“Studying, and then?”
Recognize perspectives and plan career!

A quantitative analysis of career plans and aspirations of computer scientists’

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Topic:
Developments in STEM & preparing workers for the future

Keywords
Women in computer science, career aspirations, management or specialist career, gender role attitude, working time models

Abstract:
This article aims to investigate gender differences among German students in computer science programs. In the male-dominated field of computer science leadership positions are predominantly held by men. In our empirical analysis, we investigate which career path students tend to choose, whether they are planning a specialist or management career. One reason for different career aspirations could be the gender role attitude. We distinguish between a traditional and an egalitarian understanding of gender role attitude. The traditional understanding of gender role attitude considers men as breadwinners, whereas women take care of house- and family. Therefore, the career of women is less important. The egalitarian understanding of gender role attitude supports career-oriented women and accepts the consequences for the family. Our findings show that women compared to men, are more egalitarian-minded and they also interested in their career development. At the same time, women assume that the main family work will be at their expense. In comparison to male students, they are therefore more interested in family-friendly work time models.

Theoretical framework:
We assume that students of computer science differ in their professional plans. Due to the fact of gender stereotypes and gender roles, we expect that men are more interested to pursue a leadership position than women are. However, we believe that women are already aware of their role in the family and they are interested in family-friendly working-time models. The empirical analysis based on the model of life planning in professional and private life (Abele, 2006).

Aims and objectives:
By interrogating students of computer science, we wanted to gain insights into gender differences in career aspirations, gender role attitude and preferred working conditions.

Sample:
The sample included 194 students of computer science (w = 70; m = 124).

Methodology:
The data of the students were generated from the project Alumnae Tracking (2013-2015). Hypotheses were tested using Wilcoxon rank sum test, logistic and multinomial logistic regression.

Results:
Female students of computer science are significantly more egalitarian compared to male students. Compared to men women definitely know which career path they would like to

choose. However, women are also aware of their role in the family. Therefore, part-time offers from future employers are significantly more important to women compared to men.

Scientific and applied significance:

Because of the results, a coaching program was implemented. The measure aims to provide career-planning support for female students of computer science.