

## Examining alternative items for the assessment of perceived ageism

Liat Ayalon

To cite this article: Liat Ayalon (2018) Examining alternative items for the assessment of perceived ageism, Educational Gerontology, 44:5-6, 316-324, DOI: [10.1080/03601277.2018.1473971](https://doi.org/10.1080/03601277.2018.1473971)

To link to this article: <https://doi.org/10.1080/03601277.2018.1473971>



View supplementary material [↗](#)



Accepted author version posted online: 08 May 2018.  
Published online: 16 May 2018.



Submit your article to this journal [↗](#)



Article views: 178



View related articles [↗](#)



View Crossmark data [↗](#)



# Examining alternative items for the assessment of perceived ageism

Liat Ayalon 

Louis and Gabi Weisfeld School of Social Work, Bar Ilan University, Ramat Gan, Israel

## ABSTRACT

Ageism is the negative construction of old age. It has real-life implication at the individual and structural levels. To address ageism in large social surveys, the first step is to identify an easy-to-use item, which measures its incidence. The present study compares the utility of two items, which query about perceived exposure to ageism. The fourth wave of the European Social Survey (ESS) contains data from 29 countries in Europe, including Israel. In the present study, I compare two items as potential indicators of perceived exposure to ageism. As many as 33.7% of the sample reported exposure to ageism based on the ageism module item (which assesses one's individual perceived exposure), but only 1.1% reported perceived ageism based on the regular ESS item (which queries about identification with a discriminated group). The overall Kappa was .02, indicating that agreement between the two items was no greater than chance. Both items were significant predictors of subjective health, but had somewhat different correlates. This study is important as it raises the need for a more careful consideration of items in the assessment of sensitive social issues, such as perceived ageism in large social studies.

## KEYWORDS

Ageism; discrimination; priming effect; response format

## Introduction

Ageism is defined as stereotypes, prejudice, and discrimination toward age and aging (Officer et al., 2016). Ageism is broadly seen as the negative construction of old age. It is highly prevalent and has negative consequences at the individual and societal levels (Ayalon & Tesch-Römer, 2017). Despite the existence of scales to measure ageism, social studies often rely on a single item, rather than on a full scale (Alvarez-Galvez & Salvador-Carulla, 2013; Ayalon, 2014; Marques et al., 2015; Van Der Star & Bränström, 2015). This is because these large social studies cover a range of topics and ageism is just one of the topics. To assist in the future selection of items for the assessment of perceived ageism, the present study compares the utility of two items, which query about perceived exposure to ageism. Using these two items, I examine the overall incidence of perceived ageism and its correlates.

**The European Social Survey (ESS)** is a cross-sectional survey conducted in about 30 European countries every 2 years, using a face-to-face format. The ESS aims to identify trends in attitudes, beliefs, and behaviors. In 2008, in light of increased attention to the topic of ageism, the ESS included a special module, which addressed questions about experiences and expressions of ageism (Abrams & Swift, 2012). Capitalizing on this module, I compare two items, which aim to evaluate perceived exposure to ageism. In reviewing these items, it is important to note that perceived exposure represents a subjective estimation, rather than an objective estimation as to whether or not ageism actually occurred (Ayalon, 2016).

The first question is part of the special module on ageism. This question is introduced within the context of questions about age and ageism in Europe. A second question is part of the general

survey, which is administered every other year. This question too addresses exposure to ageism and is introduced in the context of questions about religiosity.

### **Context effect**

Because the two items are presented in different sections of the questionnaire, responses to the items could be influenced by the context effect (Schwarz, 1999). Research has shown that responses to survey questions are highly influenced by the context in which they appear, as prior questions often prime responses to subsequent items (Pienaar, Lew, & Wallmo, 2015; Strack & Martin, 1987).

A four-stage process is involved in the response to survey items: Respondents have to interpret the question, retrieve relevant information, consider the appropriateness of their response against relevant norms and finally, use their judgment to select a response. Reportedly, all four processes can be impacted by the context (Tourangeau & Rasinski, 1988). Hence, it is expected that an item that appears in the context of other questions on ageism will elicit a sense of perceived discrimination.

