

## Women in Applied Behavior Analysis

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The status of women in applied behavior analysis was examined by comparing the participation of women in the *Journal of Applied Behavior Analysis (JABA)* to their participation in three similar journals. For all journals, the percentage of articles with at least one female author, the percentage of authors who are female, and the percentage of articles with a female first author increased from 1978 to 1997. Participation by women in *JABA* was equal to or greater than participation by women in the comparison journals. However, women appeared as authors on papers in special sections of *Behavior Modification* substantially more often when the editor was female than when the editor was male. In addition, female membership on the editorial boards of *JABA*, *Behavior Modification*, and *Behaviour Research and Therapy* failed to increase from 1978 to 1997. We conclude that a "glass ceiling" reduces the participation of women at the highest levels of applied behavior analysis and related fields.

*Key words:* participation of women, gender equity, glass ceiling, applied behavior analysis

Several past studies have examined the status of women in behavior analysis (e.g., Iwata & Lent, 1984; Laties, 1987; Myers, 1993; Neef, 1993; Poling et al., 1983). Some authors have argued that men and women are not treated equally (gender inequity). For example, Myers (1993) argued that gender inequity occurred when he found that the percentage of female first authors in the *Journal of the Experimental Analysis of Behavior (JEAB)*, 15% was smaller than the percentage of female full members of the Association for Behavior Analysis (ABA, 31%), the percentage of doctorates in psychology (55%) or experimental psychology (48%) that were awarded to women, and the percentage of women in the general population (51%).

As argued by several authors (e.g., Neef, 1993), however, these differences in participation do not prove that gender inequity occurs. Many alternative hypotheses can potentially explain the data. For example, publishing

might require some special preparation or skills that are not shared by all women. In that case, the percentage of female authors in *JEAB* might fall short of the percentage of females in the general population. Women might also have less interest in the subject matter of the experimental analysis of behavior than they have in other areas such as social psychology, developmental psychology, or behavior modification. In that case, the percentage of female authors in *JEAB* would fall short of the percentage of female doctorate holders in psychology and the percentage of female members of ABA.

McSweeney and Swindell (1998) ruled out these explanations by comparing participation by women as authors in *JEAB* to their participation as authors in three comparable journals. These journals were chosen to be similar to *JEAB* in subject matter and selectivity (rejection rates of submitted articles). Choosing similarly selective journals should rule out differences in motivation to publish, background preparation, intelligence, and so forth as explanations for differences in participation rates across the journals. Choosing journals within a single subject matter should rule out differences

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We thank Leonard Burns, Eric Murphy, and John Roll for their comments on an earlier version of this manuscript.

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in interests as explanations for different participation rates.

McSweeney and Swindell (1998) also examined changes in participation by women over the last 20 years. As will be seen below (Results and Discussion), many explanations can account for differences in participation by women at one time. Fewer explanations are compatible with temporal trends in the data.

McSweeney and Swindell (1998) did not argue that gender inequity must cause the differences in participation rates by women across the journals that they examined. Many other differences among the journals could contribute. However, they did argue that their data provide information about the status of women in the experimental analysis of behavior and, therefore, could contribute to an understanding of this topic. We performed a similar analysis for the area of applied behavior analysis. For this analysis to be directly comparable to McSweeney and Swindell's analysis, those parts of the method that are identical to that used by McSweeney and Swindell are described with the same words.

## METHOD

We examined each issue of the *Journal of Applied Behavior Analysis* (*JABA*), *Behavior Therapy* (*BT*), *Behavior Modification* (*BM*), and *Behaviour Research and Therapy* (*BR&T*) from 1978 to 1997 to determine the number of authors, the number of articles, the number of female authors, the number of female first authors, and the number of articles that included a female author. We chose those years to be comparable to the years analyzed by McSweeney and Swindell (1998). The years cover a substantial amount of time, and they include years over which attitudes towards women seemed to change.

We counted an article whenever a title and authors were listed in the table of contents of the journal. Articles were often divided into different cate-

gories (e.g., research articles, case reports, case studies, book reviews, etc.). Our analysis included all articles without regard to type. The classifications used by the journals differed, and the classifications used by a single journal changed over time. Therefore, presenting data according to type of article would have little validity.

