Challenging Gender Stereotypes using Virtual Pedagogical Characters

Agneta Gulz  
Div. of Cognitive Science (LUCS)  
Lund University  
+46 (0)46 222 3269  
agneta.gulz@lucs.lu.se

Magnus Haake  
Dept. of Design Sciences  
LTH  
Lund University  
+46 (0)46 222 7916  
magnus.haake@design.lth.se

Betty Tärning  
Div. of Cognitive Science (LUCS)  
Lund University  
+46 (0)46 222 3269  
betty.tarning@lucs.lu.se

Abstract

The paper explores motivational and cognitive effects of more neutral or androgynous-looking characters versus more feminine-looking female and masculine-looking male characters. A user study involving 158 students, aged 17-19, encountering four virtual characters, visually manipulated to represent gender stereotypicality versus androgyny, is presented. On the one hand we explored students’ attitudes towards the different characters as seen in how they rank them as preferred presenters and articulate their arguments about the characters. On the other hand we looked for patterns as to which character(s) influence female and male students most positively with respect to their attitude towards a university level computer engineering program. Results from the study are presented and discussed. We conclude with pointing towards future research within the area.

Keywords: virtual characters, gender, visual design, femininity, masculinity, androgynities, computer engineering, educational choice.