# Stereotyping Older Adults: How Labels and Perceived Age Influence Ratings

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**Abstract**

Ageist language can bias research, with past findings indicating that labels such as “elderly” invoke more negative stereotypes than neutral labels. We investigated how labels, contact, and perceived age influence stereotypes of older adults in Germany. 116 German-speaking participants (age-range = 14-33) reported their stereotypes and perceived age for one of three labels for older adults and reported contact with their grandparents. Targets labeled as “people the age of grandparents” were perceived as older (modal age-range 70-90 years) and targets labeled as “older adults” (modal age-range 50-70 years) as younger, than the those labeled “people 70-85 years of age.” Stereotype ratings did not vary by label, but were more negative when the target was perceived as older and more positive when contact with own grandparents was higher. Researchers and practitioners should use care in selecting labels when conducting and communicating their research as well as working with older adults.

*Keywords*: ageism, stereotypes, contact, perceived age

## Stereotyping Older Adults: How Labels and Perceived Age Influence Ratings

Negative stereotypes of older adults remain unfortunately common with negative ramification for older adults' well-being (e.g., Bellingtier & Neupert, 2018; Stokes & Moorman, 2020). Accurate assessment of these stereotypes is crucial for basic and applied research on ageism and interventions against it (e.g., Flores-Sandoval & Kinsella, 2020). Currently, multiple assessment methods exist, which limits the comparability of findings (Ayalon et al., 2019). One noteworthy difference pertains to how older adults, as the stereotype target, are labelled. We propose that such labelling differences may not be trivial, and evoke different mental representations in participants.

Past work indicates that some labels suggest more negative associations than others. Polizzi & Millikin, (2002) found that when older adults were labelled as "old" or "elderly" stereotype ratings were more negative than when they were labelled as people "70-85 years of age." Aging researchers likely avoid labels known to evoke negative stereotypes, however it is possible that current labelling practices could positively bias findings. For example, studies using younger participants (e.g., Lineweaver et al., 2017) have requested participants to think of individuals similar in age to their grandparents. This association could potentially bias stereotype reports as grandparents themselves tend to be viewed more positively than older adults in general (Brewer et al., 1981; Hummert, 1990; Newsham et al., 2021). For example, Newsham and colleagues (2021) found that when college students were asked to think about grandparents they reported considerably more positive than negative emotions words, whereas the emotion words associated with "old person" where more equivocal. Although grandparents as a group are rated more favourably than other groups of older adults, it is not yet known if ratings of older adults referred to with labels that invoke grandparents, (i.e., "people the age of grandparents"), which do not ask for ratings of grandparents per se, would be positively biased compared to more neutral labels.

Furthermore, the most recent addition of the American Psychological Association's publication manual (2020) suggests using the presumed neutral label "older adults" when referencing older individuals, yet this term may be less familiar to the general public. It is not known if this label activates the same categorical associations as labels that reference a specific age range or invoke grandparents. Thus, the current study sought to examine the comparability of different labels currently used for studying stereotypes of older adults. To the extent that labelling leads to different mental representations of older adults that vary in their cognitive and affective associations, differences in the way older adults are labelled have the potential to considerably alter study findings. Additionally, it is not yet known if the labels activate the same categories of older adults, that is, whether the older adults being rated are primarily perceived to be old-old, young-old, or even in middle-age. These considerations may be especially important for gerontologists studying the efficacy of intergenerational contact interventions (e.g., Gaggioli et al., 2014; Meshel & McGlynn, 2004).

As many communities are age-segregated (Moorman et al., 2017), younger individuals may have limited contact with older adults. The lack of contact is unfortunate, as research based on Allport's contact theory (1954) suggests that contact can ameliorate negative societal attitudes of other groups (Allan & Johnson, 2009; Pettigrew & Tropp, 2006). Although general contact with older adults may be low, contact with older adults within the family (i.e., grandparents) is higher (Harwood et al., 2005). The greater familiarity with grandparents may be a reason for invoking them when studying age-related stereotypes. By asking participants to think of people similar in age to grandparents, researchers may be able to focus younger participants on the age-group of older adults with whom they otherwise may have limited experience. On the other hand, this reference, although intended to be broader than grandparents (i.e., referring to all older adults regardless of grandparent status), may invoke associations related to grandparents specifically. Such an unintended effect

would be problematic for the generalizability of the findings because the grandparents subtype is typically rated as more positive than other subtypes (Brewer et al., 1981; Hummert, 1990). Thus, we hypothesized that ratings of "people the age of grandparents" would be more positive than ratings for the more neutral labels "older adults" and "people 70-85 years of age." Furthermore, we examined if greater contact to one's grandparents specifically would predict more positive stereotypes of older adults generally.