We assumed that women's participation as authors in *JABA* reflects their participation in applied behavior analysis because *JABA* is the flagship journal of the field. We chose the three comparison journals on the recommendation of colleagues who specialize in applied behavior analysis. As in McSweeney and Swindell (1998), the journals were comparable in selectivity at least during the first 5-year intervals for which the data were analyzed. Acceptance rates were approximately 25%, 10%, and 15% for *JABA*, *BT*, and *BR&T*, respectively (Buffardi & Nichols, 1981). Acceptance rates for *BM* were not given in that article.

All of these journals are devoted to a similar subject matter and appeal to similar audiences. As a result, many authors publish in more than one of them. All of the journals were also examined by Richards, Cox, and Norton (1998) in their attempt to identify the leading researchers and institutions in behavior analysis and therapy. The similarities among the journals are apparent in the following quotations from the mission statements that appeared in the first issue of each journal in 1997.

*The Journal of Applied Behavior Analysis* is primarily for the original publication of reports of experimental research involving applications of the experimental analysis of behavior to problems of social importance.

*Behavior Therapy* is an international journal devoted to the application of behavioral and cognitive sciences to clinical problems. It primarily publishes original research of an experimental/clinical nature which contributes to theories, practices, and evaluations of behavior therapy broadly defined [see Editorial, *Behavior Therapy*, 1990, 21, pp. 1-2].

*Behavior Modification* seeks submissions in the following areas: (1) assessment and modification

techniques for problems in psychiatric, clinical, education, and rehabilitation settings; (2) papers describing measurement and modification of behavior in normal populations; (3) single-case experimental research and group comparison designs; (4) reviews and theoretical discussions; (5) treatment manuals; and (6) program descriptions.

The journal [*Behaviour Research and Therapy*] publishes scientific papers pertaining to abnormal behaviour and experiences, and their modification, and to medical psychology. The assessment of abnormal behaviour and experiences, and how they change and under what conditions, has always been within the scope of *Behaviour Research and Therapy*, and we have now incorporated *Behavioral Assessment*.

We made the same assumptions as McSweeney and Swindell (1998) when collecting the data. In cases where the gender of the author was not known, authors were considered to be female if they had a stereotypically female first name (e.g., Mary) or if they used the stereotypically female spelling of an ambiguous name (e.g., Marian is usually female, Marion is male; Frances is usually female, Francis is male). Authors who used initials were counted as women only when we knew that to be the case. As a result, we may have counted too many authors who used initials as males. To compensate, we considered authors with unisex first names (e.g., Chris, Robin) to be female unless we knew otherwise.

Membership on the editorial board was determined by consulting the first issue of each year. As in McSweeney and Swindell (1998), the numbers do not include information about the editor in chief or associate editors. Including this information would bias against finding changes over time because these editors may change infrequently. Since the incorporation of *Behavioral Assessment* in 1993, *BR&T* has had two editorial boards. The present data include both boards.

As a result of our assumptions, our calculations are undoubtedly inaccurate. However, McSweeney and Swindell (1998) argued that these inaccuracies are usually small. They showed that this method of data analysis yield-

ed results similar to those of Myers (1993) even though he used a different method of analysis (excluding all unknown cases). They also argued that the level of accuracy probably did not change systematically over time or across journals. To reduce the problems in the present analysis, we also recruited a specialist in applied behavior analysis (Patricia Donahoe), who was familiar with the gender of many of the authors, to help us with the analysis.

In spite of our efforts, the data for *BR&T* may be less accurate than those for the other journals. More authors in *BR&T* than in the other journals used initials instead of first names, and the number changed systematically over time. A mean of 34, 26, 24, and 19 authors per year used their initials in *BR&T* for 1978–1982, 1983–1987, 1988–1992, and 1993–1997, respectively. This translates to 22%, 13%, 12%, and 6% of all authors in the journal for the same four 5-year intervals. Consulting colleagues and the current membership lists of professional organizations failed to identify most of those using initials, particularly during the earlier years. Initials, rather than first names, were also given for almost all editorial board members. In this case, we were able to obtain the first names of many editors by consulting colleagues and by checking the membership lists of professional societies. We omitted the ones we could not find (approximately 15%) from the total count. Although the data from *BR&T* might have been excluded from the present analysis on this basis, they have been retained because they were basically similar to the results for the other journals.

