meetings or other executive level social functions. I haven’t found that to be a problem as long as I am willing to speak up when I have something useful to say. I think as long as you are paying attention to the outcomes you produce, it doesn’t really matter the gender of the people that are having the working relationship.

In this time of growth in behavior analysis, what advice do you give to behavior analysts of the future?

Our field is growing very rapidly and there is a huge supply/demand imbalance in applied settings. There are so many more consumers who need us than we have the capacity to serve. We have to be careful because this could lead to pressure to produce more students more quickly. If students are rushed to complete their degree and get into the workforce quickly, they may not get the experiences that they need to succeed in that workforce. It can also lead to new higher education programs that may or may not produce the same quality of graduate as those that have been produced in the past.
When inexperienced or under qualified people are hired into situations without substantial ongoing supervision and professional development, those consumers who need our help suffer. I also think that we have to find ways to continue to communicate to our new young professional the values that go with our field. That is, we take pride in producing meaningful change in the lives of people with disabilities and we have a long and important history of doing so. We have to tell younger professionals every day about the important events and people in the history of our field to create appreciation for those amazing leaders who preceded us in different times. People like Johnny Matson, Judy Favell, Mike Cataldo, and Richard Foxx actively crafted our field and they did so due to a mission and vision about the future of the field. It is scary to think that we might lose that history, impact, and opportunity for big change. My advice is to know the story, tell the story and influence people to strive to do “good” in the world!

Can you share a story about a time in your career that you made a mistake and how you changed your approach in the future?

My mistakes have been so numerous that I can’t possibly keep track of them all. I make them every day and will surely continue to do so. The critical thing is to recognize the mistake as quickly as you can, apologize sincerely and immediately to those who suffer ill effects, and figure out what to do differently in the future. Figuring out what to do differently in the future generally arises from reflection on what pieces of information failed to control your response previously. Of course it helps to start off by doing a careful analysis and problem solving exercise before you respond to a situation so that you limit the number and scope of your mistakes.

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.

My advice would be to a) plan ahead as much as possible and b) create effective stimulus control so that you can enjoy both roles and responsibilities. My advice for women is only different for women than for men because a higher proportion of professional women are likely to be in two career families and because of the possible physical complications of childbirth for women. The physical and emotional impact of pregnancy, childbirth, and the first 6 months of a child’s life are difficult to comprehend until you actually experience them (i.e., amazingly elating and amazingly difficult). People often plan on everything going really well (e.g., work until a few days before childbirth, baby and mother have no complications, take 8 weeks off, have all of your energy and cognitive faculties fully intact when you go back to work) and then experience stress and disappointment when they are “unexpectedly” fatigued, emotional, or have to take additional time off due to emergencies, illness or complications. The old rule of thumb “hope for the best but PLAN for the worst” is absolutely the way to go for this particular life event and for ongoing parenting. It is important to make an honest evaluation of your expect with your parenting partner if you are a dual career couple. Being part of a dual career couple means that my husband and I have to share almost all parenting duties so that we can each be successful with our daughter when the other is unavailable and each maintain success in our careers. You also have to actively program for stimulus control to facilitate your greatest enjoyment of each role. This may mean turning off the email when you are able to be home with your family or only working on projects after your children are asleep. It also means that you have to be organized and efficient at work to get as much done as possible during the hours that
you are devoting to your job so that you don’t bring work stress home with you. When that stimulus control gets weakened and the roles interfere with each other, unhappiness and stress result. The important thing is to recognize your own role in purposefully creating time for enjoyment of each role.

*Are there any other topics that you could elaborate on that specifically pertain to your mentorship practices with female professionals?*

Men may be more likely to actively seek out leadership training and resources than women. I try to actively create opportunities to talk about leadership by running a weekly leadership mentoring group in my company. We explicitly focus on effective strategies for leadership and the importance of becoming a mentor to others.

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A Challenging and Satisfying Career in Basic Science

Frances K. McSweeney¹

Dr. McSweeney is Regents Professor of Psychology and Vice Provost for Faculty Affairs at Washington State University (WSU). She received her B. A., Summa Cum Laude, from Smith College and her Masters and Ph.D. from Harvard University. She taught for one year at McMaster University before joining the faculty at WSU where she rose through the ranks to Regents Professor. Dr. McSweeney has served as Chair of the Department of Psychology, Chair of the Faculty Senate, and Vice Provost for Faculty Affairs at WSU. She also served as a member of the Executive Council, and as President of, the Association for Behavior Analysis International (ABAI). She has received awards from her university such as the 2002 Sahlin Faculty Excellence Award for Research, Scholarship and Arts and the 2004 Eminent Faculty Award, the university’s highest honor. She also received the Med Associates Distinguished Contributions to Behavioral Research Award from Division 25 of the American Psychological Association.

Dr. McSweeney has been cited as a prolific author in behavior analysis (Shabani et al. 2004). She has studied the matching law, behavioral contrast, and the participation of women in psychology. Her current research examines systematic changes in the effectiveness of reinforcers with their repeated delivery. She believes that sensitization and habituation to the sensory properties of the reinforcer produce those changes in reinforcer effectiveness. Sensitization-habituation may eventually provide the key to understanding the termination of many behaviors that are currently attributed to

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different mechanisms (e.g., termination of feeding to satiation, of running to fatigue, of studying to boredom). Arguing that many behaviors stop partly because of habituation to the sensory properties of their reinforcers suggests a common theoretical explanation for diverse behaviors, as well as entirely new methods for controlling these behaviors in practice.

**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?*

My college did not teach behavior analysis, but it did require Psychology majors to take four field exams at the end of their junior years. I chose an examination on motivation. I read Bob Bolles’ book on the subject in preparation for the exam and was strongly influenced by it. Bob was not strictly a behavior analyst, but he was a hard-core experimental psychologist who worked with non-human animals and addressed the major questions in our field. So, Bob’s book was a major influence. Second, I liked working with non-human animals and was particularly interested in studying basic principles of behavior that would apply to many species. Third, I liked math and wanted to study a subject that produced data that were orderly enough to permit mathematical analysis. I liked neuroscience but I couldn’t imagine a life of cutting up animals. As a result, I migrated towards behavior analysis. It examined interesting questions and had the rigor of neuroscience without the blood.

*You attended graduate school at Harvard University 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’ll go into a little detail because the Harvard program has been so influential in behavior analysis. When I entered the program at Harvard, there were two psychology departments. The Department of Social Relations contained the “softer”, more humanistic, side of psychology, such as social and developmental. The Department of Experimental Psychology housed the “harder”, more scientific, side of psychology. It had four major areas of emphasis at the time: learning and motivation (basically the Experimental Analysis of Behavior, EAB), cognitive, physiological (now neuroscience), and sensation and perception.

The main office of the Experimental Psychology Department was on the 6th floor of William James Hall. Each of the four areas of emphasis had laboratory space on a floor above the 6th floor. The operant lab was on the 7th floor. Students usually spent their first year with an office on the 6th floor and then moved to their laboratory floors for the rest of the program.

The faculty of the department was a “who’s who” of psychology. Skinner, Herrnstein, and Baum taught EAB and Herb Terrace visited for a sabbatical year. Jerry Bruner, among others, taught cognitive. Charlie Gross and Dick Thompson (for approximately one year) taught neuroscience. S. S., aka “Smitty”, Stevens was in charge of sensation and perception. The graduates of the program were also a who’s who of American psychology. A list of the names of all of the past PhD recipients was located outside of the department library on the 6th floor. It served as an inspiration for current students.
Students were only admitted to the department for the PhD but could obtain a masters along the way. The first year of the program was devoted to course work. After that, students moved on to research. The first-year curriculum included a required pro-seminar that covered psychology as the department defined it. Someone from each of the four major areas taught a part of the course. The first day of the course, and our first day in graduate school, Herrnstein told us that the purpose of the course was: (1) to forge us into a unit through adversity, (2) to help them to evaluate us relative to each other, and least important, (3) to teach us some psychology. He indicated that the faculty didn’t believe they were teaching us anything. Instead, they were just assessing how well we could overcome the hurdles that they placed in our way. The hurdles were very major indeed, large enough to weed out a lot of talented students.

To receive our PhDs, we were required to pass two exams in each of two foreign languages from among French, German and Russian. My languages were French and German. I had studied some French in high school and college, but I passed the German exams through flash cards and luck. The department did not offer a statistics course, but we had to pass a statistics exam. We also took prelims (preliminary examinations) as a group, the week after Labor Day at the end of our first year. We took one prelim per day over the course of four days. Each of us was required to take three exams from the four major research areas, but we could replace one of those areas with an alternative. I replaced sensation and perception with comparative psychology. No reading lists were provided. We just had to “know the field.” Approximately half of the students failed prelims each year. They were allowed to take the exams again the next year, but few did. Most of them left the program.

