

Contributions of Social Desirability to Self-Reported Ageism

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Abstract

The authors examined the role of social desirability in 445 participants' responses to self-reported measures of ageism across two studies. In Study I, college students and community adults completed the Relating to Older People Evaluation (ROPE) and a short form of the Marlowe—Crowne Social Desirability Scale (M-C SDS). Study 2 was a conceptual replication that included the Fraboni Scale of Ageism (FSA). Correlation analyses confirmed a small but significant relationship between scores on the positive ageist items and the social desirability scale in both studies. Ageist attitudes were correlated with negative ageist behaviors in Study 2. Implications for current views on ageism and strategies for reducing ageist attitudes and behaviors in everyday life are discussed.

Keywords

ageism, ageist behaviors, ageist attitudes, positive, and negative ageism

Ageism, referring to prejudice or discrimination based on perceived chronological age, is prevalent, and detrimental to individuals and groups in society (Aosved, Long, & Voller, 2009; Kelchner, 1999; Nelson, 2002; Palmore,

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1999). Butler (1969) introduced the construct of ageism in the late 1960s as a new bigotry reflective of age bias and discrimination. Ageism may be held or expressed beliefs and opinions about older adults, or actions, such as discriminatory practices in the workplace. Older people are commonly depicted in negative ways in advertising that focuses on health problems or cosmetic products—they are also portrayed in a humorous or sarcastic manner in jokes and greeting cards (Palmore, 2006a; 2006b). Ageism may well have roots in the fear of growing old. That is, when people worry about their own potential loss of independence and inevitable death, they project their worst fears on older people as a way to avoid their own reality (Nelson, 2005; Terry, 2008). Greenberg and his associates have suggested that ageism reflects peoples' anxiety related to death (i.e., mortality salience), among other perceived losses associated with old age, such as loss of health, beauty, and vitality (Greenberg, Schimel, & Martens, 2002; Greenberg, Solomon, & Arndt, 2008). From this perspective, ageist attitudes and behaviors directed toward older adults are perpetuated in an effort to reduce anxiety by distancing oneself from the threatening prospects of late adulthood. Indeed, evidence has shown that young adults' ageist attitudes and behaviors were related to risktaking and death anxiety, consistent with the view that ageism is a response to mortality awareness (see Popham, Kennison, & Bradley, 2011a, 2011b).

Typical with many prejudicial behaviors, people are unlikely to admit that they harbor oppressive feelings or practice stereotyping, judgment, putdowns or actions that reflect an intolerance or stigmatization toward others. Aosved et al. (2009) investigated this idea and reported that people who are more likely to report intolerance toward others, exhibit an authoritarian, rigid personality style. Nevertheless, people may act prejudicially toward older adults without awareness or consideration of the negative consequences for an older person. This practice has been referred to as unintentional prejudicial actions (Cole, n.d.) or what Bargh, Chen, and Burrows (1996) call automatic social behavior where priming situational exposure to social traits prompts an automatic or learned response. Whether intentional or unintentionally driven, ageism may detrimentally affect older adults' perceptions of their own competencies and lead to the development of "self-stereotypes" where negative attitudes about aging become self-directed (Levy, 2001). Furthermore, how older adults perceive themselves as they age may have serious implications for their functional health status (Levy, Slade, & Kasl, 2002). Thus, understanding the factors that promote and perpetuate ageism in society is an important challenge for psychology.

McGuire, Klein, and Chen (2008), among others, have pointed out that ageism may occur on institutional and societal levels (see Palmore, 1999; 2001). For instance, older persons may be discouraged to apply for

employment, or may be treated with less respect and attention in medical or other institutional settings, such as educational venues, than younger people (Grant, 1996). At the societal level, older people may be segregated in housing by age or mandatory retirement in certain positions. Palmore (1999) advanced a typology that incorporates individual, institutional, and societal levels of ageism, along with a conceptual distinction between positive and negative dimensions of ageism. At the individual level, positive forms of ageism include telling a person they look good for their age, opening the door or helping a person across the street because of their age, and seeking input from older people because they are considered wise. Many behaviors viewed as being courteous toward older adults may actually be manifestations of positive ageism, reflecting implicit assumptions about older people that are based on stereotypical views of aging. Positive ageism can be seen at a societal level in some social welfare programs such as Social Security benefit eligibility based solely on age and quarters of retirement contributions (Palmore, 1999). From this vantage point, a unique characteristic of ageism, different from other isms such as racism or sexism, is that some expressions of positive ageism may seem more socially acceptable than others. In contrast, negative ageism encompasses demeaning behaviors and/or discriminatory attitudes, such as telling a person they are too old to learn something new, or assuming a slow or erratic driver is an older person (Palmore, 1999). Palmore's typology, with positive and negative dimensions of ageism at the individual, institutional, and societal levels, provides a comprehensive framework for understanding ageism as a behavioral and societal phenomenon. Differentiating between what are viewed as more socially acceptable versions of ageism and the less acceptable expressions of ageism is of particular interest of the study.

For nearly half a century, social gerontologists have examined ageist attitudes using survey measures such as the Attitudes Toward Old Persons Scale (Kogan, 1961); the Aging Semantic Differential (Rosencranz & McNevin, 1969) and the Fraboni Ageism Scale (FSA; Fraboni, Saltstone, & Hughes, 1990). In recent years, there has been increased interest in assessing people's behavior toward older persons. Based on Palmore's (1999) typology, the Relating to Older People Evaluation (ROPE; Cherry & Palmore, 2008) was developed to measure the frequency with which people report positive and negative ageist behaviors in everyday life. Previous research using the ROPE has shown that many people engage in positive ageist behaviors with fewer people admitting negative ageist behaviors (Papadaki, Plotnikof, & Papadaki, 2011). Other evidence has shown that women report positive ageist behaviors more often than men, and younger and older adults report ageist behaviors at a similar rate (Cherry & Palmore, 2008). Allen, Cherry, and Palmore (2009)

have since replicated and extended these findings in educational and clinical settings using samples of college students, nursing home staff, and mental health practitioners. In particular, Allen et al. (2009) found that nursing home social service staff members reported more positive ageist behaviors than mental health system social workers and college students. These findings imply that the nursing home social service staff may have viewed positive ageist behaviors as desirable (e.g., a courtesy or sign of affection), especially when considered in the context of negative ageist behaviors that are patronizing, insulting, or offensive by comparison. From this vantage point, a greater endorsement of positive ageist behaviors, perhaps coupled with reduced negative ageist behaviors, may be more an indication of social desirability in responding by the participant than an indicator of self-reported ageism. Allen et al. (2009) did not include a measure of social desirability in their studies, so it was not possible to address this issue empirically.

