

Challenges Faced by Women in Administrative Roles; With a Special Emphasis on the Field of Electrical Engineering

Project Report

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Abstract:

Like in other countries, India also has a significant number of women who rise up against the societal bias towards women to break the stigma of “women belonging to private space”. In spite of a lot of women rising up, very few reach the highest positions in their respective organizations as compared to men. Most of the analysts explain this as equal disadvantage men and women have going up in an organizational ladder. The question here is, “Are women at a greater disadvantage than men?”. Some of the analysts do agree that women are at a disadvantage due to a lot of factors. This paper presents a study conducted among a group of women professors and staff working at the Department of Electrical Engineering IIT Madras and alumnae who graduated with an Electrical Engineering degree from IIT Madras. This paper highlights the challenges faced by women and potential solutions for the existing problems.

Introduction:

The global conflict on gender equality puzzles us the most. Half of the world's population and potential is women. Social progress is stagnated when this potential is suppressed due to gender inequality. Many societies expect men and women to behave in certain ways and play certain roles. Over time, these assigned roles have shaped the behaviour of men and women which has resulted

in a societal bias. Many religions and traditions have been difficult on women. They have suppressed the growth of women by restricting them from social activities.

Around the world, women are discriminated through different practices. Roughly ninety percent of all the countries have at least one legal difference between women and men. We see a lot of examples in our day-to-day life and on social media about domestic violence against women. 46 countries still don't provide any legal protection against domestic violence. In a few communities in Pakistan and Saudi Arabia, women are not allowed to drive and go out in public. In Iraq, Oman, Yemen and other countries, a woman needs the consent of her husband to leave the country. Women in many Muslim communities have to cover their body completely with burqa according to the Sharia law. Practices like female genital mutilation to ensure a girl's 'so-called fidelity' are still prevalent in Egypt and other African countries. Rural areas of countries like India and China commit to female infanticide as having a girl child is considered a burden to the family. Especially in India, though there are laws against dowry, adultery, and rape, none of these were effective in bringing down the crime rate related to the same.

Equality is substantiated by rights - right to education, right to property, etc. - and freedoms - freedom of marriage and divorce, freedom of speech, etc. Rights and freedoms are made effective only through accompanying policy. Article 26 of UN's Universal Declaration of Human Rights states that "Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory". But many girls across the globe are still denied the right to education since childhood. This results in higher rates of illiteracy among women thereby limiting their opportunities.

Gender equality is equally important for both men and women. We can't empower women unless we engage men. We have to bridge the gap in access to resources between genders. Change is needed on many levels. Society should support women emerging as leaders. As Edith Clarke, the first female electrical

engineer of United States quoted, “ There is no demand for women engineers, as such, as there are for women doctors; but there’s always a demand for anyone who can do a good piece of work”.

Motivation and Objective:

I grew up in a locality where most of my friends were boys. I used to play the so-called guys-games, shout out loud and sometimes even get into arguments. My parents were mocked for raising me up like a boy. As a kid, I used to feel proud of the fact that I am being likened to boys. As I grew up I started questioning the fallacy that ‘a girl can’t be the way she wants to be’. I started strongly believing that a guy and a girl are equal. I was tired of the social stigma that girls face and decided to fight against the societal barriers imposed on girls.

An incident in my sophomore year turned out to be a life-changing moment. During a concert, I was molested by a guy in the crowd. I couldn't turn behind to identify him in the congestion but caught hold of his hand. I could not find the courage to pull him out of the crowd. I let go of his hand because I was scared of the societal opinion and people pointing fingers at me, the victim. I considered myself a strong woman and never realized that I would succumb to this fear until I experienced it. This incident made me more compassionate towards women and minorities who face similar challenges on a regular basis. It is then that I decided to fight against these societal odds to build a better society.

I had been actively involved with International and Alumni Relations team since my second year at IIT Madras and decided to contest for the position of Secretary. When I expressed my interest to contest the election, I received criticism from all the directions. In an institute where girls form only ten percent of total population, it was considered impossible for me to contest against a guy and win. When I stood strong and put my nomination, I was ridiculed for disrupting political strategies of other candidates. During the campaign, I had to

face bias of the election code against female candidates. Though I had to sacrifice on my campaign time, I put efforts in getting the election code changed to make sure that girl contestants don't have to face the same problems in future. Because of my determination as well as strong candidature for the position, I won the election.