JEAB (the Journal of the Experimental Analysis of Behavior) published a special issue about the Harvard EAB program. I have an article in that issue (McSweeney, 2002) if anyone is interested in more information.
At Harvard University, who was your major professor and how did this relationship influence you?

I think I was B. F. Skinner’s last student before his formal retirement, although he had other students after he formally retired. I’m still known as a “Skinner student”, 40 years later. He was an amazing advisor who emphasized writing. He taught me that people don’t have any contact with your ideas except through your ability to communicate. Written communication usually reaches more people than oral communication, so you should write clearly. He recommended Rudolf Flesch’s book, *The Art of Plain Talk*. I still do a final, “Flesch”, revision of any paper that I write and I recommend the book to my own students. Skinner taught me about the importance of orderly data, the virtues of the single-subject design, and the advantages of the inductive, empirical, approach to research. I also learned how to be a better mentor from him. He was always available, set high standards, but was extremely kind.

Were there any other professors in graduate school that strongly influenced you?

Herrnstein and Baum because of their approach to, and influence on, behavior analysis. S.S. Stevens also contributed to my love of orderly data and he taught me the importance of brevity in speech. When he taught the pro-seminar, he required each student to present a 10-minute talk on a topic that he assigned. If the student had not finished his or her talk after 10 minutes, Stevens slammed a book on the table. I still try to be brief when I talk, to leave the audience wanting more, rather than less. I also learned a lot about teaching from Charlie Gross, a neuroscientist. I enjoyed his lectures because he was a showman. He was funny, moved around the room a lot, and occasionally wore a black cape with a red lining. I imitated him some in my own teaching, without the cape.

Early in your career, who were your primary role models in the field?

The Harvard group that preceded me, including Skinner, Herrnstein, Baum, Rachlin, Catania, Fantino, Neuringer, Hineline, Killeen, Williams. Allen Neuringer has been particularly supportive over the years. Herb Jenkins was one of my favorite researchers because his work always showed us that we didn’t know anything about behavior. His findings on autoshaping, sign tracking and the feature positive effect were unexpected at the time. Howie Rachlin was another of my favorite researchers. I enjoyed the topics he chose and his insights into those topics. I didn’t have much contact with Vic Laties, but he also had an impact. He was the editor of *JEAB* when I started publishing. I don’t think there’s a kinder person anywhere. He showed me how to evaluate manuscripts by asking whether they taught me anything.

Describe your first job in behavior analysis after graduate school.

I went to McMaster University in Ontario, Canada to teach behavior modification before finishing the requirements for my PhD. That job required me to learn about behavior modification, an entirely new field for me. I also quickly discovered how much I still had to learn about conditioning. Herb Jenkins, Shep Siegel and John Platt were at McMaster at the time. They taught me a lot, particularly about classical conditioning. It was an exciting time. Jenkins was working on sign tracking, Siegel was working on the compensatory response theory of the classically-conditioned response. The Rescorla-Wagner model of classical conditioning was new. My time at McMaster also taught me how demanding an academic position can be. There is so much work to do. The Harvard training of how to hurdle really came in handy.
What did you learn as a result of going on the job market for the first time after graduate school?

I entered graduate school, the same year that Time Magazine ran a cover story about how we were entering a dark ages for higher education. Then I received my PhD in 1974, which was one of the worst economic years since the Great Depression. It was not as bad as the recent recession, but pretty bad. I didn’t apply for the behavior modification position at McMaster because I wanted to do fundamental research with non-human animals. The students ahead of me in the operant laboratory at Harvard did not set good examples for job hunting. As I recall, no one had sought, or received, an academic job since Ben Williams left approximately five years before. I was offered several postdoctoral positions and I interviewed for a couple of jobs that did not pan out. Nevertheless, I was fortunate because I got what I think was the only tenure-track position available in EAB when I took the position at WSU. The message for me was not to give up, no matter how dark the situation.

Advice and Guidance

Describe your primary approach to managing people (e.g., providing feedback, problem solving).

I do have a lot of “managerial” experience, but I like to think of it as working with people rather than managing them. When I can, I prefer to lead by example. However, when that is not possible, I prefer to be collaborative in my approach. Being a good leader involves remaining optimistic even when the “sky is falling”. Good leaders should always ask: how we can move on from here, rather than who can we blame for the problem? I also think it’s important to retain your sense of humor no matter how hard that may be.

What advice did your mentor give that still influences you today?

I talked about Skinner’s advice that there isn’t anything more important than clear writing. He also said, “When you run onto something interesting, drop everything else and study it.” (Skinner, 1956, p. 223). That advice has guided my choice of research topics over the years. I’d also add something that S. S. Stevens said. He argued that experiments fail for one of two reasons: either you didn’t vary the independent variable over a wide enough range or you chose a dependent variable that was insensitive to that independent variable. So when my experiments failed, I tried changing either the range of the independent variable or the nature of the dependent variable. That advice also worked well over the years.

Of all of the roles you have served in our field, what are some of the activities you have valued the most?

The role that I have probably enjoyed the most is working with graduate students. I would never have had the career I’ve had without the help of the talented, disciplined and hard-working students with whom I have worked. So thank you all very much.

It was a special honor to serve as the President of ABAI. There are some strong, capable, women involved with ABAI: Maria Malott, Sigrid Glenn, Carol Pilgrim, Linda Hayes, to name just a few. I also served with very capable men including Jack Marr, Mike Perone and Jay Moore. As a result of all of their efforts, ABAI is a very well-run organization. I learned a lot of specific lessons from these colleagues and I
learned the general lesson that working together is really critical. We’re stronger as a group than we are as individuals. I also liked having the chance to influence our field and to represent the basic experimental side of the discipline.

I’ve enjoyed my editorial roles and my service on grant panels because I’ve learned a lot from the papers and grant proposals that I’ve reviewed. I learned that I needed to read a paper at least three times before I really understood it. Then, the critical questions to be answered in a review included: is this good science; did I learn something from the paper; and are there any suggestions that I can make about how to improve it? I also tried to be relatively nice in reviews so that the authors could “hear” the message and put it to use. Peer review doesn’t have to be the brutal system that it can be at times.

What advice can you offer to people considering becoming a student in a behavior analysis program on choosing training programs and advisors?

Be really careful and do your homework before deciding on a program or advisor! Weigh your options carefully because the program you choose will fundamentally shape your entire career. It is critical to be interested in, and have a passion for, what you choose to do because, if you’re lucky, you’ll be doing it for a very long time. So find a program that will let you indulge your passion.

Is it important to have some experience with a same gender role model?

I think it is important to have good role models and mentors throughout your career. You can learn what not to do, as well as what to do, from them. I certainly benefited from strong female role models as an undergraduate at Smith College where I had plenty to choose from. In contrast, there were not many women at Harvard and I missed having them available.

I also think that it’s important to have strong, male role models. In my opinion, the support of sympathetic males is critical to making progress for women. I could not have succeeded at WSU if I hadn’t had the support of men such as Tom Brigham, Jay Wright and Ron Hopkins.

What are some leadership characteristics that have been most valuable to you?

I think that building trust is very important. You can do that by being straight-forward and never violating the trust that you’ve already built. It helps to be pretty placid emotionally. If you don’t change dramatically from day to day, people will always know what they will face when they come to talk to you. It helps to be energetic, so things get done. A sense of humor is critical, especially laughing at yourself. I also try to use the Golden Rule when making decisions. Doing unto others as I would have them do unto me has served me well over the years.

Women in behavior analysis face challenges in some settings due to socially constructed values (i.e., teaching evaluations). Can you speak to any barriers that you faced and how you dealt with them?

Yes, I think that I’ve faced some barriers, but things are improving. I’ve had it much easier than those who came before me and I hope that my generation will pass on an even better situation to those that follow.

The women that preceded me often dealt with flat-out rejection and denial of their abilities. I think that most of that overt discrimination was becoming covert by my time. Women in my cohort were more likely to die a death of a thousand small, subtle, cuts than to be dealt the single, knockout, blow that earlier women faced. There were many more men than women in EAB when I joined the field. As a result, it was socially acceptable to treat women badly, as servants rather than equals. It was also common for
women to be "stepped on". I was giving a talk at the Society for the Quantitative Analysis of Behavior and a prominent behavior analyst came up and took over the podium during my presentation. He wasn’t being unfriendly, but he was using my time to promote his work. I don’t think he would have done that to a man. I tried to be polite, roll with the punches, and maintain my sense of humor, but the point is that a man probably wouldn’t have had to expend that energy. It’s a small thing, but those "cuts" accumulate.

Today, I think that covert discrimination remains strong but has moved to higher levels. Take a look at the list of invited speakers at the ABAI convention over the last few years. The last time I looked, most of the invited speakers were men, even though women outnumber men in our field. That is, women can enter the field, but it’s hard for us to lead. That’s a reflection of our culture, it’s not anyone’s fault and we can hope that that will change soon.