The primary objective of the present research was to examine the role of social desirability in self-reported ageist behaviors in college students and community adults. Based on Allen et al. (2009), we suspect that social desirability is an individual difference characteristic that may affect participants' responses on self-report measures of ageism. By definition, social desirability pertains to people's inclination to portray positive images of themselves and to respond in ways that they feel are viewed as socially appropriate (Barger, 2002; Johnson & Fendrich, 2002). It is not surprising, therefore, that people wish to put their best foot forward when assessing themselves. This tendency is referred to as self-presentation bias (Johnson & Fendrich, 2002; Soubelet & Salthouse, 2011). Johnson and Fendrich's respondents with advanced age who reported higher traits on subjective well-being likewise reported higher scores on the Marlowe-Crowne Social Desirability Scale (M-C SDS). Soubelet and Salthouse (2011) discussed the trend that advanced age participants often score lower on negative affect and higher scores on items such as life satisfaction. Aligning with this tendency, their participants scored higher in positively construed areas, such as conscientiousness and lower in negatively construed areas of behavior such as neuroticism. In the present research, participants completed a short form of the M-C SDS (Strahan & Gerbasi, 1972) to provide new evidence concerning the influence of social desirability on self-report measures of ageism.

A second objective of the present research was to examine relationships among the ROPE dimensions and the FSA (Fraboni et al., 1990) as measures of ageist behaviors and attitudes, respectively. We reasoned that stronger ageist attitudes, reflected by higher FSA scores, would be associated with more frequent endorsement of negative ageist behaviors, indexed by ROPE negative items. This outcome would provide new evidence of convergent validity

for the negative dimension of the ROPE, a noteworthy finding from a psychometric point of view. If positive ageism reflects implicit assumptions of frailty and diminished competence in older adults as Palmore (1999) has suggested, then one would expect to observe correlations of a similar magnitude among the FSA scores and ROPE positive items. On the other hand, if the positive dimension of the ROPE is tapping deferential behaviors and presumed beneficent courtesies toward older adults, one would expect nonsignificant correlations or possibly negative correlations among the FSA scale scores and ROPE positive items.

To summarize, participants completed the ROPE and the M-C SDS to test the hypothesis that people may exaggerate the frequency of ageist behaviors if they perceive such behaviors as socially desirable. To permit direct comparisons with Allen et al. (2009), we tested undergraduate and graduate students enrolled in Social Work courses at Louisiana State University (LSU) in both studies. A nonstudent group of adults from the community was included to increase the heterogeneity of the study sample in Study 1 and strengthen the external validity of these findings. In Study 2, undergraduate and graduate students, along with middle-aged and older adults, completed the ROPE, M-C SDS, and the FSA (Fraboni et al., 1990) as a measure of ageist attitudes. We expected to replicate the association between ROPE positive items and the M-C SDS in Study 2, confirming the role of social desirability in responding to positive ageism items. Such a finding would be noteworthy, as the intersection between social desirability and ageism has received scant attention in the literature to date.

Study I

Method

Participants. In all, 190 individuals participated in this study. The demographic characteristics of the sample appear in Table 1 (upper panel). The undergraduate students were 63 persons enrolled in two sections of a Social Work course at Louisiana State University (LSU). The graduate students were 65 persons enrolled in three different graduate courses in Social Work at LSU. The community adults were 62 attendees at a workshop sponsored by Alzheimer Services of the Capital Area in Baton Rouge, Louisiana where the first author presented a seminar on healthy aging and memory.

Materials and Procedure. The ROPE contains 20 types of ageist behaviors: 6 are positive types of ageism (e.g., Hold doors open for old people because of their age; Vote for an old person because of their age) and 14 are negative

Table 1. Demographic Characteristics in Study 1 and 2.

		Age (in years)			Gender		Education	
	Ν	М	SD	Range	Male	Female	М	SD
Study I								
Undergraduate students	63	22.4	3.4	19-43	27	36	1.25	0.62
Graduate students	65	26.1	5.3	22-45	8	57	3.11	0.32
Community adults	62	61.2	20.0	20-91	14	48	2.39	1.23
Study 2								
Undergraduate students (1)	21	22.2	4.3	19-38	П	10	1.55	1.0
Undergraduate students (2)	61	22.6	4.0	20-46	19	42	1.16	0.52
Graduate students	69	28.3	6.2	22-50	9	60	3.03	0.24
Middle-age adults	55	45.I	11.5	26-68	15	40	3.02	1.09
Older adults	49	65.2	7.2	49-78	П	38	2.50	1.13

Notes. In Study I, undergraduate students were enrolled in a Social Work service course and graduate students were enrolled in the MSW program at Louisiana State University. Community adults were attendees at a workshop sponsored by Alzheimer Services, Inc. In Study 2, undergraduate students (I) were enrolled in service courses in Life Course and Aging Studies and Disaster Science Management. Undergraduate students (2) were enrolled in a Social Work service course. Graduate students were enrolled in the MSW program at LSU. Middle-aged adults were current state employees at LSU. Older adults were former state employees who attended the Retired State Employee Association of Louisiana annual meeting. Education was coded on a 5-point scale where (0 = less than high school, I = high school or GED equivalent, 2 = associates degree or at least 2 years college, 3 = college degree, 4 = master's degree, 5 = doctorate).