## RESULTS AND DISCUSSION

### *Changes in Participation Rates over Time*

Figures 1, 2, and 3 contain the mean percentage of articles with at least one female author, the mean percentage of authors who are female, and the mean

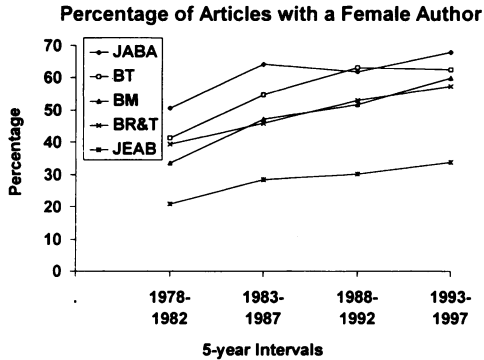


Figure 1. Mean percentage of articles with at least one female author over 5-year intervals from 1978 to 1997 for the *Journal of Applied Behavior Analysis* (JABA), *Behavior Therapy* (BT), *Behavior Modification* (BM), *Behaviour Research and Therapy* (BR&T), and the *Journal of the Experimental Analysis of Behavior* (JEAB).

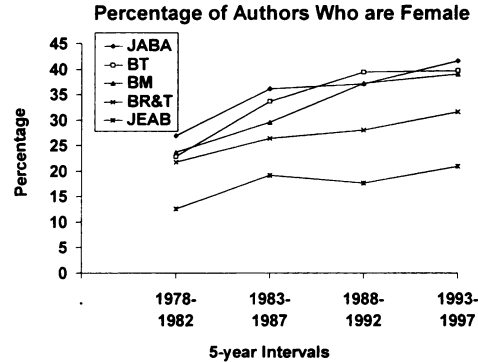


Figure 2. Mean percentage of all authors who were female over 5-year intervals from 1978 to 1997 for the *Journal of Applied Behavior Analysis* (JABA), *Behavior Therapy* (BT), *Behavior Modification* (BM), *Behaviour Research and Therapy* (BR&T), and the *Journal of the Experimental Analysis of Behavior* (JEAB).

percentage of articles with a female first author, respectively, over the four 5-year intervals from 1978 to 1997. Each function presents the mean of the results for one of the four journals. Results for *JEAB*, taken from McSweeney and Swindell (1998), are also presented.

Similar to the results found by McSweeney and Swindell (1998), participation by women increased over the last 20 years for all journals and for all measures of participation. The increase was substantial in size. When the percentage participation by women in the last 5-year interval was divided by the percentage participation by women in the first 5-year interval for each journal and each measure of participation, the results varied from 1.17 to 1.92. Therefore, it could be said that participation by women increased by at least 17% and by at most 92% over the last 20 years. The increase in participation by women was similar in size for *JEAB* and *JABA*. Using the same method to measure the size of the increase, participation by women increased by approximately 50% for both journals over the years that we examined.

As argued by McSweeney and Swindell (1998), percentage participation by women might increase if the

number of participating men decreased even if the absolute number of participating women did not increase. This did not occur. The absolute number of participating women usually increased over the period of investigation. From the first to the last 5-year interval, the average number of female authors per year rose from 41 to 88, from 17 to 29, and from 34 to 100 for *JABA*, *BM*, and *BR&T*, respectively. The average number of female authors per year fell only for *BT* (from 53 to 46). From the first

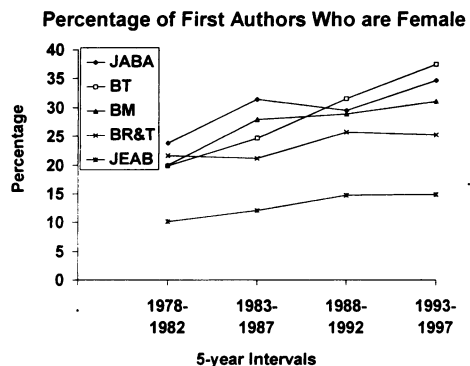


Figure 3. Mean percentage of articles with a female first author over 5-year intervals from 1978 to 1997 for the *Journal of Applied Behavior Analysis* (JABA), *Behavior Therapy* (BT), *Behavior Modification* (BM), *Behaviour Research and Therapy* (BR&T), and the *Journal of the Experimental Analysis of Behavior* (JEAB).

to the last 5-year interval, the average number of female first authors per year also rose from 14 to 24, from 16 to 18, from 7 to 8, and from 14 to 28 for *JABA*, *BT*, *BM*, and *BR&T*, respectively.