*In this time of growth in behavior analysis, what advice do you give to behavior analysts of the future?*

I think that we have to pay attention to the perception of behavior analysis. We are often viewed as heartless, inhumane, monsters. In my opinion, it behooves us to work on correcting this misconception even at the cost of temporarily discarding some of the purity in our language. As any scientific discipline, we have a unique technical language that can be isolating. I think we have a lot of explaining to do to other psychologists and to the public.

*Do you have any specific advice that you would provide to women in behavior analysis?*

We have gained a lot over the years, but I think that there is room for more progress, particularly at the highest levels. We need to band together and organize to make progress. At WSU, we have an organization called the Association for Faculty Women. It holds monthly meetings for networking, support and advocacy for women. The members have been an important source of support and guidance for me over my career. If you don’t have such an organization where you work, build one.

*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.*

Women need to take the questions of whether and when to have children more seriously than men do. With only a few exceptions, women will be doing most of the work of child-raising, no matter how helpful their husbands are. I don’t think there is a cookie-cutter answer to the questions of whether or when to have children, or about any other life choice. But I would say that you need to pay attention to those decisions. Don’t just make them by default. In my opinion, it isn’t possible to be productive in your career unless your personal needs are reasonably satisfied. Everyone needs to have a life, not just a profession. That’s true regardless of whether the choice is about having children or about whether you can spare the time to exercise or get together with friends. Be sure to take care of your personal needs so that you can get through the marathon, not the sprint, of your career.

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Compliance with Ethical Standards  In addition, human or animal participants were not employed for this manuscript, so informed consent was not necessary.

References


Influences on My Early Academic Career

Anna Ingeborg Pétursdóttir

Anna Ingeborg Pétursdóttir (Fig. 1) received her Ph.D. in psychology from Western Michigan University and is currently an associate professor of psychology at Texas Christian University. Her primary area of research is verbal behavior and its acquisition. Her applied research interests include strategies for enhancing verbal behavior acquisition of children diagnosed with autism, whereas more basic research interests include typically developing children’s language acquisition and how research and theory in this area may translate into effective language interventions. Dr. Pétursdóttir’s research has been published in the Journal of Applied Behavior Analysis (JABA), the Journal of the Experimental Analysis of Behavior (JEAB), and The Analysis of Verbal Behavior (TAVB), among other journals. She is past editor of TAVB and the current Publication Board Coordinator of the Association for Behavior Analysis International (ABAI). She also currently serves as the associate editor of JABA and an editorial board member of JEAB and the European Journal of Behavior Analysis, in addition to having served on the editorial boards of various other journals. Dr. Pétursdóttir is a past president of the Texas Association for Behavior Analysis.

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?

Many influences converged on this decision. As an undergraduate student at the University of Iceland, I was exposed to B. F. Skinner’s original writings in courses

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that I took with professor Magnús Kristjánsson. I remember reading About Behaviorism and “The Operational Analysis of Psychological Terms,” among others. Then I found Walden II and Beyond Freedom and Dignity among my grandfather’s books, and I read those too. I didn’t understand half of what Skinner was saying, but I was fascinated. Most of psychology seemed disjointed to me; it seemed full of theories and findings that only applied to some small subset of human behavior. Skinner addressed everything, and I found it appealing.

There was also a required course on behavior analysis that I enjoyed, and then an elective course on single-case designs with Gabriela Sigurðardóttir, where the readings included most of Sidman’s Tactics. That was an absolutely phenomenal course. There were seven of us in it, and most of us ended up getting involved in behavior analysis one way or another. Four of us ended up in behavior analysis graduate programs in the USA, including Einar Ingvarsson, one of my fellow JABA Associate Editors. And I don’t think it was something any of us had considered before we took that course. I enrolled in the course because I was a little bit of a methods and statistics geek (incidentally, although I don’t recall any mention of behavior analysis in my statistics classes, the professor I had for most of them was Þorlákur Karlsson, a behavior analyst out of West Virginia). I found myself fascinated by the single-case approach, and what little I understood of Sidman’s book at the time had a profound influence on me.

That same semester, which was my last one as an undergraduate, I interviewed Dr. Sigurðardóttir for the psychology students’ annual newsletter, of which I was the editor (with Einar Ingvarsson as a sidekick). After writing up the interview, I remember thinking long and hard about behavior analysis as a grad school option. The following fall, I started working as an in-home therapist for a child with autism (once again, with Einar Ingvarsson as one of the child’s other therapists) and then there was no return. This was in the mid-1990s and one of the first children in Iceland to receive intensive behavioral intervention. I stayed with the family for two years, and it was an incredibly enriching and influential experience that became a huge factor in my decision to pursue behavior analysis, although a couple more years went by before I made the leap and started applying to graduate programs.

I also want to mention that during the years leading up to graduate school, Gabriela Sigurðardóttir was hosting potlucks at her house once or twice a year, to which she invited all of her current and former students who were interested in behavior analysis.
Each year, one or more students left for the USA to pursue behavior analysis at the graduate level, and each time, they got sent off with one of these potlucks and a special t-shirt with a drawing of B. F. Skinner on it. I won’t lie—I wanted the t-shirt badly! Gabriela also made sure that we met every prominent behavior analyst who visited Iceland (Gina Green, Phil Chase, Ed Fantino, and others), and these encounters helped solidify my interest as well.

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

The psychology department at Western Michigan, of course, is a major powerhouse of behavior analysis. I didn’t think I was going to get accepted there and was excited beyond belief when I received my acceptance letter. The years I spent there were the best years of my life. I don’t know how many graduate students were there, probably somewhere between 50 and 100. There were behavior analysis students, clinical students, I/O students, and school psychology students (at least the first year or two I was there), but behavior analysis permeated everything because all of the faculty were behavioral. It was a great time to be there because the faculty included both prominent senior leaders in the field and highly productive, up-and-coming folks. I also had the chance to be around and make friends with many excellent graduate students, including many people who have been highly successful in their early and mid-career endeavors.

**At Western Michigan University, Who Was Your Major Professor and How Did This Relationship Influence You?**

I worked with three different mentors, and each one of them had a profound influence on me. I started out with Dick Malott, who taught me new way of thinking. I then went on to work with Jack Michael, for the last two years before he retired, and he obviously sparked my interest in verbal behavior. Finally, Jim Carr was my Ph.D. mentor, and he taught me to do good research, to think as a scientist and a clinician at the same time, and a great many other things as well. Nine years later, I still find myself thinking “How would Jim handle this situation?” or “How would Jim phrase this?” all the time. He probably doesn’t know this, though, because I hardly ever stop to actually ask him.

**Were There any Other Professors in Graduate School That Strongly Influenced You?**

Absolutely, I think every professor I had contact with in graduate school had a strong influence on me in one way or another. I almost hesitate to mention specific individuals because that means I am leaving out others who also deserve mention. But one of them was definitely Linda LeBlanc, not just because of what I learned from her formally but also because she served as a role model for me, as a young, talented female in academia who also became a mother while I was there and seemed to handle both roles perfectly. In addition, there were a number of courses that I took with faculty other than my mentors that I find myself thinking back to a lot because I learned something in them
that still influences me: for example, an EAB course with Al Poling, a course on childhood psychopathology with Scott Gaynor, a psychology of work course with Alyce Dickinson, an ABA survey course with John Austin, and, last but not least, three excellent statistics courses that I took with Brad Huitema. I had a pretty decent statistics background before grad school, so I already had a pretty good idea of which tests to run in which situation and how to run them, but Dr. Huitema’s courses added an important layer of conceptual understanding of statistical inference that I have found extremely useful for planning, conducting, evaluating, and interpreting research, including behavior-analytic research (my own and that of others) that does not make use of inferential statistics at all.

Early in Your Career, Who Were Your Primary Leadership Role Models in the Field?

Besides my mentors and my other professors, my role models have always included people who produce high-quality research that advances the science or application of behavior analysis. When I was in graduate school, there had already been a huge influx of women into the field, but a large majority of the high-profile researchers were still male (see Shabani et al. 2004), and I don’t know how much that has actually changed. So I always very much looked up to, and still look up to, strong female researchers like Dorothy Lerman and Rachel Thompson, among many others.