### **Person vs. group discrimination discrepancy**

The two items, which measure perceived age discrimination also are phrased differently. The ageism question, which is part of the special module on ageism asks directly about perceived exposure to prejudice and unfair treatment (i.e., discrimination), whereas the ageism question, which is part of the ongoing survey first asks about identification with a group that is being discriminated against and then queries about the reason for discrimination.

Common to both items is the focus on *perceived discrimination based on age*. There is ample evidence to show, however, that the way the question is phrased likely impacts the response to it (Hagelin, Nilstun, Hau, & Carlsson, 2004). Research has shown that individuals are more likely to report perceived discrimination in reference to their group, rather than to their own personal experiences (Ruggiero, 1999; Taylor, Wright, Moghaddam, & Lalonde, 1990).

One explanation for this discrepancy stems from an assumption that the most privileged individuals are the ones who participate in survey research. As such, they indeed, are less likely to experience discrimination compared with other, less-privileged members of the same group. Another possibility for the discrepancy stems from the fact that people associate the term “group” with multiple individuals. The multiplication of the individual experience is what makes up a group, which by definition has to experience more discrimination than the individual person. A third explanation for the discrepancy may stem from the salience of the phenomenon in the media and news report, which make the perception of the experience more prevalent, even though the actual experience at the individual level is uncommon (Taylor, Wright, & Porter, 1994). The responses provided to the two items are compared to examine the overall incidence of perceived ageism. Relying on past research, one would expect that the question, which is part of the ageism module and asks about exposure at the individual level will result in a lower incidence of perceived ageism.

### **Potential correlates**

Several demographic Predictors were examined as potential correlates of perceived age discrimination as assessed by each of the two items. **Age** was examined given the fact that although the majority of research to date has addressed age discrimination toward older adults, there is a growing body of literature to show that younger adults also experience age discrimination. The terms “adultism” or “childism” have been used to describe attitudes and behaviors of adults toward youth or children, respectively, based on an assumption that adults are superior (Bell, 1995; Pierce & Allen, 1975). Indeed, a recent study has shown that younger, rather than older adults, were more likely to report perceived age discrimination (Ayalon, 2014). Additional research has documented the greater vulnerability to the financial crisis of younger adults compared with older adults (Parodi, Pastore, Tanveer

Choudhry, Marelli, & Signorelli, 2012; Verick, 2009). Hence, a negative correlation between the two items that assess perceived age discrimination and ageism is expected.

**Gender** is another variable of interest. There is some research to show an interaction between ageism and sexism. For instance, whereas grey hair and wrinkles in men are well-accepted, women are expected to hide visible signs of aging and stay “forever young” (Bart, 1969; Clarke & Griffin, 2008). Compared with men, women also are more likely to experience ageist attitudes directed at them (Duncan & Loretto, 2004). Hence, we expect that both items will be endorsed more by women than men.

**Level of education and subjective socioeconomic status** are additional sociodemographic characteristics of importance. The general idea is that ageism makes certain vulnerabilities more pronounced, as it is almost never age alone which exposes people to the experience of ageism. It is usually age in interaction with other less-privileged socioeconomic statuses, such as low levels of education or poverty (Palmore & Manton, 1973; Powell, 2014). This claim has been corroborated by past research which has found that less educated individuals report greater exposure to perceived age discrimination (Palmore, 2001).

Concurrent validity is examined, with **subjective health** as an outcome of interest. Subjective health was selected as a potential outcome because of the substantial body of literature, which has shown that ageism is bad for your health and literally, “gets under the skin” (Allen, 2015; Ferraro & Shippee, 2009; Hausdorff, Levy, & Wei, 1999). Hence, higher levels of perceived ageism, as measured by the two items, were expected to associated with lower levels of subjective health.

