

Introduction

Risks of ageism

- ◆ Stereotypes about aging and old age predominantly negative ^{Humert, 2011}
- ◆ Contribute to widespread discrimination against older adults ^{McConatha et al., 2003; Nelson, 2004}
- ◆ Internalization of negative aging stereotypes a threat ^{Emile et al., 2015; Levy, 2009}
 - Related to negative health and psychological outcomes, (e.g., increased hospitalization, reduced longevity, poorer memory) ^{Levy et al., 2012; Levy et al., 2015}

Role of awareness and increased knowledge

- ◆ Attitudes towards aging less negative for young adults with more inter-generational contact and social exposure ^{Allan & Johnson, 2009}
- ◆ Reliance on stereotypes in social judgments decreases with additional knowledge about social groups ^{Nelson, 2004}
- ◆ Ageism may be reduced via increased awareness and education ^{Allan & Johnson, 2009; Palmore, 2015}
- ◆ Positivity and negative of attitudes towards social groups may also be affected by level of knowledge and degree of stereotyping

Need for better understanding of ageism antecedents and for effective anti-ageism interventions

Research Aims

- ◆ **Aim 1:** Evaluate relationships between ageism, aging attitudes, aging anxiety, and contact with older persons in a sample of younger adults
- ◆ **Aim 2:** Determine whether aging beliefs are enhanced by increased aging knowledge (e.g., completion of a 15-week-long psychology course on aging, compared to a control class)

Study Design

- ◆ **2 time points:** first week (pretest) and last week (posttest) of 15-week university semester
- ◆ **2 conditions:** Psychology of Aging class (Aging) and Applied Behavior Analysis class (Control), in-person,
- ◆ Surveys administered online in random order
- ◆ Compensation was extra credit, not more than 5% of grade

Methods

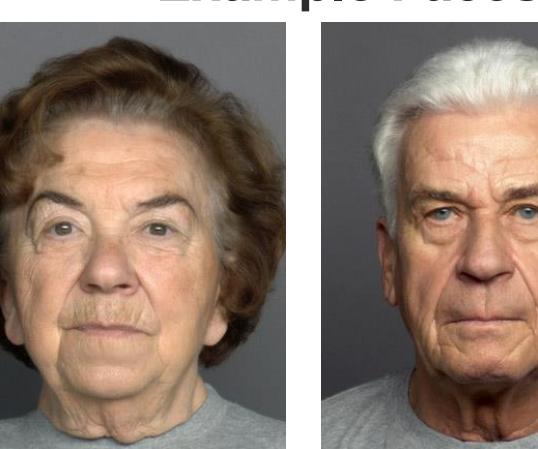
Participants

- ◆ **Aging:** $n = 48$, 85% female, 75% Caucasian, $\bar{GPA} = 3.42$
 - 10% pretest only, 12% posttest only, 77% both
 - 4% Freshman, 15% Sophomore, 25% Junior, 56% Senior
- ◆ **Control:** $n = 30$, 73% female, 77% Caucasian, $\bar{GPA} = 3.29$
 - 13% pretest only, 13% posttest only, 73% both
 - 13% Freshman, 30% Sophomore, 37% Junior, 20% Senior
- ◆ Comparable mean GPAs, $t(76) = -1.83$, $p = .07$

Measures

- ◆ **Ageism:** Frabroni Scale of Ageism, 29 items ($\alpha=.89\text{-}.90$), 4-pt Likert scale (1=strongly disagree, 4=strongly agree) ^{Fraboni et al., 1990}
 - Subscales: antilocution, avoidance, discrimination
 - Ex.: *Old people complain more than other people do.*
- ◆ **Implicit age attitudes:** Traits of Older Adults, *What percentage of older adults do you think are _____?* ^{Grühn et al., 2011; Schmidt & Boland, 1986}
 - 15 positive traits ($\alpha=.85\text{-}.86$): E.g., generous, healthy, wise
 - 15 negative traits ($\alpha=.87\text{-}.91$): E.g., lonely, poor, senile
- ◆ **Ratings of older faces:** 8 neutrally-expressive older faces (4 male, 4 female), 7-pt Likert scale
 - Warm, competent, likeable, physical health, memory ability
 - 2 versions, counterbalanced by time point and condition