Describe Your First Job in Behavior Analysis After Graduate School

My first job after graduate school was my current job at Texas Christian University (TCU). However, I had previously spent a year back in my hometown in Iceland, teaching at the University of Akureyri while working on my dissertation. TCU was the first job I interviewed for. It seemed like an excellent match for what I wanted—a smaller university that places a heavy emphasis on quality teaching and undergraduate student engagement, but also provides excellent support for research and, in my case, an opportunity to mentor Ph.D. students. It has turned out to be a fantastic place to work (not to mention the great football team!), so I am still here. I am the only behavior analyst in the psychology department, and I often get comments on how hard that must be. But I see it as a good thing. I have plenty of opportunities to interact with the behavior analysis community by going to conferences, reviewing manuscripts for journals, serving behavior analysis organizations, and collaborating with behavior analysts outside of TCU. Not having behavior analysts around me every day at work broadens my perspective, as it allows me to interact with and learn from a more diverse community of researchers who study human and animal behavior. It forces me to think about my research and about behavior analysis in general from a different point of view. I also think it’s good for my graduate students. My students are not in a behavior analysis graduate program; instead, they are working toward a Ph.D. in experimental psychology. They typically come in having completed Master’s degrees or some amount of graduate coursework and supervised experience in behavior analysis. During their time here, they take a small set of core psychology courses, a few additional courses in learning and behavior analysis, and then just do a lot of research. I think a major strength of the experience they get here is that they need to learn to explain their research, why it
is important, and why the methodology makes sense, to a general academic audience, while minimizing behavior-analytic jargon. That, I think, is a hugely valuable skill to have for any behavior analyst considering an academic career. It sometimes means learning to use language that would cause failing grades in any behavior analysis course, but there is a time and a place for that language. Audience control is important.

Advice and Guidance

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

I try not to be an aversive stimulus; I think that’s my primary approach. Honestly, managing people is not one of my strengths and not something I particularly enjoy thinking about. My approach to it is largely contingency-shaped, and I make many mistakes.

What Advice Did Your Mentor Give That Still Influences You Today?

I find myself constantly influenced by various pieces of advice or wisdom from my mentors. For example, I feel like in every single lab meeting with Jim Carr I picked up a piece of important information that has stuck with me and influenced either the way I do research or some aspect of my professional development. But because you are focusing on women, the one I am going to share is a piece of advice that I got from Jack Michael. I don’t think it was directed at me personally, it was more of a general comment on the underrepresentation of females in academia and factors that may influence women’s graduate school and early career decisions to a greater extent than men’s. I won’t be able to replicate the way it was delivered, which was pretty humorous as I recall, but it was to the effect that your degrees and early career moves stay with you for life, whereas there is no guarantee that a man will!

Of All of the Roles You Have Served in Our Field, What Are Some of the Activities You Have Valued the Most?

Two of the roles I have enjoyed the most have been serving as the editor of TAVB and an associate editor of JABA. These roles have provided me with the opportunity to interact with a lot of people in our field in their roles as authors and reviewers, as well as an opportunity to assist authors with shaping the final products of important and innovative research. What I always enjoy the most, of course, is being able to accept a good paper for publication.

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

Do what you can to follow your interests (e.g., try to scope out potential mentors who do work that you feel like you can be truly passionate about) instead of choosing based on convenience (e.g., a program close to home). You will encounter many more reinforcers that way. It’s hard to become good at something you don’t care a lot about.
Is It Important to Have Some Experience with a Same Gender Role Model?

I think only data can inform us of its importance in general. But anecdotally, I feel like it was important for me as an aspiring female academic to have female role models. As I mentioned earlier, successful women in academia have always been very salient stimuli for me. When I was an undergraduate, I made the observation that full-time faculty at my institution were mostly male, whereas female instructors were mostly adjuncts. Even Gabriela Sigurðardóttir, who had such a strong influence on me at the time, was an adjunct at the time I took her course, although she later obtained a full-time position. And it sounds crazy to me now, but at the time (perhaps assisted by comments from other students), I seriously came to think of it as something that men do. So yes, I think it was hugely important for me in graduate school to observe multiple exemplars of accomplished, tenured female faculty (Linda LeBlanc, Alyce Dickinson, Lisa Baker) who were not just good but great at what they did. I also remember being impressed with the fact that ABAI had had not just one or two, but many female presidents elected by its membership.

What Are Some Leadership Characteristics That Have Been Most Valuable to You?

There are many leadership characteristics that I value in other people, including fairness, transparency, flexibility, and willingness to listen. But my own leadership skills are very much a work in progress.

Can You Speak to any Barriers That You Faced and How You Dealt with Them?

It is rare for me to feel disadvantaged by my gender as I go about my work on a daily basis. But that does not mean that barriers do not exist. In academia, it has been shown that men tend to receive more favorable teaching evaluations than women. There are also data showing that parenthood has differential effects on the careers of male and female academics. And whatever the reason, it looks like service responsibilities in academia fall disproportionately on females (Misra et al. 2011). Then there are little things like the fact that I often receive email from students in which they address me as Ms. Petursdottir, whereas my male colleagues report always being addressed as Dr. or Professor (at least to the extent that students still bother opening email messages with a greeting). We’ve come a long way since Mary Whiton Calkins was denied a Ph.D. at Harvard on account of being a woman, but we still have a long way to go. Of course, as women become more powerful in behavior analysis and elsewhere, we also have to watch out for the fact that future social constructions could as easily affect males in a negative manner.

In This Time of Growth in Behavior Analysis, What Advice Do You Give to Behavior Analysts of the Future?

These are definitely exciting times for behavior analysis. While the growth has been driven by demand for services, it has resulted in a great many new graduate programs around the world, which means more academic manpower with the potential to
advance our science and help it reach a wider audience. My first piece of advice is to be bilingual. Know your behavior, but please be able to translate it into the way that other people talk, not just laypersons but also scientists in other fields. My second piece of advice is to avoid dogmatic thinking, which is unfortunately something I encounter all too often among junior (and sometimes not so junior) individuals in the field. Behavior analysis is a science, not a religion, and there is no place for dogma in it. Be sure you allow data to change your mind, and keep in mind the distinct possibility that B. F. Skinner may not have been right about everything he ever said.

**Can You Share a Story About a Time in Your Career That You Made a Mistake and How You Changed Your Approach in the Future?**

I make mistakes every day and try to change my future behavior as a result, sometimes successfully and sometimes not. It probably depends on the consequences of the mistake, doesn’t it?

**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 find it difficult to answer this question without going on a rant about the lack of resources available to working parents in the USA. Where I come from, paid parental leaves are mandated by law and high-quality child care is subsidized until school age. Those were the resources I grew up to expect to be available to me in the future, and it never occurred to me that careers and children might be extraordinarily difficult to combine, beyond the logistics of figuring out when to get the laundry done. In the USA, having a baby typically means that either one parent has to leave the work force or the parents have to pay exorbitant sums of money for strangers to care for the baby, and worst of all, this starts when the infant is only a few weeks old. These aren’t choices that anyone should have to make.

I work in academia, and I would advise all females who are considering an academic career and also planning to have children (or already have them) to read a book called *Professor Mommy* by Rachel Connelly and Kristen Ghodsee. This book contains a lot of good information about working in academia and is full of useful and fairly optimistic advice for women who want to combine academic careers with motherhood. Obviously, parenthood affects women in ways that it cannot affect men because of the physical realities of pregnancy and breastfeeding. Even the healthiest of pregnancies brings fatigue and major loss of productivity, and that’s before things even start to really get busy at home with the arrival of the infant. The fact also remains that although mothers and fathers are increasingly splitting child care responsibilities, and it is increasingly common for women to be primary breadwinners, women are still less likely than men to have a spouse who stays at home entirely or has flexible hours. So all things considered, it is not surprising that having children is more likely to disrupt the academic career of a woman than a man, and yet their work gets measured against the same standards, as it should. One problem with academia is that an academic career does not start until you are in your late twenties or older, and you don’t get tenure until your mid-thirties or later. If you plan to have children, you have to make a choice
between having them pre-tenure, when setbacks to your productivity leave you vulnerable, or waiting until after tenure, when it is getting very late, biologically speaking. It is a very difficult situation for women. I echo the advice that Connelly and Ghodsee give in their book, which is to ask a lot of questions of potential employers and make employment decisions in part based on things like maternity leave policies and the possibility of tenure clock stoppage for childbirth. These types of policies can really make a huge difference in terms of minimizing career disruptions. In general, it is important to plan ahead to minimize disruption and to adopt time management strategies that help make up for any loss of productive time.

I want to emphasize that although I have pointed out some obstacles, I am not advising anyone against combining motherhood with a career. I have two young children myself, and it has been nothing but an improvement to both my professional and my personal life. In terms of productivity, I spend far fewer hours in front of my computer than before, but a much higher proportion of these hours are productive hours. I have for a long time now collected data on the number of productive hours that I allocate to different professional responsibilities. It turns out that even though I spend much less time working than before I had children, I have almost as many productive hours overall, and during those productive hours, I am getting more things done in less time. This semester, for example, with an infant and a toddler at home, I have managed to spend more time on my own research than in any semester since I started my academic career (except during a sabbatical), even though my teaching and service responsibilities are just as heavy as before. I just work faster. And meanwhile, I’m actually taking every weekend off to hang out with my kids, which is a great improvement over all the weekends I spent working before. But things may be a little different for me than they are for many others, as I have a pretty family-friendly employer, and I had my children after tenure, when the pressure was off and I also had enough experience to be able to become more efficient at my job than before.