**To sum**, both items examined in this study represent common ways to measure perceived exposure to discrimination and have been used extensively in the literature (Alvarez-Galvez & Salvador-Carulla, 2013; Ayalon, 2014; Marques et al., 2015; Van Der Star & Bränström, 2015). Moreover, in addition to their use as part of the ESS, both items have been frequently used as indicators of perceived ageism in other large-scale surveys, such as the Health and Retirement Survey, the Citizenship, Involvement, Democracy (CID) Survey or the Eurobarometer. Given their frequent use for research and policy purposes, it is essential to assess their respective performance, following the expectation that the two items measure a similar construct, namely, perceived exposure to ageism.

It is important to note that the ESS does not offer any Gold standard for the assessment of the psychometric properties of these items. However, because these items are often used interchangeably (Alvarez-Galvez & Salvador-Carulla, 2013; Ayalon, 2014; Marques et al., 2015; Van Der Star & Bränström, 2015), one would expect the two to generate similar results. Discrepancies between these two items would indicate a need for more careful consideration of the selection of items for the assessment of perceived ageism as part of large social studies. Although the study cannot differentiate between context effect and phrasing effect, it can allude researchers to the importance of these factors when designing large-scale social surveys of sensitive issues.

## Methods

The fourth wave of the ESS, contained data from 29 countries in Europe, including Israel. Overall, 56,752 individuals over the age of 15 were interviewed. Demographic details about participants across the 29 countries are reported in Table 1 (supplement). In the present study, we compare two items that were used as potential indicators of perceived exposure to ageism:

- (1) As part of the special module on ageism, respondents were asked the following question: *“Using this card, please tell me, how often, in the past year, anyone, has shown prejudice against you or treated you unfairly, because of: your age.”* Response options varied between 0 = never and 4 = very often.

The majority of research to date has relied on a single item from the ESS (Ayalon, 2013; Marques et al., 2015). Consistent with past research (Ayalon, 2013; Rippon, Zaninotto, & Steptoe, 2015; Stuckelberger, Abrams, & Chastonay, 2012), the item was dichotomized because it is highly skewed (0 = “no perceived age discrimination”; 1–4 recoded as 1 = “yes perceived age discrimination”).

**Table 1.** Predictors of the perceived ageism items ( $N = 56,752$ )<sup>a</sup>.

	Group discriminated based on age <sup>b</sup>	Experiences prejudice based on age <sup>c</sup>
Age	.03***(.004)	-.01***(.003)
Gender (men-reference)	-.20*(.08)	-.01(.03)
Education (1–5)	.12***(.03)	-.04*(.02)
Subjective income (1–4)	-.61***(.06)	-.19***(.03)
ICC	.13	.06

\*\*\* $p < .001$ ; \* $p < .05$ .

<sup>a</sup>Two multilevel regression analyses were conducted, with age, gender, education, and subjective income as potential predictors at the individual level and random intercept.

<sup>b</sup>This item is part of the ongoing ESS, which is administered every other year. A “yes” response indicates that the respondent stated that his or her group was being discriminated based on age.

<sup>c</sup>This item is part of the special module on ageism. A “yes” response indicates that the respondent perceived prejudice or unfair treatment because of age.

- (2) As part of the general survey, which is administered every other year, participants were asked, “do you describe yourself as a member of a group that is discriminated against in this country?” Those who responded, “yes,” were subsequently asked, “On what grounds is your group discriminated against?” One response category was “age.” In the present study, only response options, which identified age as a basis of discrimination, were examined: 0 = “no perceived age discrimination,” 1 = “yes perceived age discrimination.”

As potential *covariates*, we used the following demographic information, which was gathered based on self-report: age, gender, education (1 = less than lower secondary education, 2 = lower secondary education completed, 3 = upper secondary education completed, 4 = postsecondary nontertiary education, 5 = tertiary education completed), and subjective income (1 = very difficult on present income; living comfortably on present income = 4).

Subjective health status (1 = very bad, 5 = very good) was used as a potential *outcome* of interest.