types (e.g., Send birthday cards to old people that joke about their age; Vote against an old person because of their age; cf. Cherry & Palmore, 1999). For each item, respondents were asked to select one of three response options: Never (scored as 0), Sometimes (scored as 1), or Often (scored as 2). Scores are summed within each dimension and expressed as a proportion of the highest score possible for that dimension. The 10-item short form of the M-C SDS (Strahan & Gerbasi, 1972) contains true/false statements with an equal number of true and false items. One point is awarded for each "true" response to any of the true items (e.g., I am always willing to admit it when I make a mistake) and "false" to any of the false items (e.g., I like to gossip at times). Responses are summed to form a social desirability score. Scores range from 0 to 10, with higher scores representing an increased sense of social desirability in responding. The student groups completed the ROPE and M-C SDS

	Instrument						
		RO	PE ^a				
	Posi	tive	Nega	ative		M-C	SDS♭
	М	SD	М	SD	М	М	SD
Study I							
Undergraduate students	0.54	0.17	0.22	0.11	0.38	4.62	2.25
Graduate students	0.54	0.16	0.20	0.12	0.37	4.43	2.07
Community adults	0.62	0.16	0.25	0.12	0.44	6.03	2.20
Study 2							
Undergraduate students (1)	0.49	0.20	0.21	0.10	0.35	4.43	1.75
Undergraduate students (2)	0.58	0.18	0.24	0.13	0.41	5.00	2.06
Graduate students	0.52	0.20	0.20	0.11	0.36	4.43	2.10
Middle-aged adults	0.56	0.18	0.21	0.11	0.39	5.25	2.25

Table 2. Summary of ROPE and M-C SDS in Study I and 2.

Notes. ROPE = Relating to Older People Evaluation. ^a(Cherry & Palmore, 2008). ^bM-C SDS= Marlowe-Crowne Social Desirability Scale (Strahan & Gerbasi, 1972).

0.17

0.27

0.12

0.42

5.69

1.98

0.56

as an in class exercise. The community adults completed the surveys in a conference room prior to a lecture given at Alzheimer Service, Inc. in Baton Rouge, Louisiana. The research protocol used in these studies was reviewed and approved by Institutional Review Board at LSU.

Results and Discussion

Older adults

Table 2 presents the mean scores for positive and negative ROPE items as a function of group. A 3 × 2 mixed analysis of variance (ANOVA) on these scores yielded a significant main effect of group, F(2,189) = 5.58, p = .004 with higher mean scores for the community adults than the two student groups. The main effect of question type was also significant, F(1,187) = 890.74, p < .001, with participants endorsing positive items (M = 0.57) more often than negative items (M = 0.22). The Group x Question Type interaction effect was nonsignificant.

Analyses on the M-C SDS scores yielded a significant main effect of group, F(2,187) = 10.17, p < .001. Pairwise comparisons confirmed that the mean M-C SDS score for the community adults (6.03) was significantly greater than the undergraduate (4.62) and graduate (4.43) students' mean scores (p's ≤ 0.001) which did not differ from each other.

Table 3. Co	relations Between Ageism Measures and the Marlow-Crowne Socia	al
Desirability So	ale (MC-SDS) in Study 1 and 2.	

Study / Measure	N	R	<i>r</i> with age partialed out
Study I			
ROPE positive	190	0.15*	0.090
ROPE negative	190	-0.002	-0.091
Study 2			
ROPE positive	252	0.16**	0.16**
ROPE negative	252	-0.08	-0.11
FSA total	252	-0.09	-0.10
FSA antilocution	252	-0.05	-0.06
FSA discrimination	252	0.02	-0.02
FSA avoidance	252	-0.18**	-0.16**

Notes. ROPE = Relating to Older People Evaluation. FSA = Fraboni Scale of Ageism. In Study 2, three participants did not complete the M-C SDS, so these analyses are based on 252 cases.

Correlation Analyses. We conducted correlation analyses to examine the relationships among the ROPE items and the M-C SDS scores (see Table 3). These analyses showed that the positive and negative items were significantly intercorrelated (r = 0.41, p < .001). The more interesting result was the correlation between positive items and M-C SDS scores (r = 0.15, p < .05). This finding supports the hypothesis that more frequent endorsement of positive ageist items is associated with a greater need for social desirability in responding as indexed by the M-C SDS scores. The correlation between negative [items] and M-C SDS scores was nonsignificant.

The results reported so far confirm the hypothesized association between positive ageism and social desirability. However, the community adults' mean age and their positive ageism mean exceeded the student groups' means, suggestive of a confounding between chronological age and responses to positive ageist behaviors (see Table 1). Consequently, we conducted partial correlation analyses to statistically control for age-related influences on responses. As can be seen in Table 3, the correlation between the positive items and M-C SDS scores was nonsignificant when variance due to age was statistically controlled. Interpretative caution is warranted, as respondent age was not an a priori consideration in this study. Further, Cherry and Palmore (2008) found no evidence of age effects on the ROPE when college students and older adults were directly compared. Community adults in Study 1 were

^{*} $b \le 0.05$. ** $b \le 0.01$

a convenience sample with a very wide age range (20-91 years; see Table 1), so clear inferences regarding age effects are not warranted. The issue of potential age-related differences in ROPE responses is addressed in Study 2.