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References

Joy and Fulfillment as a Female Behavior Analyst

Beth Sulzer-Azaroff

A background in elementary education set the stage for Dr. Beth Sulzer-Azaroff’s search for methods to promote productive student performance. Once introduced to the power of applied behavior analysis as a science and technology, she used it to conduct research, consult, and teach across a broad range of populations. She first taught at Southern Illinois University, subsequently at the University of Massachusetts, Florida International University, the University of North Texas, and Florida Gulf Coast University. She frequently consulted on methods for promoting performance quality in business, service, and educational and training organizations. Author or co-author of 17 books or major book revisions, 100+ published papers and text chapters, she also served as the first female president of ABAI and co-founder of the Berkshire Association for Behavior Analysis and Therapy, member and Chair of the American Psychological Association’s (APA) Division 25 (Experimental Analysis of Behavior), Board of Scientific Affairs and Committee on Continuing Education; Chair of the Cambridge Center for Behavioral Studies and others. She has been Associate Editor of the Journal of Applied Behavior Analysis (JABA) and an editorial board member for numerous other behavioral journals. She was elected to the Connecticut Academy of Science and Engineering, Fellow of six divisions of APA, plus the Association for Behavior Analysis, International, Academy of Behavioral Medicine, and the American Psychological Society. In addition, her colleagues have been gracious enough to award her several awards as well for her work (Fig. 1).

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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?

In the mid-fifties, my husband, Edward Sulzer, was pursuing his doctoral degree at Columbia University. Fred Keller’s course acquainted him with the analysis of behavior. Ed would relay what he learned and we discussed how such concepts as effective applications of positive reinforcement might heighten my effectiveness as a grade-school teacher. In testing those ideas, I was more than gratified by the results in terms of student learning and deportment.

You attended graduate school at the University of Minnesota for your doctoral training. Can you take a moment to describe the graduate program (e.g., department, number of students, dynamics, coursework, advisement)?

I actually participated in two programs—first in Clinical Psychology, later in School Psychology. The clinical program included about 40 students and a renowned faculty. The curriculum was fairly fixed, the students all clever and competitive, and the faculty heavily involved with their research or writing. The student drop-out rate was quite high and few completed their doctoral studies.

Given that I had two young children at the time, I felt overwhelmed by those conditions and switched to the School Psychology Program. There, the subject matter was closer to my own areas of interest and the faculty seemed more supportive.

At the University of Minnesota, who was your major professor and how did this relationship influence you?

Robert Orlando was my major professor. Having studied under Sidney Bijou at the University of Washington, Dr. Orlando was well versed in the field of operant behavior. During his weekly seminar on “mental retardation” [sic], we read and discussed journal articles in the field. Most of the participants, I included, began to formulate our ideas for our doctoral research. Dr. Orlando was quite enthusiastic about my intention to pursue methods for assessing children’s preferences for various categories of reinforcers. Together, we developed a research protocol for assessing those preferences among “retarded” (developmentally disabled) and typically developing children.

Were there any other professors in graduate school that strongly influenced you?
Certainly Kenneth McCorquodale, who taught courses in the *Analysis of Behavior*, helped me to expand my knowledge in the field. Travis Thompson and Wells Hively assisted me in my research and of course Ed Sulzer, then a professor of Clinical Psychology guided me every inch of the way. Jan Duker, Head of the School Psychology Program was very supportive of my work and assumed the role of dissertation advisor after Dr. Orlando left the University.

*Early in your career, who were your primary leadership role models in the field?*

While I was writing the results of my dissertation research (on a comparison between the match-to-sample behavior of typically developing children and those with developmental disabilities), Ed was invited to and agreed to assume the Directorship of the *Behavior Modification Program* at Southern Illinois University (SIU). At the time, SIU was a mecca for behaviorally oriented psychologists: Nathan Azrin, Teodoro Ayllon, Harris Rubin, Robert Campbell, Donald Hake, Ronald Hutchinson, and others. With Ed at the helm of the department, we interacted closely with all of those stellar behaviorists and many others who stopped by to meet with us and/or to offer colloquia. I also was deeply inspired by visits to the labs of Sidney Bijou and Howard Sloane at the University of Illinois, and of Baer, Wolf and Risley, Etzel, and others at the University of Kansas.

*Describe your first job in behavior analysis after graduate school.*

During an informal lunch that Ed, I, and several of his colleagues attended, Tom Jordon, then Department Head of Educational Psychology, mentioned that he was searching for someone to teach educational psychology. When informed that I was in the process of writing the results of my dissertation, he immediately offered me a position. Unwilling to be away from my new little daughter, Lenore, I refused. Tom then followed up by asking me to consider teaching just one course (3 hours, one evening a week). To this, I agreed. Apparently, the students enjoyed and valued the course and before I knew it, Tom talked me into working half-time in the department. That included spending several hours in the Child Development Clinic, teaching the educational psych course, and mentoring a couple of graduate students. By the time Lenore began attending pre-school, I had become a full-time assistant professor.

**Advice and Guidance**

*Describe your primary approach to managing people (e.g., providing feedback, problem solving).*

This being one of my major areas of emphasis, I generally followed a problem solving and intervention scheme. Thanks to Dwight Harshbarger, my “Brown’s Group”\(^1\) partner for several years in the 1990’s, we distilled and simplified this scheme into the rubric below.

1) What is a good job? Key parties (students/advisor; workers/managers etc.) discuss and agree on

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\(^1\) The Brown’s group is an organization that has worked with numerous international corporations to implement successful behavior-based performance improvement programs.
• Long-term goals, e.g.:

  i. Obtaining a degree
  ii. Rates of production (within what temporal parameters?)
  iii. Reductions in injury rates

• Short-term goals, e.g.:

  i. “A” quality quizzes
  ii. Principals’ visiting classrooms once each week and commenting positively on meeting standards for outstanding student performance
  iii. 90% or above adherence to safety standards

2) Am I doing a good job?

• Reliable and valid measures are designed and instituted according to a pre-set regular schedule.

3) How do I know if I’m doing a good job?

• The measured results are fed back (often in graphic form) to the performers and others involved at all levels.

4) What happens when I do a good job?

• Performers gain something they like and/or value, i.e., praise/compliments, good performance evaluations, promotions, special events, such as parties, snacks, and perhaps other symbolic or tangible rewards (e.g., trophies), preferred schedules or assignments, bonuses, promotions, pay raises, etc.).

What advice did your mentor give that still influences you today?

In graduate school, Robert Orlando taught us by example and shaping how to read, comprehend, critique, and make use of the findings of published journal reports. We also became acquainted with the early ABA literature within the field of developmental disabilities.

Of all of the roles you have served in our field, what are some of the activities you have valued the most?

Without a doubt, teaching and mentoring were my most rewarding activities. I felt the content of the courses I taught was valuable and the behavior-analytic-based pedagogic methods I used were especially powerful and effective. That is, many of my undergraduate students continued on to graduate school in behavior analysis or closely related fields while the vast proportion of my graduate students have become major contributors to the areas of research, development, and service in the field of Applied Behavior Analysis. Engaging in research also has always infused me with excitement. As applied behavior analysts, we attempt to design and precisely define the most effective and efficient independent variables (intervention methods) and valid dependent variables (indicators of change) and test the former’s impact on the latter. When individually and socially important outcomes are achieved and demonstrated to
be functionally related to the change procedures, we are elated. Writing textbooks and instructional manuals, a technique I found to keep me updated on new developments in the field has also been a source of deep satisfaction.

What advice can you offer to people considering becoming students in a behavior analysis program on choosing training programs and advisors?

1. Refer to the data, by searching for the results the program produces, such as number and proportion of students graduated within what time range; the nature of the positions they secure, the data on high-quality post-training contributions made by faculty and graduates in terms of client progress, research and text publications, and other contributions to the field and to society.

2. Attend local, regional, national and international ABA conferences to familiarize yourself with the breadth and depth of the field. Arrange, in advance if possible, to attend presentations and/or meet with faculty and students affiliated with academic programs of interest.

3. Prepare to visit the programs that interest you with your list of question and concerns, and meet with faculty and current students BOTH individually and in groups.
   
   • Try to discover what kind of financial support might be available for students
   • Inform yourself about local cost of living, living arrangements, funding opportunities, access to learning resources, and so forth
   • Consider fees, travel costs, and time

Is it important to have some experience with a same gender role model?

It helps, though is not essential. When I attended graduate school, most university faculty positions, including those at the University of Minnesota, were occupied by males. In general, the very few females tended to be more understanding of my need to balance familial and educational priorities.

What are some leadership characteristics that have been most valuable to you?

I would look to leaders with a history of success in such areas as motivating and managing behavior, especially being specific about what behaviors and results they were seeking; specifying how they did or would assess my performance and provide me with related specific and constructive feedback; following through intermittently though fairly often and pairing their feedback with reinforcing statements and/or other reinforcers, such as preferred assignments, resources, and so on. At the university level, a cultural norm seems to prevail among peers and supervisors of (other than subjective student evaluations) rarely providing faculty with valuable feedback. In my own case, I only knew my peers and supervisors appreciated my work when I received my annual report, was promoted and/or awarded a raise, or when my students said something complimentary. I would have appreciated more specific feedback from colleagues and supervisors.

