

The Gerontologist cite as: Gerontologist, 2016, Vol. 56, No. 4, 610–614 doi:10.1093/geront/gnu158

Advance Access publication January 23, 2015



## **Forum**

# Ageism as a Risk Factor for Chronic Disease

Julie Ober Allen, MPH\*

School of Public Health, University of Michigan, Ann Arbor.

\*Address correspondence to Julie Ober Allen, MPH, School of Public Health, University of Michigan, 1415 Washington Heights, SPH I, Ann Arbor, MI 38109-2029. E-mail: joallen@umich.edu

Received July 1, 2014; Accepted November 17, 2014

Decision Editor: Rachel Pruchno, PhD

#### Abstract

Ageism is one of the most socially condoned and institutionalized forms of prejudice in the United States. Older adults are discriminated against in employment, health care, and other domains. Exposure to unfavorable stereotypes adversely affects the attitudes, cognitions, and behavior of older adults. Recurrent experiences with negative stereotypes combined with discrimination may make ageism a chronic stressor in the lives of older adults. The way stress influences physical health is gaining increasing support. The weathering hypothesis (Geronimus, A. T. (1992). The weathering hypothesis and the health of African-American women and infants: Evidence and speculations. Ethnicity and Disease, 2, 207–221) posits that the cumulative effects of chronic objective and subjective stressors and high-effort coping cause deterioration of the body, premature aging, and associated health problems such as chronic diseases. Researchers have found empirical support for the weathering hypothesis as well as its theorized contribution to racial and ethnic health disparities. Although ageism is not experienced over the entire life course, as racism typically is, repeated exposure to chronic stressors associated with age stereotypes and discrimination may increase the risk of chronic disease, mortality, and other adverse health outcomes. I conclude with implications for practice in the helping professions and recommendations for future research. Ageism warrants greater recognition, social condemnation, and scientific study as a possible social determinant of chronic disease.

Keywords: Age discrimination, Stress, Weathering

Previous studies have linked chronic stressors associated with social inequities to health conditions such as heart disease, hypertension, obesity, adverse birth outcomes, and mental health and well-being (Das, 2013; Gee & Payne-Sturges, 2004; Geronimus, 1992; Geronimus, Bound, Keene, & Hicken, 2007; Lantz, House, Mero, & Williams, 2005; Seeman, Singer, Rowe, Horwitz, & McEwen, 1997). Social inequities are conditions that promote the marginalization and discrimination against certain socially defined groups (e.g., Blacks, women, poor) while privileging other groups (e.g., Whites, men, wealthy) through differential access to political, economic, and social power. Social inequities are created and reinforced by dominant structural and cultural processes and norms. Research on social inequities as sources of chronic stress tends to predominately focus on racism, and on sexism and classism to a lesser degree. Although age is another important category of social classification, age-based discrimination has been relatively overlooked and unexamined as a potential source of chronic stress with ramifications for physical health.

In this article, I argue that structural age discrimination may also be a risk factor for chronic disease and warrants greater recognition, social condemnation, and scientific study. Structural age discrimination refers to the inequitable historic, cultural, institutional, political, and interpersonal conditions, structures, practices, and norms embedded within our society that routinely privilege some age groups, such as younger adults, while simultaneously disadvantaging other groups, including older adults. I start with an overview of age discrimination in the United States. Next, I provide evidence for why age discrimination may function

as a source of chronic stress. I then describe empirical and theoretical evidence linking chronic stressors to health outcomes, especially chronic diseases that may be applicable to age discrimination. I conclude with implications for practice in the helping professions and recommendations for future research.