During my ongoing tenure as the first female Secretary of IAR, I have faced roadblocks to my work from fellow secretaries as well as the administration due to their failure to acknowledge a girl becoming the secretary. I overcame these roadblocks with my unyielding perseverance. I have developed a better understanding of problems faced by women in different walks of life and am determined to contribute to that field.

As a part of a course seminar, I presented my literature review on gender equality in developing countries like India. I was surprised by the statistics on gender inequality towards women and LGBTQ community. This inspired me to do further research on the issue of inequality and helped shape my final year project.

Sample Set of Women in the study:

Demographics are as follows.

Profession	Organisation	Number
Professor	EE Department IIT Madras	9
Senior Technical Superintendent	EE Department IIT Madras	2
Junior Technical Superintendent	EE Department IIT Madras	3
Technical Superintendent	EE Department IIT Madras	4
Senior Assistants	EE Department IIT Madras	2
Junior Assistant	EE Department IIT Madras	1

Senior Attendant	EE Department IIT Madras	1
Institute Engineer	EE Department IIT Madras	1
Technical Officer	EE Department IIT Madras	1
Office Staff	EE Department IIT Madras	2
Alumna	Graduated from IIT Madras	3

Survey Questions:

1. Tell us about yourself
2. Tell us about where you come from and your family background
3. Have you ever faced the challenges of Gender inequality in reaching your position?
4. What sort of challenges did you face?
5. Were you able to overcome them? If yes, How?
6. Were you alone in overcoming these challenges? If not, who has been there with you?
7. Do you think you could have achieved more in life if there wasn't a gender inequality? If yes, How?
8. Specific to IIT Madras, were there any challenges you faced just because of being a woman?
9. Specific to the Department of Electrical Engineering, were there any challenges you faced just because of being a woman?
10. What changes would you like to see in the existing system and society?
11. Have you contributed for any of these changes? If yes, How?
12. If given power, how would you bring these changes?
13. Where do you see the world heading towards in terms of gender equality?
14. Where do you want the world to head towards in terms of gender equality?

Major Challenges:

A detailed analysis of the responses from interviews, and validating them with the existing literature brings out a few challenges faced by women in administrative roles. A breakdown of root causes of these challenges, their effect on one's life and society, and ways to overcome them are presented below.

Prejudice About Women:

People are brought up through different kinds of parenting and surroundings. Gender sensitization has not been done to us at an early age. There is a prejudice about women on what they should do and how they should behave. Most of us just try to enforce it. This pre-bias towards women is what results in the alienation of those who raise up to higher positions which appears unconventional to the society.

People should define their lives themselves and not the society. Similarly, a woman's life should be left to her to decide. The societal pressure of unshared household responsibilities and marriage have been affecting a woman's thought process. Overages even women got used to the society defining their life. That's why we do not see many women opposing this prejudice built deep in the society. We also do not see families moving places to support the endeavors of women but most of the times see that for men because the society finds it 'fair' to give a man such comfort and flexibility.

It's not confined just to India. It's also there in the western countries. The root problem for our thinking is the way 'we' are raised up. The "we" refers to everyone in the world and not just Indians. Right from a young age, many women have been restricted to play with the so-called "gender-specific" toys like kitchen sets. This sets a pre-bias in the mind of a kid on how they are expected to behave

when they grow up. In the case of India, girls are not considered to be as smart as guys. Very few parents encourage girls to pursue math and science. This results in guys to think from a young age that they are smarter than girls in these fields. As the streams get more and more specialized, girls drop out in larger numbers leaving a skewed gender ratio at the top of any field.

Even in premier institutes like Indian Institute of Technology (IITs), few professors do not prefer taking female Ph.D. students for practical work as they find them incapable and in general assume of them having a lot of commitments with family. One of the professors states that the actual struggle was not 'physical' on the shop floor working alongside men but was 'mental' in breaking the stereotypes by outperforming all her male peers. Another professor feels that stereotypical jokes and comments over time led to this stigma towards women.