The current study is guided by the research of Polizzi and Milkin (2002), who demonstrated the negative consequences of using ageist terminology in research, and expands on it four ways. (1) First, whilst maintaining a similar rating scale and the more neutral label "people 70-85 years of age" from Polizzi and Millikin (2002), we additionally evaluated non-ageist labels currently used by researchers, that is, "people the age of grandparents" and "older adults." (2) Furthermore, prior work has focused primarily on individuals and stereotypes in English-speaking countries. However, aging is a global concern and issues related to labelling are not confined to a particular language. In the present study, we wanted to investigate labelling effects in German-speaking individuals, for whom aging stereotypes are similar to those reported in US samples (De Paula Couto et al., 2021), but may be becoming more negative (cf. Spangenberg et al., 2018). (3) We also expanded on the undergraduate student sample used by Polizzi and Milliken by focusing our recruitment on non-psychology students ranging from adolescence through young adulthood. We selected these demographic as students studying psychology are likely to have more academic familiarity with the target labels than non-students and individuals in this age-range are more likely to have older adult grandparents. (4) Finally, we sought to verify that our labels targeted similar age-groups by asking participants how old they perceived their target to be. The validity of this assumption is often implied in past research, but hardly tested empirically.

# Method

## Participants and Procedure

Participants ($N$ = 116) ranged in age from 14 to 33 years ($M$ = 22.66, $SD$ = 4.53; 60% women. Participants were fluent in German (98% native German speakers) and were recruited via emailed invitations that we distributed through the peer networks of the researchers and research assistants. We deliberately avoided recruiting psychology students, whose awareness of age stereotypes may differ from that in the general population. We were successful with 96% reporting that they did not study psychology. Participants had a broad range of educational backgrounds with 11% still in high school, 31% having completed high school with university-entry qualifications, 17% having completed high school with other qualifications, 37% having completed university, technical college, or apprenticeships, and 4% with other qualifications. Sample size was determined by a power analysis specifying 80% power to detect a small effect (.15). Via online survey, participants completed an informed consent, were randomly assigned to conditions, and completed ratings for one of three targets: "people the age of grandparents," [German: "Personen im Alter von Großeltern"] "older adults" [German: "ältere Erwachsene"], and "people 70-85 years of age" [German: "70-85 jährige Personen"]. Participants who rated the first two targets were subsequently asked to report on the perceived age range of their targets. All participants then completed contact and demographic questions. Participants spent 4.98 minutes ($SD$ = 6.49) completing the stereotype measure. As compensation, participants could choose to be entered into a drawing to win five 5€ gift-certificates. The study was approved by the authors' university's ethics commission.

## Measures

### *Age Stereotypes*

In line with Polizzi and Millikin (2002), age stereotypes were measured with the German version (Gluth et al., 2010) of the Aging Semantic Differential (ASD; Rosencranz & McNevin, 1969), which consists of 32 opposing adjective pairs. The aging semantic differential is one of the most popularly used instrument for assessing age stereotypes and has been translated into numerous languages including German (Strange, 2003), Mandarin (Gonzales et al., 2017), and Spanish (Villar Posada, 1997), which allows for the possibility to compare and replicate findings across populations. Seven-point bipolar scales were used and coded such that full endorsement of the more positive attribute (e.g., tolerant, happy, friendly) was coded as 1 and of the more negative attribute was coded as 7 (e.g., intolerant, sad, unfriendly). Thus, higher mean ASD scores indicate more negative stereotypes. The scale was reliable for all targets: Cronbach's alphas were .91 (grandparents), .89 (older adults), and .87 (people 70-85).

***Perceived Target Age Range***

To verify that each target was perceived as referring to older adults, we asked participants in the "people the age of grandparents" and "older adults" conditions what age range they had in mind when making their ratings. Participants responded by filling in the statement, "for me these are people who are about ___to___ years old." Participants in the "people 70-85 years of age" condition were not asked this question, as the age range had already been specified for them.

***Contact with Grandparents***

Frequency of grandparent contact was measured with four questions assessing current and prior contact. For each, they were asked about the amount of contact they had with their grandparents in-person (e.g., visits) and virtually (e.g., video chats, social media). Six response options were given ranging from 1 = *never* to 6 = *daily*. Reliability analysis indicated that the items were highly correlated (Cronbach's alpha = .78) and mean scores

were created for each participant ($M$ = 3.48, $SD$ = 0.96) indicating contact about once a month.

**Analysis**

To test our hypothesis regarding differences in stereotype ratings (i.e., ASD scores) for the three target labels we used a one-way ANOVA. To verify that these labels referred to similar age-groups, we compared the high and low estimates for "older adults" and "people the age of grandparents" to the specified ages (low = 70, high = 85) with one-sample *t*-tests. To examine associations of stereotype ratings with target label, contact with grandparents, and target age, we simultaneously regressed ASD scores on label (1 = "grandparents," 0 = other), grand-mean centered contact to own grandparents, and target age (mean of low and high perceived/specified age per participant).