## Age Discrimination in the United States

Age discrimination, also referred to as ageism, refers to the stereotyping of and discrimination against people due to their chronological age or a perception that they are "old" or "elderly" (Butler, 1969). In a particular context, people of any age may be stereotyped or discriminated against because of their age. This article, however, focuses on adults 60 years old and older because they are systematically disempowered, devalued, and excluded across many sectors in our society. This oppression only intensifies with increasing age. Biases, stereotypes, and preconceptions about older adults are ubiquitous and deeply embedded within U.S. culture. Although stereotypes of older adults can be positive or negative, most tend to be negative (Kite & Wagner, 2004). Previous studies suggest that approximately 89% of older adults have experienced age discrimination (Palmore, 2004) and that implicit ageism is more prevalent than implicit racism or sexism (Nosek, Banaji, & Greenwald, 2002). In addition, ageism is one of the most socially condoned and institutionalized forms of prejudice in this country; it is generally considered normative and acceptable (Angus & Reeve, 2006; Hagestad & Uhlenberg, 2005). For example, adult birthdays are often celebrated with jokes, cards, and gags emphasizing the undesirable aspects associated with aging. Yet similar "humor" directed at marginalized racial groups or women would be considered offensive and politically incorrect. In fact, some people question whether ageism is a legitimate form of oppression, whereas others are barely aware of its repercussions on the lives and health of older adults. In Kimel v. Florida Board of Regents (2000), for example, the majority opinion of the Supreme Court stated that "States may discriminate on the basis of age without offending the Fourteenth Amendment," if the basis of this discrimination could be rationally argued, and that "older persons, unlike those who suffer discrimination on the basis of race or gender, have not been subjected to a 'history of purposeful unequal treatment" (p. 83).

Research on the negative effects of ageism on the lives of older adults tends to focus on age discrimination in employment and in the provision of health care (Pasupathi & Löckenhoff, 2004). Older people are often forced into early retirement or terminated, with their treatment justified as based on economic or liability considerations (Roscigno, Mong, Byron, & Tester, 2007). Many older adults subjected to such treatment have a difficult time or are unable to find new employment. Older adults are also often treated differently by health care providers when compared with their

younger counterparts (Eymard & Douglas, 2012; Robb, Chen, & Haley, 2002). An insightful anecdote describes a man who goes to his doctor complaining of knee pain. The doctor says to him, "You should expect this. You are getting older." The man replies, "My other knee is just as old, but it does not hurt." As suggested in this anecdote, pain, physical deterioration, melancholy, and cognitive decline are often assumed to be inevitable parts of the aging process. As a result, older patients may not receive medically appropriate medications and procedures (Pasupathi & Löckenhoff, 2004; Robb et al., 2002). Some health care decisions, such as organ transplant recipient selection (Ladin & Hanto, 2011), may formally or informally take into account considerations such as recipients' chances of having a long life, thus reducing the likelihood that older adults will receive needed care (Shortt, 2001).

# **Psychological Effects of Ageism**

Older adults can internalize ageist beliefs and begin to believe and behave as though they are no longer independent, healthy, and vibrant adults (Levy, 2009; Levy & Banaji, 2004). Older adults exposed to negative age stereotypes in laboratory studies demonstrated worse memory, handwriting, and self-confidence and have appeared to age instantly-moving in a stereotypically older manner (see reviews in Levy & Banaji, 2004 and Meisner, 2012). These are examples of stereotype embodiment (Levy, 2009), which proposes that ageist stereotypes are internalized across life course, influence older adults' self-perceptions of aging, and are embodied, often unconsciously, in their behavior, functioning, and health. A related concept is stereotype threat (Aronson & Steele, 2005; Steele, 2010), which occurs when individuals are bothered by negative stereotypes they are targeted with and can adversely affect attitudes, cognitions, and behavior, especially performance. Both stereotype embodiment and stereotype threat can function as sources of psychological, cognitive, and physiological stress.

The ubiquity of ageist stereotypes in the United States may cause older adults to experience stereotype embodiment and threat frequently. Researchers have found that ageism decreased mental health, well-being, and even older adults' will to live (Levy, Ashman, & Dror, 1999–2000; Redman & Snape, 2006; Vogt Yuan, 2007; Wurm & Benyamini, 2014). Recurrent stereotype embodiment and threat combined with age discrimination in employment, health care, and other domains suggest that ageism can be a chronic stressor that likely has adverse psychological and physiological effects.

### Ageism, Stress, and Chronic Disease

Theories have been developed to explain how chronic stressors stemming from social inequities may increase the risk for chronic disease by getting "under the skin" (Das, 2013; McEwen, 2012). Much of this research has

been developed and tested to understand the health consequences of racism. I posit, however, that ageism may increase chronic disease risk through similar biosocial mechanisms. I do not suggest that racism and ageism are equivalent, merely that they negatively affect health via the same mechanisms. Findings from the few studies examining ageism as a stressor or associations between ageism and stress-related health outcomes provide evidence consistent with my argument.