An increase in the number of articles published per year may be partially responsible for the increase in the absolute number of female authors over time. The number of articles published per year rose from 58 to 69 and from 65 to 109 from the first to the last 5-year interval for *JABA* and *BR&T*, respectively. More articles offer more opportunities for women to participate as authors. However, this cannot be the entire explanation. As shown in the figures, percentage participation by women increased over the years. Authorship and first authorship by women also rose in *BM*, even though the total number of articles published per year decreased from 38 to 26 from the first to the last 5-year interval. First authorship by women rose in *BT*, even though the average number of articles published per year fell from 83 to 47 over the same years.

#### *Participation in JABA Relative to Similar Journals*

Figures 1, 2, and 3 show that participation by women as authors in *JABA* usually equaled or exceeded participation in the comparison journals. Participation by women in *BR&T* was often lower than in the other journals. However, as indicated, participation by women in this journal may be underestimated because authors frequently used their initials. The successful participation by women in *JABA* stands in contrast to their participation in *JEAB*, which often lagged behind the comparison journals (McSweeney & Swindell, 1998).

Figures 1, 2, and 3 show that participation by women in *JEAB* is substantially lower than participation by women in the applied journals. Many factors other than gender inequity may contribute to this difference. For ex-

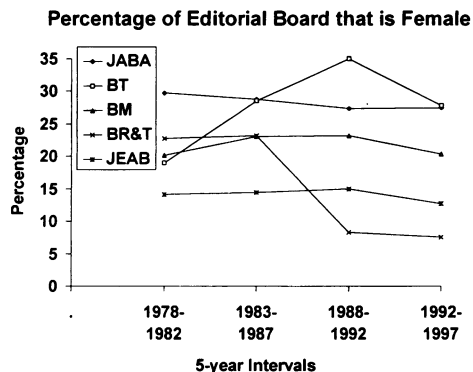


Figure 4. Mean percentage of female editorial board members over 5-year intervals from 1978 to 1997 for the *Journal of Applied Behavior Analysis (JABA)*, *Behavior Therapy (BT)*, *Behavior Modification (BM)*, *Behaviour Research and Therapy (BR&T)*, and the *Journal of the Experimental Analysis of Behavior (JEAB)*.

ample, women may be more interested in applications of psychology than in basic behavioral principles. Women might also be more interested in examining the behavior of human than nonhuman participants. Although editorial policy does not require this, *JEAB* publishes more studies that employ nonhuman subjects.

#### *Participation at More Selective Levels*

Figure 4 presents the percentage of female members of the editorial boards of the four comparison journals and *JEAB* during the four 5-year intervals from 1978 to 1997. As for authorship, participation by women on the editorial board of *JABA* usually exceeded the participation of women on other boards. Unlike authorship, participation by women on the editorial boards did not increase over the 20-year period under consideration for any journal except *BT*. Even for that journal, participation by women decreased from 1988–1992 to 1993–1997. Participation by women on the editorial boards of *JABA* and *BM* remained relatively constant and participation on the editorial board of *BR&T* decreased substantially over the last 20 years. The reported decrease for *BR&T* was not a by-product of the incorporation

TABLE 1

Mean percentage of all authors who are female (A), the mean percentage of first authors who are female (F), and the mean percentage of editorial board members who are female (E) for the four journals over the four 5-year intervals from 1978 to 1997.

	1978–1982			1983–1987			1988–1992			1993–1997		
	A	F	E	A	F	E	A	F	E	A	F	E
<i>JABA</i>	27	24	30	36	31	29	37	30	27	42	35	28
<i>BT</i>	23	20	19	34	25	29	39	32	35	40	38	29
<i>BM</i>	24	20	20	30	28	23	37	29	23	39	31	20
<i>BR&amp;T</i>	22	22	23	26	21	23	28	26	8	32	25	8

of *Behavioral Assessment* into that journal. The decrease began before the incorporation (i.e., before 1993), and the participation on the editorial board would remain only 5% if the editorial board of *Behavioral Assessment* was ignored. The participation by women on the editorial board of *JEAB* also failed to increase over the 20 years under consideration.