Can you speak to any barriers that you faced and how you dealt with them?

In teaching, I managed to avoid problems by designing essentially all my courses according to Keller’s Personalized System of Instruction. That included clarifying in advance explicit grading policies, students’ objectives, assignments, mastery requirements of 85 or 90 % (they had to re-take different forms of the same quiz and achieve
that mastery level before being allowed to move on to the next unit), providing very frequent performance assessments, and lots of specific, immediate, and merited positive feedback.

In this time of growth in behavior analysis, what advice do you give to behavior analysts of the future?

Look at both the small and the big pictures—that is, examine presenting challenges as just one aspect of a far more complex network of contingencies. For example, as a practicing behavior analyst, you will have an advantage if you consider not only the central concern, that is, the nature of the goals and objectives set by the program and the potential rates of progress of your client(s), but also in terms of your own powerful reinforcers and those reinforcers as your colleagues, supervisors, clients’ significant others (parents, other family members, friends), and try to discover to what extent they will be obtainable contingent on your progress in the educational, research, and/or service setting you are considering. That will permit you to better able to predict the supports and/or impediments to your own progress as well as those of your clients or students within the situation you are contemplating for yourself.

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.

In the 1950’s, I knew no man who undertook regular responsibility for child care. So, as a graduate student with two pre-school aged boys, I was able to provide for their care by sending them to pre-school and/or by arranging to have a baby-sitter for the hours when I attended classes. As for studying, the moment the boys left the house, I turned to my school work. Other than filling the kitchen sink with hot soapy water (we did not have a dishwasher in those days) and depositing the soiled breakfast dishes there to soak, I immediately began to work on my studies, no talking on the phone (I warned my buddies), no other housekeeping, no TV (PCs were yet to be invented) etc.

We did plan for another child after my studies were completed. To our extreme pleasure, we became parents of a lovely little girl. Fortunately, as planned and hoped, she arrived after I had collected the data for my dissertation. Without actually applying for a position, I was offered one at Southern Illinois University, Carbondale (to where we recently moved). At first, I refused because I wanted to spend as much time with my daughter Lenore, as possible. But my husband, Ed Sulzer, more liberal in approach to gender roles, offered to care for the children for the one evening a week during which I was able to teach a 3-hour class. That worked out well for all of us (by the time Lenore was ready to attend pre-school, I signed on as a full-time faculty member). What can be gleaned from these experiences? If you as a woman want both children and a career, be as certain as possible that

- You and your partner and/or other key people involved have considered your list of personal and professional priorities. Is having and raising children very high on both your lists?
- You are realistically capable of and prepared to plan and follow through with both your familial, study, and/or work responsibilities
- Your mate or surrogate is capable of and willing to contribute jointly to the endeavor
You are willing to invest significant resources to obtain and continue the best quality care and support for your children.

The timing is as auspicious as possible. Personally, perhaps it would have been easier for me to have completed my doctoral studies before starting a family, though the children I have are kind, generous, thoughtful, and accomplished. Did the fact that I had a myriad of responsibilities during their early years possibly enable them to become the way they are today?

In contemporary American society, within which gender roles have been evolving, I think these questions are becoming just as relevant for men to address.

Are there any other topics that you could elaborate on that specifically pertain to your mentorship practices with female professionals?

As far as I know, I did not distinguish between males and females in terms of my general practices as a mentor. I did try to be a positive role model to both my male and female graduate and undergraduate students by seeking and (fortunately) often receiving extra resources (e.g., grants and contracts), by carefully scheduling and husbanding my own time, and by including my graduate students as peers in teaching and research activities (of course with lots of feedback and merited reinforcement). Some examples include:

- Scheduling group and individual meetings weekly
- Attempting to demonstrate the value of taking data on my own and their progress
- Shaping progressive steps toward excellence by involving them in numerous conceptual and applied activities (seminars, research, assisting in, and teaching courses, lab/clinical work etc.)
- Using their progress data as a source of posted feedback and associated reinforcement (i.e., on a posted progress chart, we broke down the major steps they needed to accomplish toward their degrees—courses completed, project proposals submitted/accepted, data collected, reports submitted, and so on, and displayed their accomplishment of these milestones). Regularly, we celebrated those and other major achievements, often by arranging for group recognition within parties or other social events of feats accomplished
- Periodically providing the group with non-contingent reinforcers, such as parties, picnics, partial resources to attend conferences, and so on

I was quite aware of my various roles as a wife, mother, professional, educator, and scientist. Perhaps, then, I served as a useful role model, especially for my female students, who may have seen me as a woman who could balance those various roles: of a wife, mother, scientist, and professional.

Probably the one saving grace was my willingness (not eagerness) to say “no” when I felt my professional and personal resources were being stretched too thin. For example, at one time I was offered but did not accept the position as chief editor of a highly prestigious journal, while, at the time, coordinating a graduate training program, teaching, participating in a number of research projects, serving on two national-level boards, completing writing projects, and more.

Please do not conclude that I feel everything I did was ideal or even close to it. Certainly, of regrets, there are a few: the school performances by my children that I...
missed; the time I spent away from husbands, family and friends; the early financial sacrifices we would not have had to make if costs of child care and the potential early income I sacrificed instead of preparing for my degree, and so on.

Nonetheless, in general, I believe the path I took probably was fruitful. Just Google my own children (Lenore S. Azaroff, Richard G. Azaroff, David L. Sulzer) and former students! Certainly at this point in my life, given the circumstances, I think had I to do it over again, probably I would repeat most of the paths I had followed. (See also Behavior and Social Issues, 9, 55–60 (1999)). © 1999 Cambridge Center for Behavioral Studies, Meeting Life’s Challenges—Strategies and Stories: A View From the Far Side).

**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.
Stereo Knobs and Swing Sets: Falling in Love with the Science of Behavior

Bridget A. Taylor

Dr. Bridget A. Taylor is Co-founder and Executive Director of Alpine Learning Group and Senior Clinical Advisor for Rethink. She has specialized in the education and treatment of children with autism for the past 27 years. She holds a Doctorate of Psychology from Rutgers University and received her Master’s degree in Special Education from Teachers College, Columbia University. She is a Board Certified Behavior Analyst and a Licensed Psychologist. Dr. Taylor is an Associate Editor for the Journal of Applied Behavior Analysis and serves on the editorial board of the journal Behavioral Interventions. She is a member of the Behavior Analyst Certification Board, a Board Member of The Association for Science in Autism Treatment and serves on the Autism Advisory Group for the Cambridge Center for Behavioral Studies. Dr. Taylor has published numerous articles and book chapters on effective interventions for autism. She is a national and international presenter and serves in an advisory capacity for autism education and treatment programs both locally and abroad. Dr. Taylor’s current research interests are in identifying innovative procedures to increase the observational learning skills of children with autism.

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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 received my first lesson in the pains of extinction and the value of social attention as a reinforcer when I was twelve years old. My then nine-year-old brother, John, who has Down syndrome, would stand outside my bedroom door (usually in his underwear) and repeat the same words over and over again. The words varied, but he would generally fall into a pattern with the same two or three words. The words themselves were nonsensical—the name of someone we knew, a funny line from a joke, some phrase I had spoken at some point or other—but I am sure they followed some logic apparent only to him. The delivery was the constant: repetition at increasing volume, intermittently punctuated by a half-stifled giggle. The words didn’t matter, of course; it just drove me crazy. As a twelve year old, I wanted nothing more than to be left alone in my room to enjoy my privacy or my friends. Instead, I had John giggling at my door. The script generally went something like this:

John: “Rudy-smoke-why.”
Twelve-year-old me: “John stop!”
John: “Why?”
Twelve-year-old me: “It’s annoying!”
John: “Rudy-smoke-why.”
Twelve-year-old me: “Ugh, stop!”

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John: “Why?”
Twelve-year-old me: “John I am SERIOUS!”
John: “Rudy-smoke-why.”

Then, like clockwork, I’d erupt in fury to chase him away, screaming profanities while he laughed and laughed and laughed. Of course, five minutes later he was back: “Rudy-smoke-why” I tried desperately (as any twelve year old would) to be the “adult” and ignore him, but even when I succeeded in taking the high road, it only resulted in him saying the phrase louder and with more zeal.

Eventually, I realized that if I threatened to take away something that he loved, he took me more seriously. John was and is an avid music fan. When we were kids, he would spend hours at a time lying next to the stereo speakers, memorizing lyrics and historical facts about music. So I started threatening him: if he didn’t stop annoying me, I would pull the knob right off the stereo, leaving him with no access to the music he loved. Over time, this too became a game: John would repeat phrases, I’d make hollow threats, he’d repeat the phrases, and I’d repeat my threats.