## Analysis

Descriptive statistics provide information concerning the frequency and percentage of individuals who acknowledged exposure to ageism. This information is reported for each of the items separately and is aggregated at the country level. Next, the number and frequency of individuals who responded “yes” to both items, “no” to both items and “yes” to one of the items, but “no” to the other is also provided. This information is provided regarding each of the 29 countries that participated in this study. Subsequently, a Kappa statistics was calculated to assess the overall agreement between the two items across all countries. Kappa is a measure of general agreement between ratings. In the present study, this agreement is calculated in relation to the two items that assess perceived exposure to ageism. A Kappa of 1 indicates a perfect agreement, whereas a Kappa of 0 indicates that agreement equals chance alone. A general rule of thumb suggests that a  $\text{Kappa} > .6$  indicates substantial agreement and high agreement is indicated by a  $\text{Kappa} > .8$  (Landis & Koch, 1977).

To assessed *predictors of perceived discrimination*, two multilevel logistic models were constructed to separately examine potential predictors of each of the two perceived ageism items at the individual level. Age, gender, education, and subjective income were examined as potential predictors. Finally, to assess the *concurrent validity of the two items*, subjective health status was examined as a potential outcome. In the unadjusted models, each of the items that assesses ageism was entered separately. Next, both items were entered into the model simultaneously. In the adjusted model, age, gender, education, and subjective income were examined as potential controls. These analyses consisted of multilevel regressions, with random intercepts. Post stratification weights were used in the analyses.

# Results

**Table 1** presents the distribution of responses to the two items of perceived ageism. As many as 33.7% of the entire sample reported exposure to ageism based on the item, which was part of the ageism module and asked the following question: “*in the past year, anyone, has shown prejudice against you or treated you unfairly, because of: your age?*” There was wide variability across countries, with 54.4% of the population in the Czech Republic reporting perceived ageism, but only 15.9% of the population in Portugal reporting perceived ageism based on this item. The item, which appears as part of the regular ESS questionnaire follows the following format: “*On what grounds is your group discriminated against?*” with *age* being the endorsed option. Based on this item, age was endorsed as a basis for perceived discrimination by only 1.1% of the population. The country that had the highest rate of perceived ageism was Latvia, with as many as 3.7% endorsing age as a basis for discrimination, whereas in Switzerland only .1% of the population over 15 endorsed age as a basis for discrimination. The overall Kappa of the entire sample was .02, indicating that agreement between the two items was no greater than chance.

## Correlates of the two items

**Table 1** presents the results of multilevel logistic models, with each of the two *perceived age discrimination items as potential outcomes*. Age, gender, education, and subjective income served as independent predictors at the individual level. **Age** was a significant negative predictor of the perceived ageism item presented as part of the ageism module, but a positive predictor of the item presented as part of the ongoing ESS survey. Similarly, higher **levels of education** were associated with a lower likelihood of responding “yes” to the item presented as part of the ageism module, but higher levels of education were associated with a greater probability of saying “yes” to the item presented as part of the ongoing ESS survey. Individuals with poorer **subjective income** had a greater probability of saying “yes” to both perceived ageism items. Finally, **compared with women, men** were more likely to report “yes” to the item presented as part of the ongoing ESS survey. The two items resulted in different Intra Class Correlations (ICC), suggesting that the amount of variance attributed to country-level variables differs depending on the perceived ageism item assessed.

Finally, **Table 2** presents results concerning the *concurrent validity of the two ageism items*, using multilevel regression models. Both items were significant predictors of subjective health status. They remained significant even when age, gender, education, and subjective income were entered into the model. They also remained significant in the final model, when both were entered simultaneously as potential predictors, while adjusting for demographic variables.

**Table 2.** The two items of perceived ageism as potential predictors of subjective health ( $N = 56,752$ )<sup>a</sup>.

