



Nancy Paterson, "Wringer/Washer TV," 1989

In the washtub of a pink, white and chrome wringer/washer, video imagery representing all sides of the abortion debate, alternates with imagery of a load of laundry going through the wash cycle.

Voices of

by Valerie Oglov

Dans cet article, les auteures examinent les expériences et les carrières de dix femmes scientifiques dans deux universités de la Colombie-Britannique. Ces femmes ont répondu à des questions sur le découragement et le soutien, les conflits reliés aux relations femmes-hommes et à leur identité, ainsi qu'aux problèmes relatifs à l'apprentissage et à la pratique des sciences dans un milieu universitaire dominé par les hommes.

Introduction

In recent years, Canadian women in science have undergone close scrutiny because of the need to increase human resources for the diminishing scientific workforce. A report by the Canadian Committee on Women in Engineering recommends far-reaching changes in education, and in social and working environments as a result of nation-wide consultations with women and educators. This report has been adapted by the National Advisory Board on Science and Technology to include women in science and technology. The 29 recommendations include strategies and time lines, with the ultimate aim of increasing the numbers of women in science, engineering, and technology. The final report on differences in the achievement rate of women in the Canada Scholars Program also pointed out the need for mentorship and support for the women in the early years of the program. (Gilbert and Pomfret)

In 1991, we conducted a study of ten women in science in order to document their experiences and career patterns during their university lives.¹ This article focuses on some of their responses to cultural, social, and gender barriers.

Background to the study

Ten women were asked to participate in the research because they were either one of the few women in their departments, or because they had expressed concerns regarding gender politics. Five of the women were, or had been, graduate students and five were faculty members (assistant, associate, or full professors). A detailed questionnaire asking about their educations, career expectations, experiences of discrimination and harassment, sources of support and discouragement, and working environments was followed by a tape-recorded interview.² The interview consisted of open-ended questions and lasted for one hour, sometimes longer if time permitted.

Most of the women were between 32 and 39 years old. Two were outside this range (one older, one younger). Three had Ph.D.'s and four had M.Sc. degrees. Four who were in science did not complete their master's or doctorate programs. They had spent an average of twelve years in training. Five were married and four had children. One was widowed. Of the ten participants, three had switched from careers in science or had changed their disciplines of academic study and three were in their chosen fields. The remaining four were either looking for work or were working in science-related jobs, but not necessarily the ones they had initially set out to do.

Harassment and discrimination

Almost all of the women interviewed reported experiences of sexual harassment, discrimination, and overt and covert exclusion on the basis of gender. Incidences of sexual harassment included sexual assault, unwanted sexual advances, sexist jokes, pornography placed where it

would offend, and inappropriate comments on physical appearance or attractiveness.

People don't realize how many women drop out because of harassment.

[What's most upsetting about it] is that this person you're fond of and trust and look up to, comes on to you. ...He had a crush on me. I didn't feel that way at all and when he threatened to write me negative letters of reference [if I didn't return his feelings], it's no better than coercion... It can really mess you up... What really shocked me was the reaction of the other people in the department, even some faculty, who couldn't understand why I didn't want anything to do with this guy...

Although the woman who made this statement did not drop out of her graduate studies, two other women did withdraw from graduate work because of the cumulative effect of sexual harassment and other experiences.

Discouragement and support

The women's experiences of discouragement as faculty or as graduate students were pervasive and profound, and attributable to male-dominated environments. As a result, two women dropped out of their respective doctoral programs, one after three and one half years and the other after six years.

One woman who is now considering doing a Ph.D. or switching careers said that she had experienced "no active discouragement" during her graduate studies, but went on to give three examples of what she would consider "indirect" dis-

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and Hilda Ching

couragement. First, the supervisor of her master's program would not allow her to go directly into a Ph.D. program without writing a master's thesis which was an option (although he did allow male graduate students to take this route). Second, this supervisor, who was the head of the department, "...who was known to be sexist," and "who had trouble talking to women," was only available infrequently for consultation. Finally, this supervisor had one woman working "under" him for 20 years who had a Ph.D. but no position or status. For the student, this lone woman was "...what I mean by a negative role model."

Many other negative experiences were reported about graduate school.