Then one day I actually did take the knob off the stereo, and then I had collateral. Or rather, we both did: he wanted his music back and I wanted him to stop annoying me. So we learned to strike at least a temporary bargain to get what we each wanted. He never fully stopped saying the phrases—in fact, to this day we both tease one another with “Rudy-smoke-why”—but John taught me something critical about human behavior, and about himself.

From a very young age I always knew I wanted to be a psychologist and I always knew I wanted to work with people with disabilities. This wasn’t quite as precocious as it sounds—in the third grade I wrote a class paper declaring proudly that I wanted to be a “sicologist to help parents of handicapped children be better parents”—but I was determined. As a teenager and through my early college years I worked in group homes, taught preschool, and worked in special education summer camps.

One summer in my early twenties I landed my first job as a respite care worker for children with autism. My job was to entertain a child with autism for three hours at a time, giving the child’s family a much-needed break. The company that hired me and paid me $15 an hour (which in 1986 seemed a fortune) and provided some basic training in discrete trial instruction using procedures outlined in Ivar Lovaas’ *The Me Book*. In a four-hour training session, we received an overview of how to teach a child with autism: sit the child in a chair, provide him with a reward, repeat this ten times, eventually stop helping him to sit and give him the reward only when he does it by himself. This seemed straightforward enough, and I was thankful for the potential structure since I had absolutely no idea how I would spend three hours with a child with autism.

My first assigned child to work with was Jeffrey, an adorable four year old with autism, unable to talk or follow instructions and thoroughly disinterested in toys, and initially, thoroughly disinterested in me. Still, I discovered quickly that if I tickled him and threw him in the air he would laugh and come running to me. And he clearly liked cookies—and liked them even more when I told him he couldn’t have them. So I decided to do the one thing I learned in that four hour training: to sit him in a chair and give him a reward (a cookie). Sure enough, it worked: he started to sit down. When I wanted him to use the swing set in the backyard, I did the same thing: I sat him on the swing, gave him a cookie, and repeated the sequence over and over again until eventually he sat on the swing by himself.
I learned a lot that summer, but two fundamental lessons stand out: to be observant—to look for any sign that Jeffery was learning—and to be persistent—to not give up even when progress came slowly and resistance to the process was high. I also fell in love that summer: with Jeffery, and with shaping behavior. I knew then that this was what I wanted to do.

**Can you Describe Your Graduate Training and how you Came to Attend Rutgers University?**

Before I went to Rutgers University, I went to Teacher’s College, at Columbia University and got a Master’s degree in Special Education. At the time, I was working with several children with autism in their homes, implementing discrete trial instruction. I had not, however, received any “formal” training in behavior analysis beyond the four-hour training provided by the respite care agency. This was before certification in behavior analysis, and before many colleges or universities offered specialized training programs. I knew I needed to learn more about teaching and a special education teacher-training program seemed a logical step.

In the meantime, Ivar Lovaas published his seminal 1987 article documenting the recovery of children with autism. One day when I was in the elevator on my way to class, I overheard two students talking about a posting in the Job Placement Center by a parent seeking someone to implement “Lovaas therapy” with her child. I literally ran to the Job Placement Center. On the one hand, I needed the money. On the other, I knew that the work that I was already doing with children with autism, while rudimentary, was based on the same fundamental principles.

The parent responsible for the posting was Catherine Maurice, and she was looking for graduate students to work with her daughter, Anne-Marie, who had recently been diagnosed with autism. I called Catherine that evening. I didn’t appreciate it fully at the time, but that call initiated one of the most important clinical experiences in my career.

Assembling and working with a team of dedicated therapists, I learned just how powerful and systematic, ABA-based instruction could be. I marveled as I witnessed not only Anne-Marie’s progress, but also that of her brother, Michel, who had been diagnosed as well. Anything they couldn’t do, we taught them: to look at us, to follow instructions, to speak, to play with toys, to communicate their needs, to interact with others, and more. The experience taught me, among other things, that with the right intervention, some children with autism can make truly remarkable progress. I also learned a lot about the importance of team work and collaboration: every member of the team was vital to ensuring the children’s progress. Maurice chronicled that progress and children’s extraordinary journey through treatment in her ground-breaking book *Let Me Hear Your Voice* (Maurice, 1994).

In addition to working with the Maurice children and continuing my graduate work, I was also working with several families in New Jersey, one of whom approached me about starting a school for their child with autism. They had witnessed their child’s success in an ABA-based home program and wanted full-time programming, something more intensive than the local special education program. Whatever I knew about teaching, I knew nothing about starting a school, so I turned to a colleague, Dr. Linda Meyer, who had helped start the respite care program with which I was previously involved. For inspiration we looked to existing ABA-based school programs in NJ. We were particularly impressed with the Princeton Child Development Institute’s model of creating continuity between home and school by training parents to be effective
therapists in the home environment. With that vision in mind, we rolled up our sleeves and opened the doors of Alpine Learning Group in 1989. Those doors led to the rented basement of a church, where with four students, borrowed chairs, and used toys we embarked on the adventure of creating the very first ABA-based school program for children with autism in Bergen County, New Jersey.

As we built Alpine from the ground up, I continued my graduate work. I was committed to staying in the New York/New Jersey area and wanted a graduate program focused on autism. I was familiar Dr. Sandra Harris’s work in autism at Rutgers University’s Douglas Developmental Disabilities Center, so I applied and accepted a placement in the Graduate School of Applied and Professional Psychology (GSAPP) at Rutgers University in the hopes of obtaining more experience in autism. The program was grounded in psychological and behavioral assessment, school-based interventions, and counseling, and although not specifically focused on behavior analysis, the curriculum included many classes on behavioral theory and practice. Fortunately, the faculty and advisors were very supportive of students seeking to carve out individual areas of interest, so my focus settled squarely on autism and behavior analysis.

At Rutgers University, Who was Your Major Professor and How did This Relationship Influence you?

During my first year at Rutgers, I approached Dr. Harris and asked if she would do a research project with me. I wanted to learn more about single-case subject design, and told Dr. Harris that I was interested in assessing procedures I was using to teach children with autism to ask questions. I was particularly interested in documenting if the children could learn new information as a result of asking questions. I was eager to learn and Dr. Harris was warm and inviting and patiently walked me through my first research study. This lead to my first publication in JABA (Taylor & Harris, 1995).

I was also fortunate to take my first class in applied behavior analysis with F. Charles “Bud” Mace. It was Bud who convinced me that I needed more formal training in applied behavior analysis, and it was Bud who gave me my first JABA article to review as guest editor. He also encouraged me to do my pre-doctoral internship with him at Children’s Seashore House at Children’s Hospital of Philadelphia. The program offered a unique blend of basic and applied research and treatment experiences. I worked on an in-patient unit conducting experimental analyses for children with severe behavior disorders, such as self-injury and aggression. I also worked in a rat lab conducting behavioral momentum research under the guidance of Dr. Benjamin Mauro. I’ll never forget my first day alone in the rat lab, when I lost control of my assigned rat and ended up chasing it frantically around the lab. Of the many things I learned from that experience was that I far preferred children over rats.

In that year I was also fortunate enough to meet Dr. Jennifer McComas. We became fast friends and colleagues. Together, loaded up on too much caffeine, we attended 8:00 am meetings in Bud’s office where we were grilled on any number of topics including every potential schedule of reinforcement. After work, Jenn and I had regular “data review” sessions at the local coffee shop where we brainstormed various interventions for the clients on our unit. The extra caffeine and shared enthusiasm inspired a lot of great ideas. It was at Seashore House that I learned about the importance of experimental analyses and the benefits and joy of collaboration with colleagues.
Describe Your First Job in Behavior Analysis After Graduate School

Because I started Alpine Learning Group prior to even embarking on my doctorate, my career path was not typical. Although I had a number of jobs in behaviorally-based treatment centers doing direct care work and implementing in-home ABA-based intervention programs, my clinical role at Alpine Learning Group was my first true job in behavior analysis both before and after graduate school. Even when I took a sabbatical from Alpine to complete my pre-doctoral internship at Children’s Seashore House, I knew that I would return to Alpine when the year ended.

Advice and Guidance

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

I believe that modeling teaching and treatment interactions with learners is a vital component of training staff. My style is to demonstrate implementation of a protocol and then step back, observe my staff managing the interaction, and provide feedback. I also encourage teachers to arrive at their own solutions to problems and avoid telling them “the answer” or prescribing a course of action. Thus, I offer the model as a starting point, but then encourage staff to proceed from there based on the data and their own observations.

I also try to use humor in my interactions with staff and to acknowledge my own shortcomings or mistakes. Early in my role as supervisor, my 360 reviews reported that I was high on corrective feedback and low on praise. In short, I was far more effective in shaping the behavior of behaviorally-challenged children than I was in shaping the behavior of young, neurotypical adults. Remaining open to feedback has been the key to improving my own training and supervision skills. While I remain quick to give feedback to correct staffs’ teaching interactions, I have come to understand and appreciate the power of positive feedback, and I give it more freely and more naturally. But I am still, and always expect to be, a work in progress.