	Unadjusted	Adjusted <sup>b</sup>	Unadjusted	Adjusted	Unadjusted	Adjusted
Fixed effect						
Intercept	3.23***(.06)	3.75***(.06)	3.71***(.05)	3.93***(.05)	3.20***(.06)	3.75***(.06)
Group discriminated based on age <sup>c</sup>	-.55***(.03)	-.25***(.03)			-.51***(.03)	-.18***(.03)
Experiences prejudice based on age <sup>d</sup>			-.10***(.01)	-.17***(.01)	-.09***(.01)	-.17***(.01)
-2loglikelihood	149,723.7	131,090.9	147,772.3	129,030.9	147,564.1	129,001.2

<sup>a</sup>Multilevel regression analyses were conducted, with individual level predictors and a random intercept.

<sup>b</sup>Adjusted for age, gender, education, and subjective financial status.

<sup>c</sup>This item is part of the ongoing ESS, which is administered every other year. A “yes” response indicates that the respondent stated that his or her group was being discriminated based on age.

<sup>d</sup>This item is part of the special module on ageism. A “yes” response indicates that the respondent perceived prejudice or unfair treatment because of age.

\*\*\* $p < .001$ .

## Discussion

The present study compared the utility of two different items, which assess the rate of perceived ageism in society at large. The findings are striking and provide a source for concern given the very divergent estimations provided by the two items. Whereas one item suggests that as many as one third of the population experiences ageism, the other item suggests that ageism is negligible, as only 1% of the population reports ageism. A comparison of the two items suggested that their agreement is no better than chance alone. Moreover, demographic variables have different associations with each of the perceived ageism items. Yet, as expected (Allen, 2015; Ferraro & Shippee, 2009), both items are significant predictors of subjective health, even when both are included in the model in addition to other covariates.

This study raises a major concern about the best way to assess perceived ageism in large social surveys. As noted in past research, in order for individuals to report perceived ageism, they have to notice a discriminatory event, interpret it as such and then, acknowledge the event as being discriminatory based on age. Hence, perceived ageism is not synonymous with actual ageism (Ayalon, 2016). The present study adds to the complexity by demonstrating the importance of carefully selecting the exact item to determine the presence of perceived ageism. This information is extremely valuable given the fact that large social surveys are often used to inform and motivate policies at the national and global levels. A low incidence of perceived ageism is not likely to generate much concern, whereas an incidence as high as one third of the total population is likely to call for immediate action to combat ageism.

Unfortunately, given a lack of current gold standard for the assessment of ageism, it is impossible to recommend one item over another. Instead, this paper provides a word of caution to researchers in the field by demonstrating how divergent the incidence of ageism can be depending on the type of question and the context in which the question is presented.

### *Context effect*

The item, which addressed ageism as part of the ageism module was introduced within the general context of experiences and expressions of ageism, whereas the second item was presented in a more neutral context, immediately after questions about religiosity. There is ample research to show a priming effect (Chen & Bargh, 1997; Eibach, Mock, & Courtney, 2010; Perdue & Gurtman, 1990). In the present study, priming effect could be manifested in a greater likelihood of endorsing perceived ageism in the presence of questions about the status of older adults in society. These questions bring the notion of age, aging, and ageism into awareness and potentially increase the likelihood that individuals interpret their everyday experiences as discrimination due to age.

Clearly, society has an important role in determining whether or not an experience is perceived as discriminatory (Ayalon, 2016). For instance, not giving women the right to vote or separating Black and White children in the educational system were common practices several decades ago, but now are seen as discriminatory. Hence, asking about perceived age discrimination within the overall context of age and aging, likely makes ageism a salient and legitimate concern. The second item, in contrast, is introduced in the context of more neutral questions. Such a context does not bring the experience of ageism into one's awareness.

### *Person vs. group discrimination discrepancy*

Unexpectedly, the present findings are different from past research which has argued that individuals are more likely to report discrimination directed toward their own group, rather than toward themselves (Ruggiero, 1999; Taylor et al., 1990). The item, which is introduced as part of the ageism module, asks about perceived ageism as an individual experience, whereas the item which is introduced as part of the general ESS questionnaire, first asks about affiliation with a group which experiences discrimination and only subsequently, queries for the perceived reasons for such discrimination.