Table 1 organizes this information to highlight the participation of women at increasingly selective levels in each of the journals. As in McSweeney and Swindell (1998), we assumed that it is easier to appear as an author than it is to appear as a first author, and that it is easier to appear as a first author than to be selected for the editorial board. Table 1 presents the percentage of women who occupied each position for each of the journals in each of the 5-year intervals from 1978 to 1997.

Table 1 shows that participation by women decreased with increases in the selectivity of the position in recent years (i.e., 1993–1997) for all four journals. In contrast, participation by women did not vary systematically with the selectivity of the position in the earlier years that we examined (i.e., 1978–1982). These results are consistent with the idea that a “glass ceiling” has developed that limits the participation of women in applied behavior analysis. That is, the increasing participation by women is largely confined to the lower levels of the profession. The size of the glass ceiling is substan-

tial. For 1993–1997, the difference between the percentage of female authors and editors was calculated for each of the four journals. The mean of this difference across the four journals was approximately 17%.

Similar evidence for a glass ceiling was reported by Poling et al. (1983). They reported that the first authors of 14% of the invited addresses, 30% of the symposia, and 38% of the posters presented at the 1982 meeting of ABA were women. McSweeney and Swindell (1998) also reported that women were only 9.3% of the authors of articles in *JEAB* that appeared to be invited.

Finding the development of a glass ceiling for so many journals suggests that it is real. Although McSweeney and Swindell (1998) reported similar results for *JEAB* and possibly for *Animal Learning & Behavior*, the glass ceiling interpretation of their results could be doubted because there are alternative explanations. For example, the absolute number of female authors in *JEAB* is small. Therefore, the absence of an increase in female membership on the editorial board might be due to the limited availability of female candidates for those positions. Finding similar results for other journals that have many female contributors questions this alternative interpretation for the pattern of results.

Finding the development of a glass ceiling over time provides relatively compelling evidence for gender ineq-

uity. If the only data available were those for the last 5 years, many hypotheses could explain the results. In contrast, few hypotheses predict the temporal trends in the data. For example, women might appear less often on the editorial board than as authors if they lacked the skill, intelligence, or motivation required to become editorial board members. However, it does not seem likely that a greater percentage of women are insufficiently skilled, intelligent, or motivated today than 20 years ago.

Women might be underrepresented on editorial boards because they decline invitations to join the board more frequently than men (Neef, 1993). However, it seems unlikely that women are currently declining invitations to join the board at a proportionally higher rate than they did 20 years ago.

Women might fail to work hard enough to become an editorial board member because they are distracted by other responsibilities (e.g., families). For example, among working couples without children, women spend almost twice as much time on household duties as men do (Russo & Denmark, 1984). However, women are probably more, rather than less, likely to devote time to their work now than in earlier years. For example, the largest increase in women in the work force occurred among married women with small children. In 1970, only 30% of married women whose youngest child was younger than 6 years old were employed. In 1984, 54% were employed (Matthews & Rodin, 1989). This suggests that women are more willing to devote time to work now than they used to be.

Candidates for editorial positions are mainly experienced authors. Therefore, fewer women might be selected for the board than appear as first authors if female first authors tended to publish few articles but male first authors tended to publish many. In fact, Neef (1993) showed that, prior to 1993, the editorial board of *JABA* was drawn mainly from among its experienced authors re-

gardless of gender. To apply this argument to the temporal trends in the data, however, it would be necessary to assume that the number of papers published by individual women fell relative to publications by men at least enough to offset the rise in the number of available women over the 20 years under investigation. This seems unlikely.

Editorial boards might be made up largely of high achievers who belong on the board. If the boards are small, the influx of women in recent years could not be accommodated without unfairly dismissing some of these deserving candidates. Contrary to this argument, the editorial boards are quite large. They also increased in size for *BT* (from a mean of 24 in 1978–1982 to a mean of 33 in 1993–1997) and *BR&T* (from a mean of 13 in 1978–1982 to a mean of 48 in 1993–1997), but not for *JABA* (a mean of 49 in both 1978–1982 and 1993–1997) or *BM* (from a mean of 53 in 1978–1982 to a mean of 55 in 1993–1997). Therefore, the boards seem large enough to accommodate women without treating men unfairly.