Study 2

In Study 2, three methodological changes were made to permit a more precise test of the hypotheses outlined in the Introduction. First, we added a group of non-Social Work students who were sampled from undergraduate survey courses at LSU to control for potential curricular influences on responses. Second, we added two different age groups of community adults to address potential age effects with greater precision than has been the case in our prior work to date. The middle-aged adults were current employees at LSU who represented a wide range of administrative staff positions (i.e., all nonfaculty/ instructor positions). We reasoned that these individuals would provide an appropriate comparison group for the student groups as they were sampled from the same university environment. They were older than those in the student groups, yet their mean educational attainment was equivalent to the graduate student group, which was desirable to avoid confounding chronological age and educational attainment (see Table 1). Older adults were retired state employees and their spouses who attended the annual meeting of the Retired State Employees Association of Louisiana. We assumed that these individuals would be comparable to the middle-aged adults, insofar as they were former state employees. Further, the older adults in Study 2 were more homogeneous with respect to chronological age than was the case in Study 1 as the age ranges in Table 1 indicate, which permits clearer inferences regarding age-related influences on responses.

The third methodological change in Study 2 was the addition of the FSA (Fraboni et al., 1990) to test the hypothesis that ageist attitudes and beliefs are associated with ageist behaviors, indexed by the ROPE. The FSA was chosen for use in this study based on its established psychometric properties and comprehensive assessment of ageist attitudes across the following three categories: (a) antilocution, referring to prejudicial behavior based on language or spoken abuse; (b) avoidance, which involves staying away from an individual or group; and, (c) discrimination, which pertains to acting on prejudicial tendencies by denying an individual or group rights, privilege, or access. Fraboni et al.'s (1990) conceptualization of ageism was based on Allport's (1958) seminal work where prejudice, particularly racism, was categorized on five levels, varying from hostile words to extermination. Rupp, Vodanovich, and Credé (2005) further examined the psychometric qualities of the FSA using confirmatory factor analysis. They replicated Fraboni et al.'s

(1990) three-factor structure and provided new construct validity evidence for the FSA subscales.

To summarize, we expected to observe significant correlations among the FSA total and scale scores and the ROPE negative ageism items, which would provide new evidence of convergent validity and strengthen the psychometric properties of the ROPE. Of greater interest are the correlations among FSA total and subscale scores and the positive ageism items. Based on the Study 1 results, we suspect that endorsement of the ROPE positive items reflects perceived beneficent courtesies toward older persons. Evidence showing nonsignificant or negative correlations among ROPE positive items and the FSA total and subscale scores would be consistent with this notion.

Method

Participants. In all, 255 persons participated in the study with two comparison groups of LSU undergraduate students (see Table 1, lower panel). Undergraduates (1) was comprised of 21 non-social work students enrolled in a survey course in Life Course and Aging Studies (LCA 2000, n = 7) and a Disaster Science Management special topics course (DSM 3910, n = 14). These students were comparable in age and educational attainment, so we collapsed across the two sections to form a non-Social Work undergraduate group in the analyses that follow. Undergraduates (2) consisted of 61 students in two sections of a social work course at LSU, comparable to the undergraduates in Study 1. The graduate students were 69 persons in three different sections of a seminar on agency counseling at LSU. These individuals were Master of Social Work (MSW) students comparable to the graduate students in Study 1. Middle-aged adults were 55 individuals who were fulltime state employees at LSU. Older adults were 49 former state employees who attended the Retired State Employee Association of Louisiana annual meeting in Lake Charles, Louisiana where the first author presented a seminar on successful aging.

Materials and Procedure. The same materials used in Study 1 were administered here, along with the FSA (Fraboni et al., 1990), a 29-item self-report survey that assesses attitudes rather than actual behaviors. FSA items are rated on a 4-point scale from 1 (strongly disagree) to 4 (strongly agree) with 6 items reverse scored. Other scales of ageism focus on stereotypes, myths, and misconceptions of aging. We chose the FSA because it has adequate internal consistency reliability (.86) and an affective component to more fully capture the construct of ageism, after Allport's (1958) five-level model of prejudice (Fraboni et al., 1990). That is, the FSA includes three of the five

original forms of prejudice: (a) antilocution (derogatory speech and antagonism), (b) avoidance (minimize social contact with older adults), and (c) discrimination (active exclusion of disliked group).

Results and Discussion

Analyses of Variance. Means for the ROPE positive and negative items by group appear in Table 2 (lower panel). A 5×2 mixed ANOVA on these scores yielded a significant main effect of group, F(4,250) = 2.59, p = .037. The older adults' mean was numerically higher than the other groups, although none of the pairwise comparisons were significant (all p's $\geq .10$). The main effect of question type was significant, F(1,250) = 624.33, p < .001, with more frequent responses for positive (M = 0.55) than negative items (M = 0.23). The Group \times Question Type interaction effect was nonsignificant.

Analyses on the M-C SDS scores yielded a significant main effect of group, F(4,251) = 3.22, p = .013. The older adults' mean was significantly greater than the graduate students' mean (p = .012) and numerically larger than the middle-aged adults and two undergraduate groups who did not differ from each other (p's > .14). We conducted a follow-up analysis of covariance (ANCOVA) on the ROPE scores with the M-C SDS scores as a covariate, owing to the significant group effect in the analysis of M-C SDS scores just reported. The ANCOVA yielded a nonsignificant group main effect, F(4,246) = 2.17, p = .07, implying that age-related differences do not influence ROPE responses after the variance associated with social desirability in responding has been controlled. The question type main effect remained significant in this analysis, F(1,246) = 51.42, p < .001, with higher mean scores for the positive than the negative items.

We conducted one-way ANOVAs on the FSA total and subscale scores with group as a factor (see Table 4). For the FSA total scores, the group main effect was significant, F(4,255) = 5.42, p < .001. Pairwise comparisons (Tukey) confirmed that the undergraduate student groups did not differ from each other (M's = 66.90 and 61.18) and both exceeded the graduate students (M = 55.35). Middle-aged and older adults did not differ from each other (M's = 60.49 and 60.88) or the graduate students (p's > .06). Analyses of the antilocution scores yielded a significant group effect, F(4,255) = 3.30, p = .01. The undergraduate student groups did not differ (M's =23.19 and 21.87), although both exceeded the graduate students (M = 19.04) with no other significant group effect, F(4,255) = 6.89, p < .001. The non–social work undergraduate students (1) had a higher discrimination score (M = 19.62) than the

Table 4. Mean FSA Scale Scores in Study 2.