The way stress influences health is gaining increasing support. Stress occurs when sources of stress are not resolved through immediate coping or adaptation. Although everyone experiences stress, socially and structurally marginalized populations, including older adults, experience more stressors, more chronic stressors, and have fewer mitigating resources to support effective coping. The weathering hypothesis originated by Geronimus (1992) describes a mechanism linking structural racism and stress to health disparities. It posits that the cumulative effects of chronic objective (e.g., environmental) and subjective (e.g., negative stereotypes) stressors and high-effort coping over the life course affect the biology of the body causing physiological deterioration and premature aging (McEwen & Gianaros, 2010). Researchers have found empirical support for the weathering hypothesis as well as its theorized contribution to racial and ethnic disparities in chronic diseases, mortality, and other health outcomes (Das, 2013; Geronimus, 1992; Geronimus et al., 2007; Geronimus, Bound, Waidmann, Colen, & Steffick, 2001; Geronimus, Hicken, Keene, & Bound, 2006; Pearson & Geronimus, 2011). Ageism, unlike racism, is only experienced during a portion of the life course, will affect everyone who lives long enough, and can be temporarily eluded (e.g., cosmetics and plastic surgery). Like racism, however, repeated exposure to chronic stressors associated with age discrimination and stereotypes may still cause accelerated physical deterioration and associated chronic diseases. Even short-term exposure to discrimination-based stress (against Arab Americans following September 11) has been shown to increase stress-related health outcomes (Lauderdale, 2006).

The findings from a series of studies by Levy and colleagues suggest that ageism may be associated with short-and long-term physiological health consequences. Levy and colleagues (Levy, Hausdorff, Hencke, & Wei, 2000; Levy et al., 2008) documented heightened cardiovascular stress responses (i.e., increased blood pressure, heart rate, and skin conductance) among older adults subliminally exposed to negative ageing stereotypes compared with those exposed to positive stereotypes. Frequent elevation of blood pressure and heart rate can lead to hypertension and may contribute to or exacerbate other chronic health issues such as heart disease, stroke, kidney disease, obesity, and diabetes (Go et al., 2013; Julius, Valentini, & Palatini, 2000; Lago, Singh, & Nesto, 2007). Younger adults with more negative aging stereotypes have even

been found to have higher rates of cardiovascular events later in life (Levy, Zonderman, Slade, & Ferrucci, 2009). In other studies, older adults with negative perceptions about ageing demonstrated poorer functional health (Levy, Slade, & Kasl, 2002), recovered from disease more slowly (Levy, Slade, May & Caracciolo, 2006), and had shorter average life spans (Levy & Myers, 2005; Levy, Slade, Kunkel, & Kasl, 2002). Given the burden of chronic disease in the aging population, better understanding and addressing ageism is a promising and largely unexplored strategy for decreasing morbidity and mortality in the United States.

## **Implications for Practice and Future Research**

The helping professions—social work, medicine, public health, counseling, ministry, and others-may be able to reduce the negative effects of ageism on the health of older adults in several ways. First, providers must increase their knowledge, awareness, and intentionality in order to reduce their own perpetration of age discrimination and to identify ageism in their work settings (Martinson & Berridge, 2014). By doing something, whether changing their own behavior or bringing attention to age discrimination and stereotypes when they see it, providers can take accountability for reducing ageism instead of remaining silent and preserving the status quo. Second, helping professionals can model nondiscriminatory attitudes and behaviors for colleagues, clients, friends, and family. Third, individuals, groups, and organizations within the helping professions can increase dialogue about ageism and its potential negative ramifications on the health of older adults by drawing on existing resources (e.g., The Aging Quiz at http://www2. webster.edu/~woolflm/myth.html, antiageism activist groups like the gray panthers (www.graypanthers.org), and ageism-focused special interest groups within professional associations, policy statements, and research). There is also a need for more discussion prompts and resources, perhaps informed by efforts to promote social equity and address other forms of oppression (e.g., tools from www.policylink. org, www.naccho.org, and www.rwjf.org). Facilitating dialogue about ageism is especially important among advocacy groups representing the interests of older adults, ranging from national organizations such as the AARP (formerly the American Association of Retired Persons) to local senior centers, as older adults may lack opportunities to voice their experiences of ageism without being mocked, ignored, or undercut by those who do not recognize ageism as harmful form of discrimination. Fourth, members of the helping professions can support older adults demanding autonomy, respect, and power as valued members of society by publically affirming their rights and using their power and influence to assure older adults' rights are recognized and respected. Finally, providers can encourage critical analysis of how policies, practices, and cultures within their organizations, their fields, and at the national