An academic tenure-track position might be required to allow time to do the work necessary to become an editorial board member. The percentage of psychologists employed in 4-year academic institutions has declined in recent years (Pion et al., 1996) and the availability of applied jobs has increased (Syverson, 1982). The increase in the number of female authors might also have occurred because female graduate students are publishing more frequently now with their mentors than they used to. If proportionally more of these women took applied rather than academic jobs then they would not establish the research record necessary for appointment to the editorial board.

Again, however, to explain the data, it would be necessary to assume that women are competing proportionately less well for the available academic jobs than they did 20 years ago. In fact, the opposite is true. The number of

male assistant professors has remained relatively constant since 1973, but the number of female assistant professors has nearly doubled (Pion et al., 1996). Women were appointed to 49% of all new faculty appointments in graduate psychology departments in 1991 (Pion et al.).

Although women may win initial academic appointments, they may not hold them long enough to become associate or full professors, the levels from which the editorial board is primarily drawn (Over, 1981). Again, however, the data contradict this argument. In 1971, 17.7%, 23.0%, and 43.7% of women holding academic appointments in psychology were full, associate, and assistant professors, respectively. In 1991, the same statistics were 25.1%, 27.4%, and 30.3% (Pion et al., 1996). The absolute number of female full professors more than quadrupled over this period (Pion et al.).

Finally, the increasing participation by women as authors might not have yet reached the editorial level. If this were so, however, the increase in participation by women seen for authorship in Figures 1 to 3 should appear for the editorial board in Figure 4, but after a delay. Participation by women would not increase only if reaching the editorial board required 15 to 20 years. As argued by McSweeney and Swindell (1998), this seems unreasonable. "Although one case may not be representative, the first author served her first year on the Editorial Board 8 years after she published her first article in *JEAB*" (p. 199).

We conclude that it is difficult to explain the temporal trends apparent in Table 1 without assuming that gender inequity reduces the participation of women at the highest level of the profession. Finding the same results for so many journals suggests that the inequity is widespread.

Another, less convincing, line of evidence also suggests that gender inequity occurs. Occasionally, *BM* published a group of articles that were edited by an invited editor. Table 2 pre-

TABLE 2

**Mean percentage of all authors who are female (Authors), mean percentage of first authors who are female (First), and mean percentage of articles that had at least one female author (Articles) in the special issues of *Behavior Modification*. Results are presented according to whether the invited editor was male or female.**

	Male editor	Female editor
Authors	34	57
First	27	46
Articles	47	77

sents the mean percentage of all authors who are female, of first authors who are female, and of articles that had at least one female author in these special issues. Results are presented according to whether the invited editor was male or female. Results are presented only for *BM* because *JABA* and *BR&T* did not have these special sections. *BT* had special sections, but all of the editors were male. Regardless of the measure, women were substantially more likely to participate as authors when articles were edited by a female editor.

Gender inequity is not the only possible explanation for these data, however. For example, the selection of a female editor might indicate that the subject matter of those articles was particularly interesting to women. Therefore, the greater participation by women on articles edited by women may reflect this greater interest in the subject matter. In addition, women were selected as special editors only approximately 15% of the time. Therefore, small numbers may reduce the reliability of the data. Nevertheless, the differences reported in Table 2 are suspicious. At least part of the differences may be attributable to unequal treatment of female authors by male and female editors, which might arise from female editors favoring female authors



as well as from male editors favoring male authors.

Further research should examine whether women are excluded from selective positions in other areas of psychology and in academia as a whole. Some data suggest that they are. For example, the percentage of editors of American Psychological Association (APA) journals who are women falls far short of the percentage of editorial board members who are women (15% vs. 31% in 1996; Keita, Houston, Wisniewski, & Cameron, 1999). The percentage of female members of APA has increased in recent years, but the percentage of female fellows has remained relatively constant. Between 1932 and 1945, 30% of APA members and 21% of fellows were women (Hogan & Sexton, 1991); in 1997, 48% of APA members and 23% of fellows were women (Keita et al., 1999). The percentage of members of the National Academy of Sciences who are women is smaller than the percentage of scientists who are women. In addition, women are admitted to the National Academy an average of 9 years later than men, even though these women received their doctoral degrees at the same average age as their male counterparts (Zuckerman & Cole, 1975). Discrimination against women is also often reported to be more severe in the later stages of their careers (e.g., Benokraitis, 1998; Rose & Danner, 1998; Russo, Olmedo, Stapp, & Fulcher, 1981).