	FSA Scale Scores ^a							
	То	tal	Antilocution		Discrimination		Avoidance	
Group	М	SD	М	SD	М	SD	М	SD
Undergraduate students (1)	66.90	11.84	23.19	5.99	19.62	2.62	24.10	5.97
Undergraduate students (2)	61.18	11.88	21.87	5.87	17.10	3.40	22.21	4.66
Graduate students	55.35	10.98	19.04	5.39	15.97	3.75	20.33	4.53
Middle-aged adults	60.49	9.31	21.13	5.24	17.65	2.99	21.71	4.43
Older adults	60.88	11.30	21.02	5.61	18.69	4.02	21.16	4.23

Note. FSA = Fraboni Scale of Ageism. aFraboni et al. (1990).

undergraduate students (2) (M=17.10) and the graduate students (M=15.97). Middle-aged and older adults did not differ (M's = 17.65 and 18.69) and both exceeded the graduate students, although this difference was only significant for the older adults (p < .001). Analyses of the avoidance scores yielded a significant group effect, F(4,255) = 3.21, p = .014. The undergraduate students (1) avoidance score (M=24.10) was significantly greater than the graduate students' mean (M=20.33) with no other significant differences.

To summarize, the FSA findings show few differences between the two undergraduate student groups, with the exception of the discrimination scale. The middle-aged and older adult groups did not differ in their responses for any of the FSA scales. The graduate students' means were uniformly lower than the other groups, significantly so for most of the comparisons with the undergraduate groups and also for the older adults on the FSA discrimination scale, which is noteworthy. This aspect of the data implies that MSW graduate students may be less ageist in attitude toward older adults than their younger and older counterparts, which is not surprising given the curricular emphasis on social justice within a social work graduate program. Our findings also may reflect a cohort response on how environmental circumstances (i.e., attending a Social Work program with certain expectations on behavior) may influence attitudes on social approval (Twenge & Im, 2007).

Correlation analyses: Ageism measures and social desirability. We addressed the first objective of the present research, which concerned the

influence of social desirability on self-report measures of ageism, with correlation analyses based on the ROPE and M-C SDS scores. The same analyses were carried out for the FSA scales and M-C SDS scores. Inspection of Table 3 (lower panel) shows a small but significant correlation between ROPE positive items and M-C SDS scores (r = 0.16, p < .01), replicating Study 1. Importantly, the size of the correlation did not change after the variance due to age was statistically controlled. This finding supports the hypothesis that positive ageism responses are associated with greater social desirability in responding as indexed by the M-C SDS. However, this correlation was relatively small in magnitude, indicating that the proportion of overlapping variance is minimal. Correlations between ROPE negative and M-C SDS scores were nonsignificant, replicating Study 1.

Inspection of Table 3 confirms that FSA total was not significantly correlated with M-C Social Desirability Scale (r = -0.09, p = .15). This null result replicates Fraboni et al.'s (1990) early work on the psychometric qualities of the FSA where a 31-item version of the original SDS (Crowne & Marlowe, 1960) was included to demonstrate FSA's uniqueness from other constructs (e.g., social desirability, knowledge of aging, acceptance of others). For the FSA scale scores, only the avoidance score was significantly correlated with M-C SDS (r = -0.18, p < .01), a finding that remained significant after controlling for chronological age (r = -0.15, p < .01). This unexpected but interesting result is consistent with the hypothesis that social desirability influences responses on self-report measures of ageism, although interpretative caution is warranted given small size of the negative correlation.

Correlation analyses: Ageist attitudes and ageist behaviors. We addressed the second objective of this research, which concerned the association between ageist attitudes and ageist behaviors, by conducting correlations and partial correlations. Table 5 shows correlations among ROPE positive and negative scores and the FSA total and subscale scores before and after controlling for the variance associated with age and M-C SDS. Inspection of Table 5 indicates that ROPE positive items were negatively correlated with FSA avoidance scores (r = -0.16, p = .01). This correlation remained significant after controlling for variance associated with age (r = -0.15, p = .01) and M-C SDS (r = -0.14, p = .03). None of the remaining correlations with ROPE positive and FSA scores were significant. In contrast, ROPE negative items were significantly correlated with FSA total (r = 0.34) and the FSA scale scores; antilocution (r = 0.36), discrimination (r = 0.20), and avoidance (r = 0.23). Importantly, these correlations remained significant after controlling for age and M-C SDS (all p's < .01). These data are noteworthy in that they provide new convergent validity evidence in support of the ROPE negative ageism dimension. With respect to the ROPE positive items, the

ROPE subscale / FSA	N.I	0	r with age	r with M-C SDS partialed out	
scale	N	R	partialed out		
Positive					
FSA total	252	-0.10	-0.10	-0.09	
FSA antilocution	252	-0.02	-0.0 I	-0.0 l	
FSA discrimination	252	-0.09	-0.09	-0.09	
FSA avoidance	252	-0.16*	-0.15*	-0.14*	
Negative					
FSA total	252	0.34**	0.34**	0.33**	
FSA antilocution	252	0.36**	0.36**	0.35**	
FSA discrimination	252	0.20**	0.18**	0.20**	
FSA avoidance	252	0.23**	0.25**	0.22**	

Table 5. Correlations Among ROPE Subscales and FSA Scales in Study 2.

Notes. ROPE = Relating to Older People Evaluation. FSA = Fraboni Scale of Ageism. In Study 2, three participants did not complete the M-C SDS, so these analyses are based on 252 cases. * $p \le .05$ ** $p \le .01$

nonsignificant correlations observed for the FSA total, discrimination, and antilocution scales can be interpreted as evidence of discriminant validity. This aspect of the data provides additional psychometric evidence for the ROPE and implies that positive ageism is unrelated to negative ageist attitudes.