Belief in Gender Equality:

Gender equality is a basic concept that talks about men and women being equal. By equal it means equal rights, equal duties, and equal responsibilities. Many men and surprisingly many women don't actually believe in gender equality. Men, in general, feel superior to women. This leads to women being looked down in most of the work they do. Women who go to higher positions is very less in number. They do not get equal treatment like other men at the same level be it in salaries or authority. Another general notion about women is things being easy for them because of the favours a woman receives due to her gender leading to most of their achievements being undermined.

One of the female professors talks about the general notion that if a woman is living in IIT, her husband must be a professor. She narrates an incident where a visitor to the campus was asking her husband, who doesn't work in IIT Madras, for directions to some lab completely ignoring her who had a backpack and was obviously heading to work. Another female professor talks about how her

professor back then in IIT Bombay when she was a student said that she was doing good research but would never be given a job as the field of science is dominated by men and a change will never happen. She got worried at first but stood strong and worked hard. She finished her Postdoc, got a job at IIT Madras, and got a girl as her first Ph.D. student. When she met that professor from IIT Bombay recently, he was really happy that a change happened and in fact offered her a faculty position at IIT Bombay. If we believe in gender equality and fight for a change, we can bring it.

Though the institutional conventions towards gender equality have changed for the better, the social perceptions have not changed. It is true that a woman cannot be a man. Simultaneously, a man also cannot be a woman. They have a lot of differences. A woman and a man should appreciate each other's differences and support where the other one is lacking.

A general assumption on the reason women drop out of research is family commitments. But a survey conducted by Indian Academy of Sciences among many women stated that the major reason for women dropping out of research is not family commitments but them not getting jobs. We can see an inequality in opportunities for women here. In fact, there has been a story where a resume was given to different recruiters in the same field with the name changed to a male name and female name at the top respectively. The one looking at the one with the male name on the resume was recruited and the one with the female name on the same resume was rejected. This clearly shows the bias against women that is there in the recruiters.

Back then, In MIT one of the lady professors wanted a 400 square feet space for her lab and she was denied. She found out that male professors who joined much after her had bigger labs than her. When she was having a coffee conversation with two other female professors at MIT, she realized that they all had similar experiences. They approached the Dean, a very progressive person, who wanted to investigate deep and resolve this discrimination. From then, reports were

published by MIT once every five years which highlighted a natural tendency of favouring men over women.

Education to Women:

Girls are as bright as boys. It is just that they are not given equal education and opportunities. Education teaches us the basic order and organization of the society. But we see cases of educated people also resorting to many heinous practices against women. Here is where we need to stop and think a minute about the type of education we actually receive. We have to think if this education is actually teaching us gender equality and making us gender sensitive. Nevertheless, education will empower a lot of women as economic independence is what makes them stand for themselves.

We also commonly notice families moving places for the education of guys but not girls, especially with JEE preparation. One of the professors feels that girls who made it to IITs and succeeded in their careers defeated stereotypes on many levels and have something extra in them compared to their male peers.

Women Administrators Being Bossy and Rude:

A fact we generally hear about women administrators is them being rude and bossy. A professor from IIT Madras was having a discussion with a french guy on this perception and came up with a convincing reason on why it is the case. People have their pre-biased notion of not giving much importance to the words of women. When a woman is a boss, people don't tend to take her seriously. She raises her voice to be heard and get the work done which comes out as being rude. Hence women bosses are used to raising their voices to be heard.

There are very few women who reach the top positions. Being a minority there, women gather more attention with their actions being observed carefully and quickly being judged as bossy. One of the professors also admits being stricter in classes dominated by guys for similar reasons.

Expectations from Women:

We have to give a woman the freedom to do what she wants to do. It is not comfortable if everyone's eyes are on her waiting for her to perform. It is not needed to always look up to a woman to see what she achieves. It is easy to be judging the minority of women and they do not want to be judged. Rather we have to give a woman helping hand to achieve what she wants.

For example, if a woman becomes Head of the Department, everyone constantly notices her to see how she performs. If a man takes up that position, it is like a pretty normal everyday thing. Let women be as one among the other people instead of giving them special focus.

Micromanagement by Women Administrators:

The other perception about women in top positions is they tend to micromanage. This comes naturally because women put in much more effort than men because they want their voices to be heard, and meet the higher expectations of society. They expect returns at the same scale of their efforts. So they are strict about deadlines and follow them cautiously. Women, in general, take responsibility for the work done by their entire team and tend to be perfect. This results in them being cautious about the status of work done by everyone in the team and asking for frequent updates. This comes out as micromanaging.