The discrepancy might stem from the fact that in the present study, respondents were first asked to identify with a particular group that experiences discrimination. The social identity theory argues that individuals attempt to preserve their self-esteem through the identification with in-groups of high status and the devaluation of out-groups of low status (Tajfel, 1974). Hence, it is likely that individuals attempt to disassociate themselves from devalued groups to preserve their self-esteem. This attempt of older adults to disassociate themselves from other older adults is quite common (Ayalon, 2015) and could potentially explain the present findings.

## Conclusions

Given the fact that the ESS has been administered since 2002, and that about 60,000 people in Europe and beyond complete this survey every other year, it is essential to ensure an adequate assessment of important societal issues by the ESS survey, such as perceived ageism. The huge discrepancy in the endorsement of the two items in the present study calls attention to the importance of context and person versus group identification in potentially determining the rate of perceived ageism. Researchers and policy makers, worldwide, rely on the ESS to develop social agendas and priorities. Hence, information obtained by the survey has to be meaningful, reliable, and valid. Given the lack of ability of current survey items to determine whether or not perceived ageism actually occurred, we will continue to rely on self-report items in the assessment of ageism. Hence, further consideration is needed in order to select the most appropriate items for the assessment of perceived ageism. Although the present study cannot point to one item as better than the other, it does suggest that the psychometric evaluation of items to assess ageism is essential in order to identify appropriate indicators.

Despite its innovative nature, the present study does not go without limitations. First, in an ideal world, one would determine the experience of perceived ageism based on a whole questionnaire, rather than a single item. However, this is not the case in most social surveys currently in use (e.g., the Health and Retirement Study, the English Longitudinal Study of Ageing, etc.). Given the fact that these large surveys are likely to rely on a single item, it is essential to better determine which item should be used for the assessment of perceived ageism and why. The present study raises questions about the use of the two items, but does not provide a definitive answer as to which item is preferred, given a lack of a gold standard for comparative purposes. Currently, there is no gold standard for the assessment of perceived age-based discrimination or for the differentiation between perceived age-based discrimination and actual discrimination (Ayalon, 2016). Another limitation of the present study stems from the fact the two items differed in both context and phrasing. Hence, it is impossible to determine what factor or factors are responsible for the differences in response to each of the items. Future research will benefit from comparing items on one dimension at a time, in order to better identify the reasons for the discrepancy between them. Nevertheless, this study is important as it raises awareness to the need for a more careful consideration of items in the assessment of sensitive social issues, such as perceived ageism. Given the fact that the discrepancy between the two items was so substantial, our knowledge about perceived ageism as assessed by large social surveys remains underdeveloped.

## ORCID

Liat Ayalon  <http://orcid.org/0000-0003-3339-7879>

## References

- Abrams, D., & Swift, H. J. (2012). *Experiences and expressions of ageism*. Centre for Comparative Social Surveys. Retrieved from [https://www.europeansocialsurvey.org/docs/findings/ESS4\\_gb\\_toplines\\_experiences\\_and\\_expressions\\_of\\_ageism.pdf](https://www.europeansocialsurvey.org/docs/findings/ESS4_gb_toplines_experiences_and_expressions_of_ageism.pdf)
- Allen, J. O. (2015). Ageism as a risk factor for chronic disease. *The Gerontologist*, 56(4), 610–614.