...Whenever I did grad work, I always felt inadequate.... [But] I kept working, I changed supervisory committees, I changed projects. I tried everything I could to be successful...I felt like I was a committed student, but I wasn't getting the feedback that I was. [In the end] I felt like I didn't want to hang around with people who said I was stupid...The only reason I was hanging in there was because I had this dream that I would do it and my dream was based on what a degree should really be about, and it wasn't...

One woman who fought against continual condescension from her supervisor (he assumed she would eventually drop out because she was a woman), finally went to speak to him after he gave her a problem to do that had no solution. When she asked him for another one, he was offended.

I got a very negative report so my funding was cut off. [My supervisor]

could factually say: "Look, you've been here for two years now and you haven't produced anything." This was true, but there were very good reasons for this. I also tried to get a committee together to defend myself, and they said it would be too difficult to set up right now because my funding had been cut off...For him, much better to get rid of me. At that point my self-esteem was so low...

Good supervisors should be aware of gender and power issues, and how they themselves use gender and power dynamics. They should not assume that a woman cannot or will not succeed in graduate school because she is a woman, is married, or has a child.

On a more positive note, most of the women did, however, report receiving support at some time or other during their careers. Most frequently cited as sources of support were senior supervisors, other women graduate students, or groups on campus. Only one woman referred to a mentor: a supportive person who listened to her, believed in her, took her seriously, gave her important work to do early in her career, and allowed her the opportunity of advancing in her field. In some cases the availability of a women's group in science provided the only support women received. The value of the group was in the intellectual contact with other bright women, the support they received when they started to blame themselves for things that were going wrong with their work, and the advice they got on difficulties they were having. It also met the social needs of women who, when at work, did not have many other women to relate to.

Although there are numerous programs to attract and retain women in science (see the Report of the Committee on the Status of Women in Ontario Universities), we

still need to establish campus programs of support, mentoring, and women in science groups on every university campus.

Structural, social and gender barriers

In addition to the overt harassment and discouragement which most of the women experienced, they also faced barriers which were often difficult to identify because they were a blend of structural, social, and gender blocks:

You've got to be careful you don't come on too strong or you'll alienate them [men]—They're not used to having women around...You have to make them feel more comfortable, make them feel you're not a threat.

It takes extra energy to accomplish what has to be done because some of the energy is being eroded by trying to justify and legitimize your being there.

[It was] exhausting knowing I had to go in and justify my existence all day long. Eventually I thought, I don't need this. There's so much sexism in academic life, the language that gets used in ordinary conversation, it's really quite offensive at times, and always having to react to that, always having to say: "Please, don't say that, that's not right, excuse me," constantly. And it wasn't just sexism but racism...you just get tired of it.

One faculty woman spoke of the compromises she had to make. She said there was:

No amount of money to replace what you miss, what you have to put up with... With colleagues it's non-in-

clusion. Decisions are made in the john. You can laugh but it happens. Women's cultural upbringing restrains them from interacting effectively in men's cultural settings. So in committee meetings you can have your say, but whether or not it's listened to, followed, or discussed, or even acknowledged, depends on who is there. I don't want to tar and feather all men. Some are open-minded and they work hard to keep the cultural stuff out of it. But most aren't. They're male chauvinist pigs. I wouldn't have said that four years ago. These are the guys who tell sexist jokes in the middle of a committee meeting and not be aware that there is a person in the room who is a member of that sex. I still find that callous inconsideration hurtful. The other trouble is that if you speak out against it, you're in worse shape because now, you're anti-male...

...In academia you're dealing with the establishment, and you have to be very persevering because you come up against a lot of discouragements because everyone is male...

It's not science, but the structure and organization of it [that is the problem]. Who has control, who influences decisions is what is important. Until you get 45 to 65 per cent women in there, women will be a minority. ...I've tried to be more masculine to fit in but it doesn't work because you can't negate the fact that you are a woman.

Hiring of women into faculty positions

The participants agreed that students and faculty need more women scientists as role models and mentors and that more women should be hired in faculty positions. One student thought that more women should be hired even if there were more qualified males, "that's how crucial it is." Yet, one faculty member felt that singling women out for hiring as a special group only reinforces women's "strangeness" and in some ways undermines the long-term purpose of having women in science.