Maternity Leave and Child Care Leave:

According to a professor in IIT, the only trade-off for a woman in pursuing her professional life is motherhood and managing a family. She has two children. She states that motherhood changes the way a woman works later. She recollects the case of her sister who left her job to take care of the kids. She states that women who take maternity leaves are treated differently once they are back. They are considered as if they lack their original potential and are not as capable as they were before. The professor also talks about a general perception among women itself that the career progression stagnates once one starts having kids and family. Women take the sole responsibility of taking care of the family and quit jobs.

Other professors from the Department of Electrical Engineering said they were surprised that something of this sort can happen in IIT. One professor feels at least everyone in IIT do not want to portray themselves as sexists. Whatever they might be feeling inside, they generally tend to showcase a feminist approach outside in support of women. One of the professors quoted a case where a Ph.D. student took a maternity leave and worked on her thesis from home. Her professor was really supportive. A professor feels that in this aspect, academia is more flexible than industry. In case of women professors in academia, it is a bit easy because she just has to get off teaching which is time-bound and peacefully do research at her own pace. In fact, one of the professors recollects that she was teaching a course when she was pregnant and delivered just two days after she took the last class of the course. Whereas Industry and companies outside generally don't like women taking maternity leaves as they have to find a replacement for the job for 6 months or more.

More flexible working options should be provided to women during their pregnancy and initial stages of motherhood. The perception of these leaves being a lenience to women has to change as a woman's physical body itself undergoes a

lot of modifications. This flexibility is a necessity and not a luxury. In fact, a woman's body enters a phase called postpartum period immediately after delivery. This period includes a lot of changes in her body and hormones which might cause depression, anxiety, insecurity, and lethargy. One in every five new mother's in India suffers from postpartum depression. In this stage, support has to be given to women for them to get back to their daily routine. Motherhood has to be encouraged by the gestures of work flexibility. Maternity should be treated as a great thing. A woman will also have a lot of new skills like endurance and multitasking to bring to the workplace post pregnancy.

IIT Madras provides a maternity leave of maximum six months for women Ph.D. Scholars and the leave period will be excluded from the duration of the submission of the thesis. An additional subsistence is also provided to female scholars during their maternity leave. The women Post-Doctoral Fellows in IIT Madras are eligible for maternity leave of six months if they have worked with the Institute for a duration of six months before availing the leave and have more than six-month service left after coming back from the leave. Their salary will be disbursed only after coming back from the leave. According to a review by one of the staff at IIT Madras, paternity leave of one-month duration is also provided. During maternity leave and childcare leave female professors and staff get salary as stipulated by the government.

Salaries for Women:

There is a lot of difference in pay between men and women working in the industry at the same level of authority. IIT Madras does not discriminate faculty and technical staff based on gender when it comes to paying. Dual Degree and Ph.D. students also receive an equal stipend without any discrimination. However, promotions could be an issue for women faculty due to gender discrimination.

Effect of Gender Bias on Women:

As one of the professors' states, gender bias itself may be unconscious but there has to be a conscious reverse engineering process. We need this at all levels as girls today need women who are in top positions as role models.

There have been instances of male faculty making gender insensitive comments at women students. When heard from a professor, both male and female students in the class might think it is okay to have a gender bias and look down on women. This tells us that gender sensitization is required not just to the students but also to the faculty.

Few Examples from IIT Madras:

The first Indian Institute of Technology (IIT) was established in 1950 and the number of these IITs has grown to 23 now all across India. For almost 60 years, none of these IITs had a female professor in the position of a Dean. None of the IITs to date have a female professor in the position of Director. IIT Guwahati was the first IIT to have a female Dean followed by IIT Madras.

One of the professors narrates an incident in a department where there was just one female professor. The number of professors was very less that every male professor has already become a Head of the Department in the rotation. The female professor was asked to hold the position of Head of the Department till a new male professor is recruited. She was shocked at the institute looking down on a woman professor. She said if she is to become a head, she will do it for the whole term. Finally, she became the Head and did it for a full term successfully.

A few women professors and staff state that caste is still given importance in IIT Madras. On campus, they had very first experiences of people asking them about the caste they belong to.