Example Faces



- ◆ **Aging anxiety:** Anxiety about Aging Scales, 20 items ($\alpha=.79\text{-}.82$), 4-pt Likert scale (1=strongly disagree, 4=strongly agree) ^{Lasher & Faulkender, 1993}
 - Subscales: psychological, appearance, fear, loss
 - Ex.: *I believe that I will still be able to do most things for myself when I am old.*
- ◆ **Contact with older men and women:** Quality of interactions with older men and women, weighted by frequency of contact, range: 0 - 30

Results

Aim 1. Relationships between ageism, aging attitudes, age anxiety, and contact

Correlation coefficients, means, and standard deviations at pretest

	1	2	3	4	5	6	7	8	M	SD
1. Ageism	—								1.94	0.33
2. Negative traits	.39 **	—							43.13	11.70
3. Positive traits	-.36 **	-.07	—						62.13	9.73
4. Face ratings—all	-.39 **	-.42 **	.11	—					4.18	0.61
5. Face ratings—warmth	-.17	-.29 *	.08	.77 **	—				4.10	0.67
6. Aging anxiety	.50 **	.36 **	-.09	-.15	-.02	—			2.15	0.34
7. Aging anxiety—fear	.59 **	.24	-.37 **	-.29 *	-.31 *	.44 **	—		1.89	0.44
8. Contact quality	-.30 *	-.12	.09	-.03	.02	-.08	-.36 **	—	14.44	8.07

Note. * $p < .05$, ** $p < .01$. N = 59. Grey correlation coefficients, $p > .05$. Variables reflect averages of items for each measure.

Multiple regression predicting ageism at pretest

	B	SE B	β
Step 1			
(Constant)	61.3	2.43	
Contact quality	-0.35	0.15	-.30 *
Step 2			
(Constant)	67.93	12.01	
Contact quality	-0.29	0.11	-.25 *
Aging anxiety	0.53	0.014	.39 ***
Face ratings—all	-4.22	1.66	-.26 *
Negative traits	0.08	0.09	.10
Positive traits	-0.26	0.09	-.27 **

Note. $R^2 = .09$ for Step 1. $\Delta R^2 = .42$ for Step 2 ($p < .001$). * $p < .05$, ** $p < .01$, *** $p < .001$. N = 59. Regression assumptions met.

- ◆ Ageism predicted by aging anxiety, positive traits, and face rating, as well as contact quality

Aim 2. The impact of knowledge: Pretest-posttest changes in aging beliefs

Analytic approach:

	Aging	Control	Negative Traits	Aging Anxiety—Psychological
Step 1	100	100	4.0	
Step 2	90	90	3.5	
Pretest	80	80	3.0	
Posttest	70	70	2.5	
Pretest	60	60	2.0	
Posttest	50	50	1.5	
Pretest	40	40	1.0	
Posttest	30	30	0.5	
Pretest	20	20	0.0	
Posttest	10	10	0.0	
Pretest	0	0	0.0	
Posttest	F(1,55)=6.76, $p=.01$, $\eta^2=.11$	F(1,56)=4.48, $p=.04$, $\eta^2=.07$		

Discussion

- ◆ Quality contact with older persons helpful but insufficient for intervention
- ◆ **Reactivity effect:** notable pretest-posttest “improvements” in aging attitudes for both conditions
- ◆ Recommend assessment of implicit attitudes, varied control groups, and extension to “real-world” discrimination scenarios

- ◆ Important to reduce negative attitudes, distinct from promoting positive
 - Positive portrayal not always helpful ^{Fung et al., 2015}
 - Older adults hold both negative and positive aging attitudes ^{Humert, 2011}
- ◆ **Targets for intervention:** aging anxiety and fear of older persons