- Alvarez-Galvez, J., & Salvador-Carulla, L. (2013). Perceived discrimination and self-rated health in Europe: Evidence from the European Social Survey (2010). *PLoS One*, 8(9), e74252. doi:10.1371/journal.pone.0074252
- Ayalon, L. (2013). Perceived age, gender, and racial/ethnic discrimination in Europe: Results from the European Social Survey. *Educational Gerontology*. doi:10.1080/03601277.2013.845490
- Ayalon, L. (2014). Perceived age, gender, and racial/ethnic discrimination in Europe: Results from the European social survey. *Educational Gerontology*, 40(7), 499–517. doi:10.1080/03601277.2013.845490
- Ayalon, L. (2015). Perceptions of old age and aging in the continuing care retirement community. *International Psychogeriatrics*, 27(4), 611–620. doi:10.1017/S1041610214002415
- Ayalon, L. (2016). Perceived age discrimination: A precipitator or a consequence of depressive symptoms? *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, gbw101. doi:10.1093/geronb/gbw101
- Ayalon, L., & Tesch-Römer, C. (2017). Taking a closer look at ageism: Self-and other-directed ageist attitudes and discrimination. *European Journal of Ageing*, 14(1), 1–4. doi:10.1007/s10433-016-0409-9
- Bart, P. B. (1969). Why women's status changes in middle age: The turns of the social ferris wheel. *Sociological Symposium*, 3, 1–18.
- Bell, J. (1995). *Understanding adulthood*. A key to understanding youth-adult relationship. Retrieved from [http://actioncivics.scoe.net/pdf/Understanding\\_Adulthood.pdf](http://actioncivics.scoe.net/pdf/Understanding_Adulthood.pdf)
- Chen, M., & Bargh, J. A. (1997). Nonconscious behavioral confirmation processes: The self-fulfilling consequences of automatic stereotype activation. *Journal of Experimental Social Psychology*, 33(5), 541–560. doi:10.1006/jesp.1997.1329
- Clarke, L. H., & Griffin, M. (2008). Visible and invisible ageing: Beauty work as a response to ageism. *Ageing & Society*, 28(5), 653–674. doi:10.1017/S0144686X07007003
- Duncan, C., & Loretto, W. (2004). Never the right age? Gender and age-based discrimination in employment. *Gender, Work & Organization*, 11(1), 95–115. doi:10.1111/gwao.2004.11.issue-1
- Eibach, R. P., Mock, S. E., & Courtney, E. A. (2010). Having a “senior moment”: Induced aging phenomenology, subjective age, and susceptibility to ageist stereotypes. *Journal of Experimental Social Psychology*, 46(4), 643–649. doi:10.1016/j.jesp.2010.03.002
- Ferraro, K. F., & Shippee, T. P. (2009). Aging and cumulative inequality: How does inequality get under the skin? *The Gerontologist*, 49(3), 333–343. doi:10.1093/geront/gnp034
- Hagelin, J., Nilstun, T., Hau, J., & Carlsson, H.-E. (2004). Surveys on attitudes towards legalisation of euthanasia: Importance of question phrasing. *Journal of Medical Ethics*, 30(6), 521–523. doi:10.1136/jme.2002.002543
- Hausdorff, J. M., Levy, B. R., & Wei, J. Y. (1999). The power of ageism on physical function of older persons: Reversibility of age-related gait changes. *Journal of the American Geriatrics Society*, 47(11), 1346–1349. doi:10.1111/jgs.1999.47.issue-11
- Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33, 159–174. doi:10.2307/2529310
- Marques, S., Swift, H. J., Vauclair, C.-M., Lima, M. L., Bratt, C., & Abrams, D. (2015). ‘Being old and ill’ across different countries: Social status, age identification and older people’s subjective health. *Psychology & Health*, 30(6), 699–714. doi:10.1080/08870446.2014.938742
- Officer, A., Schneiders, M. L., Wu, D., Nash, P., Thiyagarajana, J. A., & Bearda, J. R. (2016). Valuing older people: Time for a global campaign to combat ageism. *Bulletin of the World Health Organization*, 94(10), 710. doi:10.2471/BLT.16.184960
- Palmore, E. (2001). The ageism survey: First findings. *The Gerontologist*, 41(5), 572–575. doi:10.1093/geront/41.5.572
- Palmore, E. B., & Manton, K. (1973). Ageism compared to racism and sexism. *Journal of Gerontology*, 28(3), 363–369. doi:10.1093/geronj/28.3.363
- Parodi, G., Pastore, F., Tanveer Choudhry, M., Marelli, E., & Signorelli, M. (2012). Youth unemployment rate and impact of financial crises. *International Journal of Manpower*, 33(1), 76–95. doi:10.1108/01437721211212538
- Perdue, C. W., & Gurtman, M. B. (1990). Evidence for the automaticity of ageism. *Journal of Experimental Social Psychology*, 26(3), 199–216. doi:10.1016/0022-1031(90)90035-K
- Pienaar, E. F., Lew, D. K., & Wallmo, K. (2015). The importance of survey content: Testing for the context dependency of the new ecological paradigm scale. *Social Science Research*, 51, 338–349. doi:10.1016/j.ssresearch.2014.09.005
- Pierce, C. M., & Allen, G. B. (1975). Childism. *Psychiatric Annals*, 5(7), 15–24.
- Powell, J. L. (2014). Governmentality, social policy and the social construction of old age in England. *International Letters of Social and Humanistic Sciences*, 16(2), 108–121.
- Rippon, I., Zaninotto, P., & Steptoe, A. (2015). Greater perceived age discrimination in England than the United States: Results from HRS and ELISA. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 70(6), 925–933. doi:10.1093/geronb/gbv040
- Ruggiero, K. M. (1999). The personal/group discrimination discrepancy. *Journal of Social Issues*, 55(3), 519–536. doi:10.1111/0022-4537.00131
- Schwarz, N. (1999). Self-reports: How the questions shape the answers. *American Psychologist*, 54(2), 93. doi:10.1037/0003-066X.54.2.93