General Discussion

Self-Reported Ageism: Role of Social Desirability

In two studies, we found that responses to the ROPE positive ageism items were more than double that of the negative items, in line with prior research where people of different ages, educational backgrounds, and work settings were compared (see Allen et al., 2009; Cherry & Palmore, 2008; Papadaki et al., 2011). This aspect of the data has implications for the study of ageism in general and older adults in particular. Our results imply that Palmore's (1999) conceptual distinction between positive versus negative expressions of ageism is useful for understanding how people relate to older adults in everyday life and motivating future research. We have suggested that positive ageism reflects presumed courtesies and deferential behavior and not underlying assumptions of frailty or incompetence. The finding that positive ageist behaviors appear to be age invariant implies that an older person may be as likely as anyone else to help a disabled individual (e.g., hold a door open for

someone in a wheelchair) or send an ageist birthday card to a relative or friend. Perhaps humorous birthday cards relieve stress associated with advancing age for everyone. However, future research to explore the coping benefits of positive ageist behaviors would be desirable before firm conclusions would be warranted.

The second interesting finding was the association between the ROPE positive and M-C SDS scores. In Study 1, ROPE positive and M-C SDS scores were correlated, although the correlation was nonsignificant when the variance due to chronological age was controlled. In Study 2, the correlation between ROPE positive and M-C SDS scores was also small but remained significant after controlling for age. The later finding is arguably the more reliable of the two. That is, we added comparison groups of non–social work undergraduate students, middle-aged and community-dwelling older adults to the design in Study 2 to provide a more definitive analysis of age effects on ROPE responses than Study 1 and our prior work to date. Importantly, the middle-aged and older adults' ROPE scores did not differ from each other, nor did they differ from the undergraduate and graduate student groups (see Table 2). This aspect of the data strongly suggests that age per se has no direct influence on ROPE responses, confirming Cherry and Palmore's (2008) first findings.

The significant association between ROPE positive and M-C SDS scores supports our hypothesis that the frequency of positive ageism may reflect in part a need to respond in a socially appropriate manner, although the correlations were small in size so interpretative caution is warranted. Interestingly, Study 2 yielded an analogous finding. That is, the FSA avoidance and M-C SDS scores were negatively correlated, consistent with the view that social desirability may influence responses on self-report measures of ageism. One explanation for these findings is that positive ageist behaviors may be viewed by some as a courtesy, while avoidance may be judged as rude, insulting, or offensive. Perhaps a conceptual response bias is in operation where participants think of positive ageist behaviors as respectful toward seniors. Similarly, FSA avoidance items may appear as a breach of social etiquette to some people who may minimize their responses to these items. Future research that directly assesses the perceived courteousness of positive ageist behaviors as well as the perceived disrespect of FSA avoidance items would be desirable to provide a more definitive analysis of this issue.

On a broader note, our findings regarding the M-C SDS are in line with prior research on social desirability (see Barger, 2002 for a review; see also Dawes, Palmer, Allison, Ganiats, & Jeste, 2011; Soubelet & Salthouse, 2011; Thunholm, 2001). That is, if people perceive behaviors to be normative, expected, and even encouraged, respondents, particularly those with higher

scores on the M-C SDS, will likely report a higher frequency of behaviors assumed to be positive, or as Loo and Thorpe (2000) call it—faking good (p. 628). However, the M-C SDS does not distinguish between presenting oneself in a good light versus actually engaging in socially desirable behaviors, so further research is necessary. Our findings also imply that the construct of positive ageism is not tapping underlying prejudicial attitudes and stereotypic views of frailty as Palmore (1999) suggested. Rather, positive ageism may reflect a growing paradigm shift where societal views of older persons are becoming more favorable. That is, as the post–World War II Baby Boom generation moves into later life, a social movement in the direction of emphasizing the promise and positive attributes of aging seems likely (Longino, 2005). If exposure to older persons is the true catalyst to change aging stereotypes (Bousfield & Hutchison, 2010), then the increased numbers of people aged 65 years and older in society today owing to the aging of the baby boomers should bring about a more aging-supportive environment. Stated differently, as we become them, aging well and the socially desirable prospect of achieving old age with grace should reflect a more constructive, realistic, and favorable view of growing older.

Ageist Behaviors Versus Ageist Attitudes

The second objective of this research was to examine relationships among ageist behaviors and ageist attitudes. For the most part, ROPE positive responses and FSA total and subscale scores were unrelated, with the one exception of the avoidance scale. The negative correlation between ROPE positive and FSA avoidance was significant and remained so after the variance associated with age and M-C SDS was controlled (see Table 5). This finding is consistent with the suggestion of a conceptual response bias where FSA avoidance items are perceived as offensive or politically incorrect. Future research that assesses people's subjective views of ageism would be necessary before firm conclusions would be warranted.

