Supplementary Material

Study 1

Method

Participants. One hundred thirty-six individuals were recruited in a university in Northern Italy. Three participants did not rate at least one item of either the sexual orientation or the age inference task and were excluded from the sample. The final sample comprised N = 133 participants (Table 1).

Procedure. Participants were randomly provided with either a version of the survey in which value 1 of the scale was associated with "very heterosexual" (i.e., sexual orientation inference task), and with "very elderly" (i.e., age inference task), or a version in which value 1 was associated with "very gay" (i.e., sexual orientation inference task) and "very young" (i.e., age inference task).

Study 2

Method

Participants. Data were collected via a web survey (Qualtrics, 2020). The link to the survey was advertised on social media and instant messaging platforms by a student in charge of data collection.

We recorded a total of two-hundred and thirty-seven entries on the link to the online survey. Of these, n = 1 person was under the age of majority (i.e., 18 years old) and was not included in the experimental sample. Also, n = 43 people accessed the survey and agreed to participate but did not provide any rating on the dependent variables and might have reported demographic characteristics only. One hundred ninety-two individuals took part in the study. We excluded from the sample n = 8 participants who did not rate at least one item of either the sexual orientation or the age inference task.

Procedure. For direct contact, participants were presented with two items from Shamloo and colleagues (2018; adapted from Voci & Hewstone, 2003): "How many [target group] do you know?" (none-more than 10), and "How frequently do you have contact with [target group]?" (never-very frequently). For both items, participants provided their answers on a 5-point scale.

Indirect contact was measured using two items adapted from Pagotto and colleagues (2010; see also, Visintin et al., 2017): "How often do you hear news about [target group] on the TV news,

in newspapers, or on the radio?", and "How often do you see [target group] in films or in TV series?". For both items, the response scale ranged from 0 (never) to 4 (very often).

We decided to evaluate participants' contact at the end of the questionnaire for two related reasons. First, as Study 2 was an exact replica of Study 1, in Study 2 we strictly followed the procedure of Study 1. For this reason, contact was assessed only after participants had performed the inference tasks. Second, previous works on person construal have shown that people make use of contextual information, such as specific exemplars, to conceptualize social categories (e.g., Smith & Zárate, 1992). Therefore, if we had assessed participants' contact with the intersections of sexual orientation and age categories, we would likely have induced a more diverse conceptualization of sexual orientation and age categories, influencing the observed results.

Supplementary analyses

All the analysis files concerning the results discussed in this section have been uploaded in the "Supplementary material" folder in OSF, available at the link https://osf.io/ex5z4/?view_only=eb72489686244018ba5099eb5d2f9a1e.

Effect of First Label

In Study 1, the irrelevant category labels were always presented as the first and the third labels. Within each task, the presentation order of the category labels relating to sexual orientation and age were counterbalanced across participants. Due to a material error, 104 participants were presented with the 'English man' label first. We subsequently collected an additional 32 participants that were presented with 'Right-handed man' as the first label. The results were not affected by which type of label participants were presented with first. As for the age inference task, we run a 3(labels: Gay man *vs.* Heterosexual man *vs.* Irrelevant labels) X 2 (first label: English man *vs.* Right-handed man) ANOVA, with the former variable as a within-participants variable and the latter as a between-participants variable. A significant main effect of labels was found, *F*(3, 393) = 48.64, *p* < .001, $\eta^2_p = .27$, which was not moderated by first label. Young man *vs.* Elderly man *vs.* Irrelevant labels) X 2 (first label: English man *vs.* Irrelevant labels) X 2 (first label: English man *vs.* Irrelevant labels) X 2 (first label: A significant main effect of labels was found, *F*(3, 393) = 48.64, *p* < .001, $\eta^2_p = .27$, which was not moderated by first label. Young man *vs.* Elderly man *vs.* Irrelevant labels) X 2 (first label: English man *vs.* Right-handed man) ANOVA, with the former variable as a within-participants variable and the latter as a between-participants variable and the latter as a between-participants variable and the latter as a between-participants variable. A significant main effect of labels: Young man *vs.* Elderly man *vs.* Irrelevant labels) X 2 (first label: English man *vs.* Right-handed man) ANOVA, with the former variable as a within-participants variable and the latter as a between-participants variable. A significant main effect of labels was found, *F*(3, 393) = 60.54, *p* < .001, $\eta^2_p = .32$, which was not moderated by first label, *F*(3, 393) = 0.46, *p* = .71, $\eta^2_p = .004$.

In both Study 1 and 2 we recoded the ratings pertaining to the age inference task: higher ratings indicated that the categories were thought of as referred to 'young man'. In the sexual orientation inference task, higher ratings indicated that the categories were thought of as referred to 'heterosexual man'. We collapsed participants' ratings on the Irrelevant, Normative and Non-Normative categories in the age and in the sexual orientation tasks. In such a way, higher ratings would indicate a stronger association with both 'young man' and 'heterosexual man', namely with the default categories. In *Study 1*, participants' ratings were analyzed by means of a repeated measure ANOVA 3(categories: Irrelevant vs. Normative vs. Non-Normative). A significant effect of categories was found, F(2, 264) = 139.3, p < .001, $\eta^2_p = .51$. Post hoc comparisons (Bonferroni correction) showed that no difference occurred between Irrelevant and Normative categories, t(132) = 1.77, p = .238, while Non-Normative categories were considered pointing to default categories to a greater extent than Irrelevant categories, t(132) = 14.85, p < .001, and Normative categories, t(132) = 12.52, p < .001. In *Study 2*, participants' ratings were analyzed by means of ANOVA 3(categories: Irrelevant vs. Normative vs. Non-Normative) repeated measures.

A significant effect of categories was found, F(2, 366) = 120.1, p < .001, $\eta^2_p = .40$. Post hoc comparisons (Bonferroni correction) showed that no difference occurred between Irrelevant and Normative categories, t(183) = 1.04, p = .906, while Non-Normative categories were considered pointing to default categories to a greater extent than Irrelevant categories, t(132) = 14.32, p < .001, and Normative categories, t(132) = 11.41, p < .001.

Participant Gender

We a priori decided not to analyze participants' gender in the current studies for two distinct, though related, reasons. First, participants were asked to report cultural representations and not their own representations of sexual orientation and age categories. Cultural representations are less sensitive to individual differences (Devine, 1989). Second, and in agreement with the preceding point, previous studies on age stereotyping of the sexual orientation/age category intersections have shown no participant gender differences in terms of cultural stereotypes related to young/elderly gay/heterosexual men. Therefore, we did not put forward any specific hypothesis on the role of participants' gender in the stereotyping of the intersection under analysis. Coherently, we did not predetermine the number of male and female individuals to be included in the experimental sample. However, at least with regard to Study 2, since the link to the questionnaire

was advertised on the Psychology Faculty Web page, it might be plausible that the unbalanced number of male and female participants in the sample reflects the higher percentage of female individuals in the psychology student population.

We analyzed the effect of participant gender on the observed pattern of results by performing a cross-experimental analysis (i.e., merging Study 1 and 2 together). Specifically, the label x participant gender was neither significant in the sexual orientation inference task, F(4, 602) = 0.62, p = .649, nor in the age inference task, F(4, 602) = 1.47, p = .211. Hence, we might tentatively assume that, at least in the current studies, participant gender did not significantly alter the reported results.

Participant Sexual Orientation

In the reported studies, we did not exclude sexual minority participants from the experimental sample. The exclusion of such participants did not affect the pattern of results described in the paper.