Students' Perceptions and Attitudes towards Mathematical Courses in Software Engineering

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Numerous works have addressed the fundamental role of logic and formal methods in the computing curricula. While their importance as core disciplines for computer scientists and software engineers is widely acknowledged, there is a growing frustration of educators concerning the negative attitudes of students towards mathematical courses in the curricula, and the low motivation to invest efforts in these courses. To address this issue, most works focus on poor alignment of the logic courses to the real needs of software practitioners and discuss alternatives for changing *what* is being taught. However, works offering student-centric approaches related to *how* to make logic courses more effective and relevant for computing practitioners and/or reporting on empirical studies in logic education are scarce.

Towards filling this gap, in this study we explored the perceptions and attitudes of 30 undergraduate students studying at the Information Systems and Computer Science Departments at the University of Haifa, who attended a course in formal logic. We conducted interviews, in which the students were asked about the challenges of the course, ways of dealing with those challenges and how they generally felt about the course. A qualitative analysis of the obtained data leads to some preliminary insights which can be a starting point towards changing the students' negative attitudes towards mathematical courses, which in its turn may pave the way to more successful teaching methodologies.