Of greater interest were the correlations among ROPE negative and the FSA total and subscale scores, which remained significant after controlling for age and M-C SDS (see Table 5). From a psychometric point of view, these correlations provide new convergent validity evidence for the ROPE negative dimension. These data are also noteworthy from an applied perspective as they make the case for a more holistic approach to the design of interventions that target both negative ageist behaviors and attitudes. Prior research has shown that participants' attitudes toward older adults can be enhanced as a result of increased knowledge of aging, yet their levels of avoidance and discrimination remain unaffected (Stuart-Hamilton & Mahoney, 2003). Allan

and Johnson (2009) have made the point that it is not enough to increase aging knowledge to reduce ageism. Rather, interventions designed to reduce anxiety associated with aging may be most efficacious (see Greenberg et al., 2002, for a related discussion). In a similar vein, Bousfield and Hutchison (2010) conducted an intergroup assessment of youth related to behavior about older people and found that it was quality rather than quantity of experiences with elders that shaped their perspective. Their study examined both contact and meaning of the exchange, those who identified having more favorable experiences, even if infrequently, had better opinions about elders, and less tendencies to report ageist tendencies. Thus, reduction of anxiety related to aging (Allan & Johnson, 2009) perhaps coupled with positive experiences with older adults (Bousfield & Hutchinson, 2010) may bring about a reduction in ageism directed toward elderly adults. At the very least, addressing mortality salience through educational and community service initiatives might help people become more aware of their own fears related to old age and death which may help in part to reduce ageism (cf. Greenberg et al., 2002). Our results imply that people may modify their self-reports of ageist behaviors and attitudes to align with social expectations or political correctness. Whether modified views will translate to authentic behavioral change where ageist behaviors and attitudes are reduced in everyday life is an exciting direction for further research in this paradigm.

The results of Study 2 also provide new evidence pertaining to similarities and differences among the groups in ageist attitudes assessed with the FSA. To be precise, the graduate students' FSA total and subscale mean scores were uniformly lower than the two undergraduate groups. Other evidence has shown age was negatively correlated with FSA total scores in a study with college students only, implying that ageist attitudes decline with increased life experience (Kalavar, 2001). The inclusion of middle-aged and older adults in Study 2 permits a more definitive analysis of age effects in that the age range was substantially wider than has been the case in prior research using the FSA to measure ageist attitudes. Our data show no difference in FSA total and scale scores for middle-aged and older adults. Consequently, the inference of a linear decline in ageist attitudes with increasing age does not appear to be warranted. Rather, our findings suggest that the drop in ageist attitudes observed for the graduate students compared to the younger undergraduate groups more likely reflects a curricular emphasis on social justice in an MSW program in social work than age or maturity. Alternatively, this result may reflect a selfselection bias where individuals with attitudes favorable to older adults are more likely to pursue graduate training in social work.

As a final point, the FSA discrimination subscale deserves further comment. Fraboni et al. (1990) described the discrimination construct as *the most*

extreme expression of ageism, because the items that represent it imply active prejudice against older persons. The discrimination scale also includes both positive and negative items—positive items include: "Most old people are interesting" and "Old people should be encouraged to speak out politically." Less favorable perceptions include: "It is best that old people live where they won't bother anyone," and "Most old people should not be trusted to take care of infants." Positive items are reverse scored to provide a consistent measure of ageist attitudes. Interestingly, discrimination was the only FSA subscale where the two undergraduate student groups were empirically distinguished. That is, the non–social work undergraduate students (1) had a higher mean discrimination score (M = 19.62) than did the undergraduate students (2) (M = 17.10, see Table 4). This finding is compatible with the earlier suggestion that students exposed to social work's curricular emphasis on social justice may reflect less ageist tendencies than their non–social work counterparts, a potentially useful direction for future research.

Three methodological limitations of these studies should be noted. First, we relied on convenience samples, as these data were collected from classes, lectures, and meetings. While we targeted these groups to address specific hypotheses concerning age and curricular influences on responses, the potential for introducing sampling bias and threats to independence should not be overlooked. A related concern is that both studies utilized a cross-sectional design, so a potential bias of age group and birth cohort should be considered. Second, we did not measure the experience of ageism or its direct impact on the lives of older adults. Ageism can have a negative impact through diminished opportunity and discriminatory practices for older persons, as well as general exposure to stereotypical views about what it means to grow old. Third, the significant correlations observed for the M-C SDS and two selfreported ageism measure subscales, ROPE positive and FSA avoidance, were small in size and may reflect inflated Type I error, so the present findings should be interpreted in light of this concern. Future research to address these possibilities as well as the impact of ageism on psychological well-being in late life would be desirable.

In closing, the present results provide new insight into ageism as a social phenomenon. Our findings imply that people may exaggerate the frequency of positive ageist behaviors and minimize the frequency of ageist attitudes and behaviors that they feel are socially inappropriate, distorting the true frequency of ageist behaviors and attitudes in everyday life. The size of the correlations between ROPE positive behaviors and M-C SDS was small in both studies, however. This aspect of the data, together with the nonsignificant correlations among ROPE negative and M-C SDS scores, suggests that

social desirability may play a smaller role in self-report measures of ageism than one might expect.

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References

- Allan, L., & Johnson, J. (2009). Undergraduate attitudes toward the elderly: The role of knowledge, contact, and aging anxiety. *Educational Gerontology*, 35, 1-14.
- Allen, P. D., Cherry, K. E., & Palmore, E. (2009). Self-reported ageism in social work practitioners and students. *Journal of Gerontological Social Work*, 52, 124-134.
- Allport, G. W. (1958). The nature of prejudice. New York, NY: Doubleday and Company.
- Aosved, A. C., Long, P. J., & Voller, E. K. (2009). Measuring sexism, racism, sexual prejudice, ageism, classism, and religious intolerance: The Intolerant Schema measure. *Journal of Applied Social Psychology*, *39*, 2321-2354.
- Barger, S. D. (2002). The Marlowe–Crowne affair: Short forms, psychometric structure, and social desirability. *Journal of Personality Assessment*, 79, 286-305.
- Bargh, J. A., Chen, M., & Burrows, L. (1996). Automaticity of social behavior: Direct effects of trait construct and stereotype activation on action. *Journal of Personality and Social Psychology*, 71, 230-244.
- Bousfield, C., & Hutchison, P. (2010). Contact, anxiety, and young people's attitudes and behavioral intentions towards the elderly. *Educational Gerontology*, 36, 451-466.
- Butler, R. N. (1969). Ageism: Another form of bigotry. *The Gerontologist*, 9, 243-246.
 Cherry, K. E., & Palmore, E. (2008). Relating to older people evaluation (ROPE): A measure of self-reported ageism. *Educational Gerontology*, 34, 849-861.
- Cole, E. (n. d.). *Beyond prejudice: Understanding prejudicial behavior*. Retrieved from http://www.beyondprejudice.com/under_stand.html

Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24, 349-354.