I don't have many feelings anymore about this. I feel it is a dead end situation. I've lost my respect [for them]. I was really disturbed a few weeks ago when the chairman sent a letter re: having to hire a female person because our department doesn't have many women faculty. The way the memo was worded, it was so terrible, as if it's going to be a big burden on the department and how we'll have to put up with it, and the department is going to suffer because of it and soon, we have no choice... I actually kept the memo to remind myself about the attitude of these people. This is an effort to promote women into science so that female students have role models?

One woman commented that, from a student's point of view, having more women in her program "would have brought a career [in applied sciences] into the realm of the possible." Another woman said of a female role model she knew of but hadn't actually taken a course from:

...She helped me know it was possible and that others took her seriously. I saw she was successful, was married, had a baby. It looked like you could do it, in spite of what people told you.

Science and motherhood

Balancing a career and family life is a longstanding issue that is not exclusive to science. (see the Report of the Women's Committee of the American Studies Association) However, science is, as one woman stated, "not a very forgiving profession."

...if you leave, you can't go back... It is so competitive and moves so rapidly. You have to write grants, do your research, etc. For women who don't have support, they just can't do it. You can't be a full time mother and a full time scientist.

It's a long process, it can take up to ten years to get a Ph.D. and that's a good chunk of your life, and some women are not willing to postpone having children for that length of time.

Women are in a tough position because of high expectations in the scientific community. The best thing is to make the community aware of the problems, the lack of support, the lack of facilities at conferences, for example. There are never accommodations or services for your kids, your spouse. You're always looked at as an individual. I've gone with my husband on his [work-related conferences]. They had day care facilities, programs for spouses. It's incredible, they never have these in science. Your whole day is booked with programs...there's a lack of responsibility for families in science whether you're a man or a woman.

Values in the practice of science

While one participant was satisfied with her career, most agreed that the reality of doing science did not measure up to their expectations. Former students expected more of an intellectual challenge and excitement while pursuing their graduate studies, assuming that the pursuit of knowledge would be their primary concern. Most of the participants thought that the emphasis on competitiveness, winning, leading, and mastering in science needed to change as these values were destructive to the individuals who adopted them and because they inhibited the creative potential of science.

I didn't realize how much of the "tortoise syndrome" is necessary just to stick out the crap, lie low, try not to let the problems get to you, publish in important journals. You have to be smart, but you also need stamina and courage to deal with the difficult [gender-related] things.

My expectations were idealistic...[I thought] that when I finished my Ph.D. this was the end of competition, guarding, and hoarding my skills and talents. Now I would be ready, a partner, a member working for the betterment of human beings. And if I worked hard, I'd get paid and promoted...I learned quickly... that you become a manager, administrator, financial planner, politician, negotiator, security chief, hand-holder, baby-sitter.

You don't have time to write your papers...

More women would remain in science if there was a greater emphasis on developing creativity, getting to know the people one worked with, sharing knowledge, having fun, and appreciating the sense of discovery that most scientists start out with.

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¹The study was conducted through the 1990-1991 Ruth Wynn Woodward Chair in Women's Studies at Simon Fraser University, Dr. Hilda Ching.

²The researchers wish to thank Sarah Dench for her permission to use questions from her M.A. Thesis, "Factors Affecting Engineering Students: Similarities and Differences for Females and Males in the SFU Program" (1990) and modifying them for our own use.

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MARGO BUTTON

Patriarchy

Two bugs
red-spotted
make love
end to end
on a leaf
He moves,
she is moved
Her legs
frantic in space
struggle for purchase

Flit

Gone flying

Her in reverse

Margo Button is a photographer and writer who lives on Vancouver Island. She is fascinated by the creative process as a means of healing and individuation.

LYNNE KOSITSKY

pain

since I last saw you
I've walked into a wall
which shouldn't have been there
fallen over going down an up escalator
and hit myself hard in the face
with a five pound weight
when I decided to rub my nose
while exercising

so I should warn you
if you ever wish to see me again
I am not as I was

Lynne Kositsky lives in Willowdale, Ontario and has had poems published in Toronto Life and Women's Education des femmes.