## Results

"Older adults" ($M$ = 3.69, $SD$ = 0.57), "people 70-85" ($M$ = 3.79, $SD$ = 0.54), and "people the age of grandparents" ($M$ = 3.71, $SD$ = 0.61) had similar stereotype ratings $F$ (2, 113) = 0.37, $p$ = .69. However, perceived age ranges were significantly different. People the age of grandparents were perceived as ranging in age from $M_{low}$ = 68.05, $SD$ = 6.26 to $M_{high}$ = 92.36, $SD$= 7.44, whereas older adults were perceived as ranging in age from $M_{low}$ = 51.67, $SD$ = 12.03 to $M_{high}$ = 76.08, $SD$ = 15.83. All perceived values were significantly different from the specified values, low=70, high=85, (all $p < .05$). Follow-up examination indicated that the most commonly indicated lower boundary for "older adults" was 50 and the modal upper boundary was 70. In comparison, the modal boundaries for "people the age of grandparents" were 70 and 90 respectively.

As in the ANOVA, the regression results indicated that older adults were not rated more positively when labelled as "people the age of grandparents," $b$ = -0.16 [-0.39, 0.08], ß = -0.13, $p$ = .187. As anticipated, participants with more past and current contact with their

grandparents rated older adults more positively, $b$ = -0.12 [-0.22, -0.01], ß = -0.20, $p$ = .036. Finally, older perceived target age was associated with more negative stereotypes, $b$ = 0.01 [0.001, 0.02], ß = 0.21, $p$ = .036. Together, label, contact, and target age explained 7% of the variance in ASD scores. We followed-up with models including the interactions among predictors and controls for demographic variables; there were no significant interactions and no associations between demographic variables and ASD scores.

## Discussion

Older perceived target age and less contact with own grandparents were associated with more negative stereotype rating. Although the labels received similar stereotype ratings, they were not perceived as similar in age. This suggests that different categories of older adults are activated based on the label used. Most importantly, the label of "older adults" was primarily judged as referencing those in middle-age.

Thus, labels do influence mental representations, especially regarding perceived age. For younger participants, the label "older adults" overlaps considerably with developmental notions of mid-life. Past research suggests that perceptions of what constitutes "old" depend on raters' own ages (Chopik et al., 2018). Thus, researchers and educators working with adolescents through young adults (i.e., when assessing ageism or working in intergenerational programs), should be cautious when using the label "older adults," and we recommend that it be accompanied by a specified age-range, for example, "older adults ranging in age from 70 to 85."

Nevertheless, the comparability of stereotype ratings across labels indicates that adolescents and young adults may have a homogenous image of adults over 50. The lack of a "grandparent" label effect could indicate that adolescents and younger adults are able to separate their views of their own personal grandparents from "people the age of grandparents" more generally. Future research is needed to confirm this finding with children

for whom this label may be especially salient and more widely used for assessing aging attitudes (Lineweaver et al., 2017) and with different measures such as ambivalent ageism that may be more relevant for grandparents (Cary et al., 2017).

As expected, higher contact with participants' own grandparents was associated with more positive stereotypes of older adults. Our findings align with research suggesting that interventions focused on increasing intergenerational contact are a useful method for reducing ageist attitudes (Drury et al., 2016). One notable feature of our study is that our contact measure included items tapping both in-person and virtual contact. Future research could explore if virtual-contact interventions alone are sufficient for promoting positive attitudes towards older adults.

As is the case in any single empirical study, the generalizability of these findings should be considered as potentially limited to the sample characteristics at hand. Our own findings may be limited to adolescent through younger adult German-speakers in Germany. Cultural and demographic differences could influence how these labels are perceived. For example, grandparents are likely to be older, and be perceived as such, in wealthy industrialized nations where it is more common for younger adults to delay the transition to parenthood (Margolis, 2016). Thus these findings should be interpreted cautiously until replicated. Another limitation concerns the use of the Aging Semantic Differential that, along with many ageism measures, has been criticized for its psychometric properties (Ayalon et al.,2019). In addition, the scale assesses primarily explicit stereotypes yet attitudes towards older adults also include prejudice and discrimination, and can manifest implicitly and ambivalently. We agree with Ayalon and colleagues' assessment that a new multidimensional ageism scale is needed, and recommend that the labels used to refer to older adults are carefully considered in its development.

Despite these limitations, we believe that our findings provide sufficient evidence to encourage gerontologists to carefully consider the labels they use for older adults. Although researchers may already be conscientious about avoiding ageist language (Schaie, 1993), this may not be sufficient for ensuring the validity of research regarding older adults. Thus we recommend pre-testing labels with participants similar (especially in regards to age and cultural background) to those who will be assessed in the primary research. Furthermore, when communicating with the general public, we recommend researchers directly specify the age-ranges under consideration, as their audience may not have a similar understanding of the label "older adults." Specifying the age-range could also help to raise public awareness that "older adults" are not a monolithic group, and the inclusion of such individuating information can help to reduce stereotyping (Rubinstein et al., 2018). Indeed, older adults are a heterogeneous group of individuals, and there is unlikely to be one ideal label that fits well for all. It would behoove researchers and practitioners to take into account the existence of multiple representations of "older" age.

In sum, stereotype ratings of older adults are more positive when the target label is perceived as younger and participants have more contact with their own grandparents. We encourage gerontologists to carefully consider the labels used when studying and reporting on older adults.

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