level may be ageist and can advocate for change using tools such as organizational equity assessments and health impact assessments. Organizational equity assessments are intended to increase awareness and lead to the development of plans to increase equity within an organization's culture, operations, and human resources; Annie E. Casey Foundation (http://www.aecf.org/) and the Coalition of Communities of Color (www.coalitioncommunitiescolor. org) provide illustrative models examining racial equity that could be revised to focus on age equity. Health impact assessments help decision makers identify and mitigate the potential harmful, and often overlooked, health effects of new or changed policies, plans, and programs in various sectors, and the distribution of these health effects within the population including the identification of vulnerable populations, which may include older adults.

More research is needed on ageism to better understand its roots in our culture, its manifestations, and its effects on the lives and health of older adults. Given the infancy of this area of study, more data and measures for capturing ageism are essential. We know little about what characteristics may partially protect some older adults from ageism and its ill effects and what factors make others more vulnerable. Research on how age discrimination may increase risk for chronic disease is especially warranted.

Old age is so strongly associated with poor health, yet perhaps it need not be. If ageism is shown to be a determinant of chronic disease and other health problems, then reducing or eliminating ageism could prevent those health problems and improve quality of life for many people in the latter portion of the life span.

#### **Funding**

This work was supported in part by a fellowship from the University of Michigan Rackham School for Graduate Studies and by the Watkins Research Lab in the University of Michigan School of Social Work

#### Acknowledgements

I gratefully acknowledge the support of Daphne C. Watkins, PhD, who provided feedback on the initial development and drafts of this manuscript.

#### References

- Angus, J., & Reeve, P. (2006). Ageism: A threat to "aging well" in the 21st century. *Journal of Applied Gerontology*, 25 (2), 137–152. doi:10.1177/0733464805285745
- Aronson, J., & Steele, C. M. (2005). Stereotypes and the fragility of academic competence, motivation, and self-concept. InC. Dweck & E. Eliott (Eds.), *Handbook of competence and motivation* (pp. 436–456). New York: Guilford.
- Butler, R. N. (1969). Ageism: Another form of bigotry. *The Gerontologist*, 9, 243–246. doi:10.1093/geront/9.4\_Part\_1.243