- Dawes, S. E., Palmer, B. W., Allison, M. A., Ganiats, T. G., & Jeste, D. V. (2011). Social desirability does not confound reports of well-being or of socio-demographic attributes of older women. *Aging & Society*, 31, 438-454.
- Fraboni, M., Saltstone, R., & Hughes, S. (1990). The Fraboni Scale of Ageism (FSA): An attempt at a more precise measure of ageism. *Canadian Journal on Aging*, 9, 56-66
- Grant, L. D. (1996). Effects of ageism on individual and health care providers' responses to healthy aging. *Health and Social Work*, 21(1), 9-15.
- Greenberg, J., Schimel, J., & Martens, A. (2002). Ageism: Denying the face of the future. In T. D. Nelson, (Ed.), Ageism: Stereotyping and prejudice against older persons (pp. 27-48). Cambridge: Massachusetts Institute of Technology Press.
- Greenberg, J., Solomon, S., & Arndt, A. (2008). A basic but uniquely human motivation: Terror management. In J. Y. Shah & J. W. Gardner (Eds.), *Handbook of motivation science*. (pp. 114-144). New York, NY: Guilford Press.
- Johnson, T. P., & Fendrich, M. (2002). Validation of the Crowne-Marlowe social desirability scale. Timothy P. Johnson, Survey Research Laboratory, University of Illinois at Chicago, Retrieved from http://www.srl.uic.edu/publist/Conference/ crownemarlowe.pdf
- Kalavar, J. (2001). Examining ageism: Do male and female college students differ? *Educational Gerontology*, 27, 507-513.
- Kelchner, E. S. (1999). Ageism's impact and effect on society: Not just a concern for the old. *Journal of Gerontological Social Work*, 32, 85-100.
- Kogan, N. (1961). Attitudes toward old people: The development of a scale and an examination of correlates. *Journal of Abnormal and Social Psychology*, 62, 44-54.
- Levy, B. R. (2001). Eradication of ageism requires addressing the enemy within. *The Gerontologist*, 41, 578-579.
- Levy, B. R., Slade, M. D., & Kasl, S. V. (2002). Longitudinal benefits of positive self-perceptions of aging on functional health. *Journals of Gerontology*, 57B, P409-P417.
- Longino, C. F. (2005). The future of ageism: Baby boomers at the doorstep. *Generations*, 29, 79-83.
- Loo, R., & Thorpe, K. (2000). Confirmatory factor analyses of the full and short version of the Marlowe–Crowne Social Desirability Scale. *Journal of Social Psychology*, 140, 628-635.
- McGuire, S. L., Klein, D. A., & Chen, S. (2008). Ageism revisited: A study measuring ageism in East Tennessee, USA. *Nursing and Health Sciences*, 10, 11-16. doi: 10.1111/j.1442-2018.2997.00336.x
- Nelson, T. D. (2002). Ageism: Stereotyping and prejudice against older persons. Cambridge: Massachusetts Institute of Technology Press.
- Nelson, T. D. (2005). Ageism: Prejudice against our feared future self. *Journal of Social Issues*, 61, 207-221.

- Palmore, E. B. (1999). Ageism: Negative and positive. New York, NY: Springer.
- Palmore, E. B. (2001). The Ageism Survey: First findings. The Gerontologist, 41, 572-575.
- Palmore, E. B. (2006a). Advertising (pp. 5-6). In E. Palmore, L. Branch & D. Harris (Eds.)(2006). The Encyclopedia of ageism. Binghamton, New York, NY: Haworth Press.
- Palmore, E. B. (2006b). Humor (pp. 182-183). In E. Palmore, L. Branch & D. Harris, (Eds.)(2006). The Encyclopedia of ageism. Binghamton, New York, NY: Haworth Press.
- Papadaki, E., Plotnikof, K., & Papadaki, V. (2011). Self-reported ageism in students and academic staff —The case of the Social Work Department in Crete, Greece. European Journal of Social Work. Advance online publication. doi: 10.1080/13691457.2011.577410.
- Popham, L. E., Kennison, S. M., & Bradley, K. I. (2011a). Ageism and risk taking in young adults: Evidence for a link between death anxiety and ageism. *Death Studies*, 35, 751-763.
- Popham, L. E., Kennison, S. M., & Bradley, K. I. (2011b). Ageism, sensation seeking, and risk-taking behavior in young adults. *Current Psychology*, 30, 184-193.
- Rosencranz, H. A., & McNevin, T. E. (1969). A factor analysis of attitudes toward the aged. *The Gerontologist*, *9*, 55-59.
- Rupp, D. E., Vodanovich, S. J., & Credé, M. J. (2005). The multidimensional nature of ageism: Construct validity and group differences. *Journal of Social Psychology*, 145, 335-362.
- Soubelet, A., & Salthouse, T. A. (2011). Influence of social desirability on age differences in self-reports of mood and personality. *Journal of Personality*, 79, 741-762.
- Strahan, R., & Gerbasi, K. C. (1972). Short, homogeneous versions of the Marlow-Crowne Social Desirability Scale. *Journal of Clinical Psychology*, *28*, 191-193.
- Stuart-Hamilton, I., & Mahoney, B. (2003). Examining ageism: Do male and female college students differ? *Educational Gerontology*, 29, 251-260.
- Terry, P. (2008). Ageism and projective identification. Psychodynamic Practice, 14, 155-168.
- Thunholm, P. (2001). Social desirability in personality testing of military officers. *Military Psychology*, 13, 223-234.
- Twenge, J. M., & Im, C. (2007). Changes in the need for social approval, 1958-2001. *Journal of Research in Personality*, 41,171-189.

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