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

While my true love is working directly with children with autism—shaping behavior, problem solving challenging learning issues and developing interventions, I also enjoy working with parents of newly diagnosed children with autism. In the immediate aftermath of a diagnosis, parents are often scared, discouraged, overwhelmed, and feeling helpless. It is an especially rewarding experience to give hope to despairing parents by demonstrating to them their child’s capacity to learn.

I also enjoy my editorial experiences. While serving as an editor can be time consuming, it keeps me in touch with emerging research and has inspired me to investigate new procedures or analyses at Alpine. I also enjoy the collaborative work of various boards on which I serve.
What Advice can you Offer to People Considering Becoming a Student in a Behavior Analysis Program on Choosing Training Programs and Advisors?

While career goals inevitably change overtime, I would recommend taking time to consider what it is you want to do in the long run. Do you want to ultimately teach in a university, run a clinical program, conduct applied research, go into private practice, or open your own business? Once you identify that fundamental goal, I recommend looking for a university training program that will allow you to develop and practice the skills necessary to achieve your goal. Thoroughly investigate training programs of interest, visit the program, read the research, and attend conferences of the faculty who teach at the universities you’re considering. Where possible, introduce yourself to key faculty members before applying and talk to alumni of the program to find out where they are working and the types of activities they are engaged in. Finally, confirm that any program you are considering has all of the approved courses necessary for any certification or licensure you are seeking.

Is it Important to Have Some Experience With a Same Gender Role Model?

I think it is important to have role models of all genders and gender identities, and perhaps more importantly, to have mentors who are accepting and supportive of all genders and gender identities. What has been critical to me in mentoring relationships is to find someone who matches you in energy and enthusiasm, but who will challenge your thinking as much as they reinforce it.

What are Some Leadership Characteristics That Have Been Most Valuable to you?

The leaders I have admired most are humble: while expert at what they do, they know better than to take themselves too seriously. They are not afraid to admit that they don’t know something and recognize that everyone—everyone—has something to teach them. I also believe strong leaders remain open to feedback. They are unsurprised to hear that they are imperfect, and keep their focus on the long, hard, and exciting work of improving themselves both personally and professionally. Good leaders keep learning, particularly in our field. Finally, having a sense of humor is critical. Not only a sense of humor about one’s mistakes and personality flaws, but also about the daily work with children and families. It is important to meet the constant challenge of our work with appreciation and a capacity for joy.

Can you Speak to any Barriers That you Faced and How you Dealt With Them?

I have not experienced any professional obstacles that I can attribute specifically to being a woman. Early in my career, however, I certainly grappled with age bias. I was young when I started working in homes with children with autism, and I was also young to have cofounded a school program like Alpine. As a result, I sometimes confronted unnecessary and irrelevant comments about my age. But those encounters only fuelled my desire to learn more.
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

Although I am not a parent, I’ve watched in admiration as many female colleagues struggle to balance the demands of early motherhood and the competing contingencies of a professional career. I have also watched female colleagues make the difficult decision to leave employment for a period of time to pursue full time parenting. Both experiences have impressed upon me the importance of creating a work environment that is supportive of employees who choose to be parents. The necessary accommodations are often basic and simple: providing a private area and regular breaks for nursing mothers, for example, or being flexible with a parent’s schedule and leave requests. But however simple such accommodations may be, their effect can be profound. In some cases, accommodations enabled a staff member to maintain employment or to feel comfortable with the decision to leave work for a period of time. Moreover, workplace flexibility can support workers with families in returning to the workplace when the time is right.

While I cannot speak to the personal experience of being a parent in the workplace, I would encourage practitioners (both men and women) to seek out employment settings that reflect an investment in lifestyle quality and agencies whose mission extends beyond profit and production. Once you’ve found the right setting, it is important to advocate on your own behalf, communicating effectively and honestly about your need and goals.

Lastly, be sure to engage in regular self-reflection and assessment: your professional goals will, and should, change and develop over time. There is no “one way” to belong in the profession, and different degrees and types of engagement with the work of behavior analysis—part-time work, consultation work, conference participation and attendance, etc.—will be the right fit at different times.

Are There any Other Topics That you Could Elaborate on That Specifically Pertain to Your Mentorship Practices With Female Professionals?

Unfortunately, we still live and work in a culture where men occupy top positions in most fields, and where pervasive salary inequity reflects that imbalance. As mentors, we must encourage young women in the profession to seek out professional challenges, advocate for appropriate promotions, and demand equal pay. I also believe that gender bias still exists in our profession. While rare, I’ve had several mentees share experiences with me about difficult relationships with male professors or supervisors where they experienced intimidation and, in some cases, flirtation that was inappropriate and unwanted. As mentors in the field, we sometimes need to do the hard work of supporting younger professionals in establishing professional boundaries and then policing those boundaries—even when that enforcement requires reporting misconduct to the proper managerial personnel or disciplinary bodies. This is behavior—our own, and that of our colleagues—that we can and must shape for the betterment of our own profession.
In This Time of Growth in Behavior Analysis, What Advice do you Give to Behavior Analysts of the Future?

Like any discipline, behavior analysis will grow and change and its practitioners will become more and more skilled. But as the discipline expands and changes, it is imperative that we remain in touch with the scientific research. As more and more “experts” emerge in the field, we must make the essential discriminations between a personal or professional preference for a particular way of “doing” ABA-based interventions and those procedures that are supported by sound scientific research.

Additionally, economic constraints and pressures may drive clinicians to attempt to serve many more clients then is clinically or ethically feasible. I would instead encourage you to grow your practice or treatment program slowly and maintain a manageable client base. When we started Alpine, we started with four students and expanded incrementally and deliberatively over time. This allowed us to create focused, individualized, and well-supervised programs for each student who entered the program.

Important, too, is to know your reinforcers and contact them frequently. Many times good clinicians will rise to management positions. While that sort of promotion may be a valued consequence for both a clinician and an agency, it may also distance you from the more salient reinforcers that got you into the field to begin with, such as developing a relationship with and shaping the behavior of a child with autism. As behavior analysts, we should know better than anyone else how absolutely critical it is to stay in touch with what motivates and inspires us.

Finally, surround yourself with people that both challenge you and encourage you to do better. Create or work in environments that foster learning, collaboration, and innovation. I feel fortunate that at Alpine I work with a talented staff who constantly and consistently challenge me to try new things, to think outside of the box, and to maintain a wide open, beginner’s mind that permits me to keep learning from all my teachers.

Can you Share a Story About a Time in Your Career That you Made a Mistake and how you Changed Your Approach in the Future?

Early in my graduate training, I worked at a clinic and was assigned a family therapy case with a neurotypical ten-year-old boy who was encopretic. He was extremely resistant to treatment and routinely refused to even enter the treatment room. I assumed the behavior was attention maintained, as his mother reported that she scolded him each time he had a bowel accident. I worked with his mother on developing a reinforcement system for using the bathroom, and advised her not to scold him when accidents occurred. We tried several different interventions, but nothing seemed to work: he still resisted coming into sessions and the systems we had established were not producing the results we had hoped for.

Then one day I went to a lecture on paradoxical interventions. The speaker was dynamic, and very persuasive in describing the intervention. I won’t belabor details of the theory and procedure, but the basic idea of the intervention is to “prescribe” the behavior you seek to eliminate. Caught up in the intellectual novelty, I decided this was the intervention to try with my encopretic ten year old: not only would we not punish
bowel accidents, we’d prescribe them. Needless to say, it was an epic fail. Not only did the intervention not produce the desired result, but it also drove the family from treatment altogether.

In reflecting on the experience, there were several lessons I learned. One, I never took the time to establish a relationship with the ten-year-old boy. It’s hard to know if taking the time to do this would have worked, but clearly this was a professional misstep. Second, I made assumptions about the function of the behavior without doing an analysis, and I completely overlooked any possible medical reason for the encopresis. Clearly, I should have taken more time to assess aspects of the behavior and determine potential function, and to collaborate with the client’s medical doctor. Third, I succumbed to the allure of the speaker on paradoxical interventions and decided to try it because it seemed innovative and interesting. I didn’t take the time to determine if there was scientific research supporting this intervention for encopresis. Fourth, at the time, I rarely reached out for supervision. Encopresis was a clinical challenge with which I had no experience, and I should have worked more closely with my supervisor on this case. Thus, in the end—and somewhat “paradoxically”—I learned a great deal from a truly disastrous intervention.

Of course, that is one of the reasons teaching is endlessly satisfying: it is impossible to teach without continuing to learn along the way. And as my brother John’s incessant giggling taught me long ago, there is tremendous pleasure to be found in identifying your reinforcers and helping others access their own.

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.