- Das, A. (2013). How does race get "under the skin"?: Inflammation, weathering, and metabolic problems in late life. *Social Science and Medicine (1982)*, 77, 75–83. doi:10.1016/j. socscimed.2012.11.007
- Eymard, A. S., & Douglas, D. H. (2012). Ageism among health care providers and interventions to improve their attitudes toward older adults: An integrative review. *Journal of Gerontological Nursing*, 38 (5), 26–35. doi:10.3928/00989134-20120307-09
- Gee, G. C., & Payne-Sturges, D. C. (2004). Environmental health disparities: A framework integrating psychosocial and environmental concepts. *Environmental Health Perspectives*, 112 (17), 1645–1653. doi:10.1289/ehp.7074
- Geronimus, A. T. (1992). The weathering hypothesis and the health of African-American women and infants: Evidence and speculations. *Ethnicity and Disease*, **2** (3), 207–221.
- Geronimus, A. T., Bound, J., Keene, D., & Hicken, M. (2007). Black-white differences in age trajectories of hypertension prevalence among adult women and men, 1999-2002. *Ethnicity and Disease*, 17 (1), 40–48.
- Geronimus, A. T., Bound, J., Waidmann, T. A., Colen, C. G., & Steffick, D. (2001). Inequality in life expectancy, functional status, and active life expectancy across selected black and white populations in the United States. *Demography*, 38 (2), 227–251. doi:10.1353/dem.2001.0015
- Geronimus, A. T., Hicken, M., Keene, D., & Bound, J. (2006). "Weathering" and age patterns of allostatic load scores among blacks and whites in the United States. *American Journal of Public Health*, 96 (5), 826–833. doi:10.2105/AJPH.2004.060749
- Go, A. S., Mozaffarian, D., Roger, V. L., Benjamin, E. J., Berry, J. D., Borden, W. B.,...Turner, M. B. (2013). Heart disease and stroke statistics–2013 update: A report from the American Heart Association. *Circulation*, 127 (1), e6–e245. doi:10.1161/CIR.0b013e31828124ad
- Hagestad, G. O., & Uhlenberg, P. (2005). The social separation of old and young: A root of ageism. *Journal of Social Issues*, **61** (2), 343–360. doi:10.1111/j.1540-4560.2005.00409.x
- Julius, S., Valentini, M., & Palatini, P. (2000). Overweight and hypertension: A 2-way street? *Hypertension*, 35 (3), 807–813. doi:10.1161/01.HYP.35.3.807
- Kimel, et al. v. Florida Board of Regents, 528 U.S. 62. U.S. (11th Circuit, 2000).
- Kite, M. E., & Wagner, L. S. (2004). Attitudes toward older adults. In T. D. Nelson (Ed.), *Ageism: Stereotyping and prejudice against older persons* (pp. 146–161). Cambridge, MA: MIT Press.
- Ladin, K., & Hanto, D. W. (2011). Rational rationing or discrimination: Balancing equity and efficiency considerations in kidney allocation. *American Journal of Transplantation*, **11** (11), 2317–2321. doi:10.1111/j.1600-6143.2011.03726.x
- Lago, R. M., Singh, P. P., & Nesto, R. W. (2007). Diabetes and hypertension. *Nature Clinical Practice Endocrinology and Metabolism*, 3 (10), 667. doi:10.1038/ncpendmet0638
- Lantz, P. M., House, J. S., Mero, R. P., & Williams, D. R. (2005). Stress, life events, and socioeconomic disparities in health: Results from the Americans' Changing Lives Study. *Journal of Health and Social Behavior*, 46 (3), 274–288. doi:10.1177/002214650504600305
- Lauderdale, D. S. (2006). Birth outcomes for Arabic-named women in California before and after September 11. *Demography*, 41 (1), 185–201. doi:10.1353/dem.2006.0008

- Levy, B. (2009). Stereotype embodiment: A psychosocial approach to aging. *Current Directions in Psychological Science*, **18** (6), 332–336. doi:10.1111/j.1467-8721.2009.01662.x
- Levy, B. R., Ashman, O., & Dror, I. (1999–2000). To be or not to be: The effects of aging stereotypes on the will to live. *Omega-Journal of Death and Dying*, 40 (3), 409–420. doi:10.2190/y2ge-bvyq-nf0e-83vr
- Levy, B. R., & Banaji, M. R. (2004). Implicit ageism. In T. D. Nelson (Ed.), *Ageism: Stereotyping and prejudice against older persons* (pp. 49–75). Cambridge, MA: MIT Press.
- Levy, B. R., Hausdorff, J. M., Hencke, R., & Wei, J. Y. (2000). Reducing cardiovascular stress with positive self-stereotypes of aging. *The Journal of Gerontology, Series B: Psychological Sciences and Social Sciences*, 55 (4), P205–P213. doi:10.1093/geronb/55.4.P205
- Levy, B. R., & Myers, L.M. (2005). Relationship between respiratory mortality and self-perceptions of aging. *Psychology & Health*, 20 (5), 553–564. doi:10.1080/14768320500066381
- Levy, B. R., Ryall, A. L., Pilver, C. E., Sheridan, P. L., Wei, J. Y., & Hausdorff, J. M. (2008). Influence of African American elders' age stereotypes on their cardiovascular response to stress. *Anxiety, Stress, and Coping*, 21 (1), 85–93. doi:10.1080/10615800701727793
- Levy, B. R., Slade, M. D., & Kasl, S. V. (2002). Longitudinal benefit of positive self-perceptions of aging on functional health. *The Journal* of Gerontology, Series B: Psychological Sciences and Social Sciences, 57 (5), P409–P417. doi:10.1093/geronb/57.5.P409
- Levy, B. R., Slade, M. D., Kunkel, S. R., & Kasl, S. V. (2002). Longevity increased by positive self-perceptions of aging. *Journal of Personality and Social Psychology*, 83 (2), 261–270. doi:10.1037/0022-3514.83.2.261
- Levy, B. R., Slade, M. D., May, J., & Caracciolo, E. A. (2006). Physical recovery after acute myocardial infarction: Positive age self-stereotypes as a resource. *International Journal of Aging & Human Development*, **62** (4), 285–301. doi:10.2190/ejk1-1q0d-lhge-7a35
- Levy, B. R., Zonderman, A. B., Slade, M. D., & Ferrucci, L. (2009). Age stereotypes held earlier in life predict cardiovascular events in later life. *Psychological Science*, **20** (3), 296–298. doi:10.1111/j.1467-9280.2009.02298.x
- Martinson, M., & Berridge, C. (2014). Successful ageing and its discontents: A systematic review of the social gerontology literature. *The Gerontologist*. Advance online publication. doi:10.1093/geront/gnu037
- McEwen, B. S. (2012). Brain on stress: How the social environment gets under the skin. *Proceedings of the National Academy of Sciences of the United States of America*, 109, 17180–17185. doi:10.1073/pnas.1121254109
- McEwen, B. S., & Gianaros, P. J. (2010). Central role of the brain in stress and adaptation: Links to socioeconomic status, health,

