Being both visible and invisible: how women engineers manage this paradox and what it means for their careers

Women engineers (and others in ultra masculine sectors) have a visibility problem. While they are often excessively visible in terms of their gender and sex appeal, when it comes to their technical expertise, they have to win their space in the limelight. This paradox gets in the way of forming relationships at work and hurts their advancement.

We wanted to know how women deal with this. In 2014 we interviewed 50 women engineers in three leading FTSE 100 organizations in the UK. (See sidebar for more on our sample.) All three organizations said they were committed to diversity and attempting to hire, retain, and promote more women engineers. However, numbers remained persistently low, and in all three organizations, attrition was high, especially among junior women. But the women we spoke to had remained in their companies, and several had advanced to senior positions. We asked them about their day-to-day experiences of work, opportunities for career progress, and how they overcame the challenges they faced.

Our respondents talked at length about how their competence was obscured by their sexuality. They felt sexually objectified, and they had to work harder than men to prove their technical competence. Their colleagues often focused on their looks as opposed to their work.

From our interviews, we recognized four key strategies that women reported using to deal with this situation.

They conformed to "unchallenging" gender stereotypes.

One common strategy involved positioning oneself as a daughter or sister when interacting with men. This was used by early career women to generate support from colleagues. In Rosy's* words:

> *I've got blond hair and I make blond jokes and I'll say "yeah, I know I'm asking a stupid question. Tell me what you're doing. Tell it me like I'm a five-year-old." They're like a bunch of my big brothers or my dad, and playing the girlie card a little bit sometimes can help diffuse some of those situations.*

This strategy tended to be employed by the youngest and most junior respondents. Drawing on daughter/sister stereotypes reduced the focus on their sexuality and allowed them concentrate on the job at hand. However, it was infantilizing, and women could not carry on with this strategy if they wanted to advance. Several respondents complained about being patronized by 'fatherly' male colleagues. And many believed they missed out on important assignments because they were viewed as needing frequent assistance, guidance and care, and not as the most promising candidates.

They embraced feminine stereotypes.

Some women embraced feminine gender stereotypes in their appearance (dress, hair, make-up and nails), while demonstrating high levels of engineering competence at the same time. They made themselves visible in both spheres. Becky described her approach:

> *It's kind of a running joke now with my nails because I change my nail colour pretty much every couple of weeks. I'm on the shop floor and I'm helping with tooling … I mean I get all sorts of excited looks and questions like "How can you function with those nails? And I tell them to move over and I get some gloves on and do it.*

Only a small minority of women used this strategy – all of them in mid-career. Although celebrating what might be seen as a proscribed identity might seem risky, for these highly skilled engineers, it worked. They were recognized for their engineering expertise and, on the basis of this, saw opportunities for advancement. However, they were aware that this strategy only worked because they were highly competent, and that any technical error could result in it backfiring.

They downplayed their gender.

The most popular strategy we heard about was women presenting themselves conservatively to downplay their gender and avoid being sexualized. Women who used this approach carefully managed their appearance and interactions: choosing unremarkable, corporate dress, moderating their behavior to avoid any possibility of gossip, and being mindful of others' scrutiny. Clara explained, "*I'll be friendly but not too friendly … don't want to be misinterpreted. I want to be respected."*

This strategy effectively shifted the spotlight from women's physical presence to their engineering know-how. Interestingly, many women who used it were keen for others to behave likewise. Their view was that 'toning it down' – in appearance and behavior -- made life easier for everybody.

But not everyone wanted to suppress their femininity in this way, and not everyone could. For example, Yolanda explained that as a 'tiny, black women' (in a largely white male space), she just didn't blend, which meant that she did not fit in conventional images of success, or what 'promising' candidates looked like. As she saw it, her only option was to celebrate her difference – which she did through flamboyant clothes and by talking openly about her African heritage in such contexts as formal presentations. However, this only worked because she knew that her technical knowledge and skills were beyond reproach.

They tried to be "one of the boys."

Some women went further, attempting to camouflage their femininity by looking and talking like men. As Katya told us:

> *It's nice to fit in, right? I've worn a button-up shirt and they're all wearing their blue button-up dress shirt and then we're talking about fishing and I'm just like this makes it a lot easier*

As one of the only senior women in her department, Katya was used to being excessively visible. So it was a relief to occasionally feel like 'one of the guys'. This strategy was mostly adopted by women in late career, maybe because during their early years there were fewer role models, and thus fewer ways of being female in their organizations.

Some senior women also adopted what they saw described as stereotypically male behaviors: authoritative, individualistic, combative. Although they saw this as necessary to earn their colleagues' respect, it was a double-edged sword. People don't like women who act like this, and those who did were harshly judged and even subjected to name calling (*ice queen*, *Cruella)*. Women who used this approach drew attention away from their sexuality and towards their engineering competence, and they advanced career-wise, but they said they often paid a price.

Can organizations step in?

The women we spoke to recognized the need to manage this paradox of sexual visibility and professional invisibility, using one (or in some cases a combination) of these strategies to shift the focus. The majority adopted a conservative approach. While this may have been successful for them in their individual careers, it ultimately reproduced existing gender stereotypes and sustained men's dominance in the engineering field.

What can managers do to change this dynamic? A starting point is to acknowledge and challenge stereotypes. Implicit bias training has a role to play – not as a one-off quick fix, but through regular interventions specifically focused on how to remove stereotypical assumptions from recruitment, training and development, and promotion. Take promotions, for example. Well-worn criteria about who is ready to advance cannot be taken for granted – they should to be reviewed each time to ensure that they are applied in a systematic and transparent way to all candidates.

Everyone should be made aware of what constitutes unacceptable behavior, from excessive and unwelcome comments on a person's appearance to more overt sexual harassment – with sanctions applied to those who transgress. Women should know that they have the right to report behaviors that make them feel sexualized, understand how to go about this, and expect to be listened to. Organizations can also try to highlight different modes of success, to show that women do not have to look and act like men or moderate their femininity in order to progress.

* We have used pseudonyms to protect respondents' identities.

For the sidebar

The three organizations were National Fuel[1], which supplies fuel, energy, and petrochemicals to customers around the world; Engine Co, which is one of the world's leading suppliers of gas and diesel engines; and Luxe Autos, a luxury motor manufacturer owned by a multinational automotive company. Women comprised 12% of the engineering workforce in National Fuel, 9% in Engine Co and 8% in Lux Autos. Our respondents ranged in age from mid-twenties to mid-fifties, and were evenly divided between early, middle, and later career. Within their engineering sectors, they worked in a range of specialities.