

## Chapter 9

# Differences

### ABSTRACT

*Chapter 9 compares other fields and cultures. Issues of low and declining participation of women are far from unique to IT, with similar patterns, intervention programs, and results noted in other fields such as science, engineering, and construction. Yet other fields such as sociology and psychology have experienced the opposite. This supports the contention that it is not social forces but individual choice that drives career participation. There is also remarkable variety among cultures with some non-Western cultures having substantially higher female participation in IT. However, this does not reflect any greater female freedom, just different cultural evaluations and opportunities. A further conclusion from the research is that attempts to attract women or minorities into particular technical careers do not increase numbers overall or benefit all minorities, but merely rearrange the distribution.*

*Change takes time, and is never easy. And often we learn that NO does not mean that things are impossible - it only means that things will take longer time. But we will never give up, and results often come in generations after the work started. We are standing on the shoulders of generations before us in our common endeavours. They have paved the way - and they have moved mountains - now it is up to us to walk the last miles - and we must make sure we leave no women behind. Now is the time to reach our goals - for women all over the world. We have the tools, and the groundwork was done by our foremothers. Reaching the SDGs is a prerequisite to save humanity - and by focusing on SDG 5, we help build a peace army carrying half the world. - Ingrid Stange - Founder and Chair, Partnership for Change*

DOI: 10.4018/978-1-5225-7975-5.ch009

Sonja Bernhardt OAM states: “Over my years of involvement in the issues of recruitment, promotion and attraction of women into technology fields, I have seen the perspective expand. Initially the interest was specifically in computing or more generally IT, then over time it became increasingly bundled with the related fields of Science and Engineering, which had been seeing similar issues. This occurred almost across the board in the literature, government policies and campaigns, gathering acronyms as it went: first with SET (Science, Engineering and Technology) and then STEM (Science, Technology, Engineering and Maths)”.

It is not surprising that we first see our own environment and then broaden our viewpoint to related fields experiencing similar issues. From the other side of that, we can learn from the experiences of people outside our own environment: both in other fields and other cultures. So in this chapter we compare issues of female involvement in industries other than IT and in non-Western or specific ethnic cultures.

## **INDUSTRIAL REVOLUTIONS**

### **Scientific Analysis**

Issues of low and declining participation of women are far from unique to IT. Similar patterns, intervention programs and results have been noted in other fields. Indeed, the arguments presented in a United Nations report about the low and falling percentage of women in science are eerily similar to those regarding IT noted earlier in this book: “The participation of women in science can increase their contribution to society, because, among other things, they could influence the agenda for science and technology (S&T) research and development (R&D). However, at present a gender imbalance is observed in S&T education, which favours boys/men in three out of four countries worldwide that report on intake ratios. This is often due to barriers such as inappropriate school environments for girls, safety concerns, teaching methods that favour boys, and varying levels of access to technical and vocational education. Some of these problems can be addressed by promoting gender-relevant teaching methods and materials, and providing funds to promote girls and women in S&T education... To increase the participation of women in science, it would be necessary to promote women role models in

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