- and disease. Annals of the New York Academy of Sciences, 1186, 190-222. doi:10.1111/j.1749-6632.2009.05331.x
- Meisner, B. A. (2012). A meta-analysis of positive and negative age stereotype priming effects on behavior among older adults. *The Journal of Gerontology, Series B: Psychological Sciences and Social Sciences*, 67 (1), 13–17. doi:10.1093/geronb/gbr062
- Nosek, B. A., Banaji, M. R., & Greenwald, A. G. (2002). Harvesting implicit group attitudes and beliefs from a demonstration website. *Group Dynamics, Theory, Research, and Practice*, 6 (1), 101–115. doi:10.1037//1089-2699.6,1.101
- Palmore, E. B. (2004). Ageism in Canada and the United States. *Journal of Cross-Cultural Gerontology*, 19 (1), 41–46. doi:10.1023/B:JCCG.0000015098.62691.ab
- Pasupathi, M., & Löckenhoff, C. E. (2004). Ageist behavior. In T. D. Nelson, (Ed.), Ageism: Stereotyping and prejudice against older persons (pp. 201–246). Cambridge, MA: MIT Press.
- Pearson, J. A., & Geronimus, A. T. (2011). Race/ethnicity, socio-economic characteristics, coethnic social ties, and health: Evidence from the national Jewish population survey. *American Journal of Public Health*, 101 (7), 1314–1321. doi:10.2105/AJPH.2009.190462
- Redman, T., & Snape, E. (2006). The consequences of perceived age discrimination amongst older police officers: Is social support a buffer? *British Journal of Management*, 17, 167–175. doi:10.1111/j.1467-8551.2006.00492.x
- Robb, C., Chen, H., & Haley, W. E. (2002). Ageism in mental health and health care: A critical review. *Journal of Clinical Geropsychology*, 8 (1), 1–12. doi:10.102 3/A:1013013322947
- Roscigno, V. J., Mong, S., Byron, R., & Tester, G. (2007). Age discrimination, social closure and employment. *Social Forces*, 86 (1), 313–334. doi:10.1353/sof.2007.0109
- Seeman, T. E., Singer, B. H., Rowe, J. W., Horwitz, R. I., & McEwen, B. S. (1997). Price of adaptation–allostatic load and its health consequences. MacArthur studies of successful aging. Archives of Internal Medicine, 157 (19), 2259–2268. doi:10.1001/archinte.1997.00440400111013
- Shortt, S. (2001). Venerable or vulnerable? Ageism in health care. *Journal of Health Services Research & Policy*, 6 (1), 1–2. doi:10.1258/1355819011927080
- Steele, C. M. (2010). Whistling Vivalidi: And other stories of how stereotypes affect us. New York: W.W. Norton & Company.
- Vogt Yuan, A. S. (2007). Perceived age discrimination and mental health. *Social Forces*, **86** (1), 291–311. doi:10.1353/sof.2007.0113
- Wurm, S., & Benyamini, Y. (2014). Optimism buffers the detrimental effect of negative self-perceptions of ageing on physical and mental health. *Psychology & Health*, 29 (7), 832–848. doi:10.1 080/08870446.2014.891737