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The Use of Gender-Fair Language in CS National Exams

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Abstract: Computer Science (CS) and programming is still considered a boy's club and is a male-dominated profession. This is also the case in high schools and higher education. In Israel, not different from the rest of the world, there are less than 35% of female students in CS studies that take the matriculation exams. The Israeli matriculation exams are written in a masculine form language. Gender-fair language (GFL) aims at reducing gender stereotyping and discrimination. There are several strategies that can be employed to make languages gender-fair and to treat women and men symmetrically (especially in languages with grammatical gender, among them neutralization and using the plural form. This research aims at exploring computer science teachers' beliefs regarding the use of gender-fair language in exams. An exploratory quantitative research methodology was employed to collect the data. A questionnaire was administered to 353 computer science teachers. 58% female and 42% male. 86% are teaching for at least 3 years, with 59% of them have a teaching experience of 7 years. 71% of the teachers teach in high school, and 82% of them are preparing students for the matriculation exam in computer science. The questionnaire contained 2 matriculation exam questions from previous years and open-ended questions. Teachers were asked which form they think is more suited: (a) the existing form (mescaline), (b) using both gender full forms (e.g., he/she), (c) using both gender short forms, (d) plural form, (e) natural form, and (f) female form. 84% of the teachers recognized the need to change the existing mescaline form in the matriculation exams. About 50% of them thought that using the plural form was the best-suited option. When examining the teachers who are pro-change and those who are against, no gender differences or teaching experience were found. The teachers who are pro gender-fair language justified it as making it more personal and motivating for the female students. Those who thought that the mescaline form should remain argued that the female students do not complain and the change in form will not influence or affect the female students to choose to study computer science. Some even argued that the change will not affect the students but can only improve their sense of identity or feeling toward the profession (which seems like a misconception). This research suggests that the teachers are pro-change and believe that reformulating the matriculation exams is the right step towards encouraging more female students to choose to study computer science as their major study track and to bridge the gap for gender equality. This should indicate a bottom-up approach, as not long after this research was conducted, the Israeli ministry of education decided to change the matriculation exams to genderfair language using the plural form. In the coming years, with the transition to web-based examination, it is suggested to use personalization and adjust the language form in accordance with the student's gender.

Keywords: compter science, gender-fair language, teachers, national exams

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