Style for Success?
A Study on the Impact of Avatars' Styling on Perceived Competence and Warmth

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RELEVANCE & RESEARCH QUESTION

Especially regarding digitalization, avatars representing humans in a virtual environment are used in different online scenarios. One future application might be a digital assessment center, where candidates got represented by an avatar to design an inclusive application process. Based on the media equation theory (Reeves & Nass, 1996), prior studies showing, that styling has an influence on the evaluation of women's leadership abilities (Klatt, Eimler & Krämer, 2016) might also be applicable to avatars.

Nevertheless, it is still questionable, if and how this evaluation impacts the perception of the represented candidate´s capabilities behind it. Thus, the main goal of this study was to investigate the influence of an avatar´s styling on it´s perception of warmth and competence and whether it has an effect on the perceived leadership abilities and likelihood to get hired of the represented human.

Hypotheses

H1: Compared to female avatars with a braid, female avatars with loose hair will be **(a)** rated as less *competent* **(b)** rated as *warmer*.

H2: Compared to people using a female avatar with a braid, people using a female avatar with loose hair will be **(a)** less *likely to get hired* **(b)** perceived with less *leadership abilities*.

H3: Compared to female avatars with make-up, female avatars without make-up will be **(a)** rated as less *competent* **(b)** rated as *warmer*.

H4: Compared to people using a female avatar with make-up, people using a female avatar without make-up will be **(a)** less *likely to get hired* **(b)** perceived with less *leadership abilities*.

H5: Compared to female avatars with trousers, female avatars with a skirt will be **(a)** rated as less *competent* **(b)** rated as *warmer*.

H6: Compared to people using a female avatar with trousers, people using a female avatar with a skirt be **(a)** less *likely to get hired* **(b)** perceived with less *leadership abilities*.
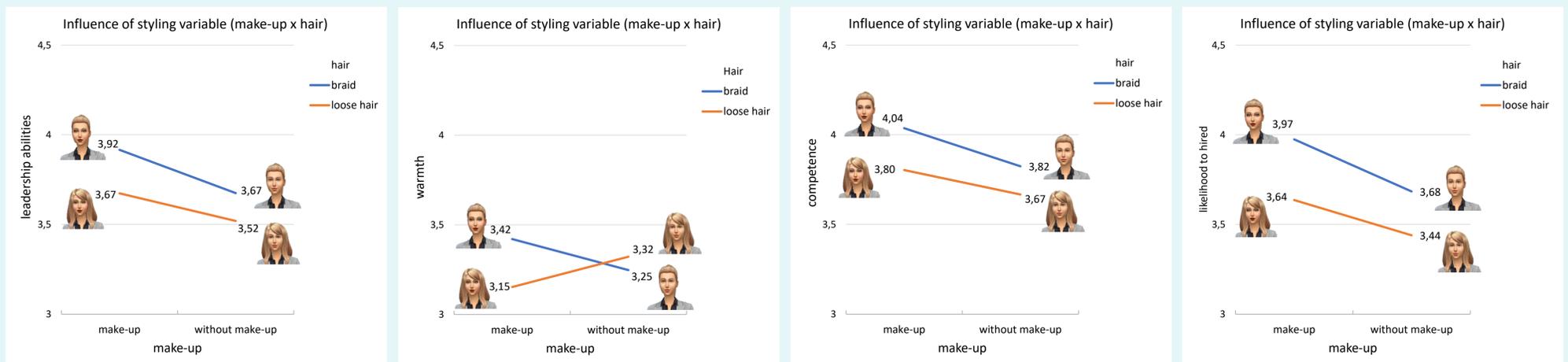
METHODS & DATA

To examine this question we conducted an online experiment with a 2 x 2 x 2 (skirt/pants, loose hair/braid, with/without makeup) between-subjects design. To enhance the generalizability two different figures have been evaluated and collapsed for the analyses. Overall 143 participants (♀=55, ♂=88, M_{age}=30,31, SD_{age}=13,28) evaluated the virtual woman concerning:

dependent variable	Items	Cronbachs (Alpha)
Warmth (11 Items)	e.g. warmth, friendlyness, reliability, honesty, empathic, communicative, helpful, modesty	.864
Competence (8 Items)	e.g. education, competence, intelligence, qualifications, independent, self confident	.908
Perceived leadership abilities (11 Items)	e.g. ambition, willingness to take risks, self-discipline, assertiveness, dominance, objectivity	.886

RESULTS

The results of a multiple ANOVA showed, that avatars with make-up were rated as more *competent* ($F(1,135)$=5,801, p=.026, η^2=.036), evoked higher *leadership abilities* ($F(1,135)$=7,309, p=.008, η^2=.051)and had a greater *chance of getting hired* ($F(1,135)$=4,01, p=.047, η^2=.029) in comparison to no make-up. Additionally, avatars with a braid are perceived as more *competent* ($F(1,135)$=6.578, p=.011, η^2=.041), are associated with higher *leadership abilities* ($F(1,135)$=7,274, p=.008, η^2=.051) and had greater *chances to get hired* ($F(1,135)$=5,85, p=.017, η^2=.042) than the ones with loose hair. Moreover, for avatars with loose hair no make-up leads to a higher *warmth* perception than make up ($F(1,135)$=5,565, p =.020, η^2=.040). No differences for clothing occurred.

Influence of styling variable (make-up x hair) — leadership abilities: braid 3,92 → 3,67; loose hair 3,67 → 3,52

Influence of styling variable (make-up x hair) — warmth: braid 3,42 → 3,25; loose hair 3,15 → 3,32

Influence of styling variable (make-up x hair) — competence: braid 4,04 → 3,82; loose hair 3,80 → 3,67

Influence of styling variable (make-up x hair) — likelihood to hired: braid 3,97 → 3,68; loose hair 3,64 → 3,44

DISCUSSION & LIMITATIONS

The results support our hypotheses that (H1a, H1b) avatars with a braid are perceived as more *competent* but less *warm* in comparison to avatars with loose hair. Women who were represented by avatars with a braid were also (H2a, H2b) associated with higher *leadership abilities* and had *greater chances to get hired* than the ones with loose hair. These are the same results we got with avatars with make-up in comparison to avatars without make-up. Those without make-up (H3a, H3b) were rated as more *competent* but less warm. The people who were represented by the avatar with make-up were connected with higher *leadership abilities* and had greater *chances to get hired* than the people who got represented by an avatar without make-up. The hypotheses (H5a, H5b, H6a, H6b) showed that the *warmth* and *competence*, as well as the perceived *leadership abilities* and *likelihood to get hired* from the represented women, are not influenced by the clothes the avatar wore.

The results show that it is important to be careful while designing the look of a digital avatar, because styling has a significant effect on the perception of the avatar and this evokes differences in die perceived capabilities of the human represented by it. Even if the study has delivered clear results, future studies can even improve the significant results of our study. Moreover more details can be discussed. We variated many different stylings, but in future studies it can be interesting to test even more or other stylings. Aditionally, future findings can be sorted by different properties of the study participants as, for example, their user characteristics, to identify the impact of the user characteristics on the perceived *leadership abilities*, *warmth*, *competence* and *likelihood to get hired*.

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