Wenneras and Wold (1997) also suggested that women do not achieve grant funding relative to their contributions. They examined the competition for a prestigious fellowship in which women were 46% of the applicants but received only 25% of the awards. To determine whether the women were less deserving than the men, the investigators developed a measure of research impact which took into account not only number of publications but also first authorship and prestige of the journal in which the publication appeared. Women were

given lower scores for the fellowship regardless of their impact scores than men. The most productive group of women who had impact scores greater than 99 were assigned significantly lower scores for the fellowship than men with impact scores of 20 to 39.

### *Summary and Suggestions*

The present study contains some good news about the participation of women in applied behavior analysis. First, participation rates by women as authors increased consistently and substantially over the years of 1978 to 1997. This was true for all measures of participation and for all journals. These results were similar to those reported by McSweeney and Swindell (1998) for the experimental analysis of behavior. Participation by women as authors in *JEAB* and its comparison journals also increased over the same period.

Second, participation by women as authors in and as members of the editorial board of *JABA*, the flagship journal of the field, was at least equal to and often exceeded participation by women in its comparison journals. This result can be contrasted with data reported by McSweeney and Swindell (1998). They found that participation by women in *JEAB* often fell behind participation by women in its comparison journals.

On the negative side, two aspects of the data are consistent with the conclusion that gender inequity exists in applied behavior analysis and its associated fields. First, at least for *BM*, women are more likely to appear as authors on articles that were edited by a woman than by a man. Second, and more convincing, the participation of women systematically decreases as the selectivity of the position increases for all four journals in recent years. As with *JEAB* (McSweeney & Swindell, 1998), women were more likely to appear as authors than as first authors and as first authors than as members of the editorial board (a glass ceiling). The glass ceiling is substantial in size and has in-

creased systematically over the last 20 years. Finding a glass ceiling for so many journals provides convincing evidence for its presence. As argued, finding an orderly change in the size of this effect over time provides relatively compelling evidence that these trends are due to gender inequity rather than to other factors.

When we argue that gender inequity occurs we argue that women and men may not be treated equally. Conscious and intentional discrimination against women probably contributes, but many of the contributing factors may be more subtle (e.g., Bargh & Chartrand, 1999; Dovidio & Gaertner, 1999). For example, women might be selected less often than men for membership on the editorial board because they are excluded from informal networks and protege relations that influence the selection of editorial boards (e.g., Clark & Corcoran, 1986; Dreher & Cox, 1996). Many additional potentially contributing factors have been discussed elsewhere (e.g., Morrison & Von Glinow, 1990; Riger & Galligan, 1980).

McSweeney and Swindell (1998) made several suggestions for improving the participation of women in behavior analysis (for other suggestions, see Poling et al., 1983). We review their suggestions without repeating their argument and provide some additional suggestions. McSweeney and Swindell argued that female undergraduates should carefully select the institutions to which they apply for graduate training so that they are mentored by faculty members who treat women equitably. Editors should try to ensure that manuscripts by men and women receive similar treatment (e.g., blind reviews, selecting some female reviewers for manuscripts by female authors). Surprisingly, none of the journals that we examined encouraged blind reviews, at least in 1997. Editors should rarely issue invitations to publish in the journal and should use an objective list of contributors to the field to make the selections for these invi-

tations and for any other important positions at the journal. The process that leads to the appointment of the editorial board should also be formalized. Currently, the appointment of the board is the result of a complex process that varies from journal to journal and editor to editor. This allows the intervention of many factors that put women at a disadvantage (e.g., seeking recommendations from friends). Their track record of publishing with women should be considered as one among many factors in the decision when people are considered for editorships or memberships on editorial boards. Finally, formal statistics on the participation of women and minorities in the experimental and applied analysis of behavior should be kept.

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