One of the advantages of academia in India provides is that there is no pressure on women to dress “formally”. The formal wear for women varies significantly from the decent Indian wear for women. This gives a comfort to women professors to dress as per their interests. In fact, IIT Madras does not impose any dress code on students and faculty.

Another woman professor shares a very good experience she had with IIT Madras. When she attended a conference in Paris, she realized a lot about challenges faced by women in the field of science to become a professor. She somehow made it to a professor and never thought of why many women do not make it. She wrote to the then Director of IIT Madras stating the seriousness of the issue and asking him for support. The director invited all the women faculty to the monthly Dean meeting and asked them to present on the issues which can be addressed by IIT Madras. He assured the faculty that all the infrastructural problems will be solved and there were indeed solved with time. The number of female faculties recruited has also consistently increased. IIT Madras does prove itself to be a platform where voices of women can be heard.

IIT Madras started a ‘Post-Doctoral Fellowship for Women with Break in Career’ to encourage women to come back into research after a break in their previous research due to family or other commitments. It was even extended to the faculty of other colleges to work in IIT Madras during their vacation time. This made a lot of impacts and opened up new opportunities to women who might have found it difficult to do research in regular programs.

Students, faculty, and staff in IIT Madras come from all over the country. They have a different set of idols and everyone’s beliefs are challenged here. There is a need for the campus to include gender sensitization in the curriculum and

orientation to make everyone understand the concept of gender equality and prevent sexual harassment in any form. IIT Madras also has Committee for Complaints Against Sexual Harassment (CCASH) a legal body to deal with cases of harassment formed in accordance with the Sexual Harassment of Women at Workplace (Prevention, Prohibition, and Redressal) Act, but not many are aware of this. IIT Madras also has a Women's Forum that includes faculty, staff, and students to celebrate diversity on campus. A few students on campus feel that the general rules imposed by IIT Madras like late night shuttle service and vigilance committees are intrinsically patronizing by treating 'girls like helpless sheep and boys like violent predators'.

Another noticeable thing from IIT Madras is the number of women who have been in the position of an Institute Student Secretary. As far as known, It is surprisingly only two till now with the number of positions of student secretaries being nine every year.

German Culture in IIT Madras:

IIT Madras has been established in collaboration with the country Germany. The institute does have a lot to derive from Germany in terms of hierarchy, respect, and culture. A woman professor claims that the trait of hierarchy and discrimination existing in IIT Madras has come from Germany. However, one of the woman professors who has been a student at IIT Madras and later joined as a faculty states that the institute has become less hierarchical over time. According to her, in academia innovation can happen only when everyone is a peer and colleague to other with a free exchange of ideas.

Though criticising IIT Madras here is not needed, we need to bring up observations when there is a correlation and pattern. People tend to behave that way naturally without actually knowing what they are doing. It's imbibed into the system and is kind of genetical. IIT Madras has too many steps to reach

higher up to the top position and there are also less number of women on campus. This might have resulted in a feeling of hierarchy. The effect of Germany on IIT Madras is still open ended giving a scope for research.

Specific to Electrical Engineering Department:

The Department of Electrical Engineering in IIT Madras has been well known all over India since the time it was established and many women alumnae preferred the department for its popularity and Madras for its safety. The number of female students studying in electrical engineering department has been high compared to other engineering departments.

In IIT, there is a Department Consultation Committee (DCC) for every department. The people in it change for every one or two years. But none of the female professors from the Electrical department were made a part of the DCC till now. It is not like they were excluded but they were also never invited to be a part of it.

The faculty of the department in general present a lot about IIT Madras and the department itself to Industry and in other important events like conferences. Most of the time, a male professor gets chosen for such presentations. A pre-bias has been there with the administration that it is a discomfort for the female professors to travel and present.

In Spite of such incidents, most of the faculty and staff do feel that Electrical Engineering department is better than many other departments in IIT Madras in terms of gender equality and being sensitive to women.

Conclusion:

Through this research, the challenges faced by women over men in administrative roles have been highlighted. A step towards gender equality can be made when the workplace comes together as a whole to remove the discrimination against women. All in all, IIT Madras is a cosmo part of India but is unique in its own. Compared to other IITs, IIT Madras have more women coming to technical fields both as students and faculty with the situation improving with every passing year. Higher the number of 'women' encouraged to reach top positions, greater the inspiration of girls to be 'women'.

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