- Strack, F., & Martin, L. L. (1987). Thinking, judging, and communicating: A process account of context effects in attitude surveys. In H. J. Hippler, N. Schwarz, & S. Sudman (Eds.), *Social information processing and survey methodology. Recent research in psychology* (pp. 123–148). New York, NY: Springer.
- Stuckelberger, A., Abrams, D., & Chastonay, P. (2012). Age discrimination as a source of exclusion in Europe: The need for a human rights plan for older persons. In S. Thomas & K. Norah (Eds.), *From exclusion to inclusion in old age: A global challenge* (pp. 125–144). Bristol: The Policy Press.
- Tajfel, H. (1974). Social identity and intergroup behaviour. *Information (International Social Science Council)*, 13(2), 65–93. doi:[10.1177/053901847401300204](https://doi.org/10.1177/053901847401300204)
- Taylor, D. M., Wright, S. C., Moghaddam, F. M., & Lalonde, R. N. (1990). The personal/group discrimination discrepancy: Perceiving my group, but not myself, to be a target for discrimination. *Personality and Social Psychology Bulletin*, 16(2), 254–262. doi:[10.1177/0146167290162006](https://doi.org/10.1177/0146167290162006)
- Taylor, D. M., Wright, S. C., & Porter, L. E. (1994). *Dimensions of perceived discrimination: The personal/group discrimination discrepancy*. In *The psychology of prejudice: The Ontario symposium* (Vol. 7, pp. 233–255). Hillsdale, NJ: Lawrence Erlbaum.
- Tourangeau, R., & Rasinski, K. A. (1988). Cognitive processes underlying context effects in attitude measurement. *Psychological Bulletin*, 103(3), 299. doi:[10.1037/0033-2909.103.3.299](https://doi.org/10.1037/0033-2909.103.3.299)
- Van Der Star, A., & Bränström, R. (2015). Acceptance of sexual minorities, discrimination, social capital and health and well-being: A cross-European study among members of same-sex and opposite-sex couples. *BMC Public Health*, 15(1), 812. doi:[10.1186/s12889-015-2148-9](https://doi.org/10.1186/s12889-015-2148-9)
- Verick, S. (2009). *Who is hit hardest during a financial crisis? The vulnerability of young men and women to unemployment in an economic downturn*. Retrieved from [http://library.bsl.org.au/jspui/bitstream/1/1234/1/227148\\_Who\\_is\\_the\\_hardest\\_hit\\_during\\_financial\\_crisis.pdf](http://library.bsl.org.au/jspui/bitstream/1/1234/1/227148_Who_is_the_hardest_hit_during_financial_crisis.pdf)