

GENDER AND AGEISM:  
THE ROLE OF AESTHETIC PREFERENCES IN THE AGING DOUBLE  
STANDARD

by

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## ABSTRACT OF THE THESIS

Gender and Ageism:

The Role of Aesthetic Preferences in the Aging Double Standard

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Decades of research have investigated the implications of the “what is beautiful is good” stereotype, termed the halo effect for physical attractiveness whereby favorable personality traits are attributed to attractive people more so than unattractive people. This robust stereotype impacts important life outcomes with attractive people receiving more salary increases and job opportunities than unattractive people (Eagly et al., 1991; Eagly, 1987; Zebrowitz, 1997). People belonging to groups who do not meet their culture’s aesthetic standards are stigmatized and tend to show automatic outgroup preference (the elderly, the overweight, and African Americans; Goffman, 1963). In the U.S, a culture that values youth and beauty, older people are at a disadvantage (Kite, Whitely, Stockdale, & Johnson, 1995; see also Kotter-Gruhn & Hess, 2012; Kwart, Foulsham, & Kingstone, 2012) and older women are stigmatized more so than older men (Sontag, 1972). Sontag coined the term the “double standard of aging” which refers to the fact that men are valued for their accomplishments (which increase with age), whereas women are valued for their appearance (which diminishes with age). The present study

investigated whether there is explicit and implicit evidence for the double standard of aging to help explain why the elderly automatically possess ageist attitudes that are as prevalent as those for young people (Nosek, Banaji, & Greenwald, 2002) by using the attitude, stereotype, and aesthetic Implicit Association Tests (IAT) and their self-report (explicit) counterparts. Consistent with the double standard, participants ( $N = 248$ , 167 Women,  $M$  age = 37.77) reported that society views young women as the most attractive group (Foos & Clark, 2011), and they also agreed that the advantage turns into a penalty such that older women are viewed as the least attractive group (Deutsch, Salenski, & Clark, 1986). Using the IATs, as expected, people automatically associated young people with positivity, attractiveness, and youthful traits more so than old people. I also expected to find evidence for the double standard for aging, such that implicit attitudes towards older women would be (1) more negative than attitudes toward older men, and (2) informed by aesthetic evaluations, whereas implicit attitudes towards older men were expected to be better informed by stereotypes. However, I did not find supporting evidence. Instead, attitudes, aesthetic preferences, and stereotypes were more positive toward young people than old people, regardless of target gender. In addition, all three IATs positively covaried to the same extent, regardless of target gender. However, because the measures were designed to assess ageism by contrasting young people with old people across two conditions (contrasting either young vs. old women or young vs. old men), it may be that pro-youth positivity overwhelmed responses. Future research should directly compare old men to old women using implicit measures to establish a better comparison between gender-based ageist associations and determine whether appearance stigma contributes to the double standard of aging.

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## Introduction

Attractive people are perceived as having positive qualities, including status (Anderson, John, Keltner, & Kring, 2001; Kalick, 1988; Webster & Driskell, 1983), intelligence (Eagly, Ashmore, Makhijani, & Longo, 1991; Feingold, 1992; Jackson, Hunter, & Hodge, 1995) and health (Dion, Berscheid, & Walster, 1972). Decades of research have investigated the implications of the “what is beautiful is good” stereotype, termed the halo effect for physical attractiveness. Researchers consistently find that favorable personality traits are attributed to attractive people and that attractive people receive more favorable life outcomes such as salary increases and job opportunities than do unattractive people (Eagly et al., 1991; Eagly, 1987; Zebrowitz, 1997). Attractiveness is even related to defendants’ legal outcomes, with more attractive and better dressed people receiving lesser sentences than less attractive and more poorly dressed people (Desaints & Kayson, 1998; Mack & Rainey, 1990). In contrast to a halo effect for attractive people, people who do not meet their culture’s aesthetic standards are stigmatized (Goffman, 1963).

### Ageism and Appearance Stigma

In a culture where youth and beauty are desirable, older people are at a disadvantage. In a meta-analysis, young adults were rated as more attractive ( $d = .38$ ) and evaluated more favorably ( $d = .24$ ) than old adults (Kite, Whitely, Stockdale, & Johnson, 1995; see also Kotter-Gruhn & Hess, 2012; Kwart, Foulsham, & Kingstone, 2012). Consequently, millions of dollars are spent annually to maintain American’s youthful appearances (e.g., Baltes & Carstensen, 1996). Appearance stigma is both socially and economically costly (Goffman, 1963).



In the United States, people 65 years of age and older represent 13% of the population and by 2030, they will represent 19% of the population (U.S. Census Bureau, 2010). Ageism is a societal problem that is likely to grow more burdensome as a result. Despite longer life expectancy, better health care, and improved well being, the elderly are still perceived as unattractive, sickly, depressed, incompetent, dependent, and lonely (Blazer, 2002; Haught, Walls, Laney, Leavell, & Stuzen, 1999; Hinrichsen & Molinari, 1998; McConatha, Schnell, Volkwein, Riley, & Leach, 2003; Tice & Perkins 1996). Even though most people expect to eventually “grow old,” this prospect does not prevent ageism. Of the 49 most-viewed TV shows by young adults and children, none featured elderly lead characters (Harwood, 1995). When the old are included in TV programs, they are most likely to be characterized in negative stereotypically consistent ways; they are depicted as lonely, frail, and mentally disabled (Bishop & Krause, 1984; Gerbner, Gross, Signorielli, & Morgan, 1980; McConatha, Schnell, & McKenna, 1999; Montepare & Zebrowitz, 2002), which is especially true for depictions of elderly women (Dail, 1988). These negative stereotypes are commonly used for humorous effect (Zebrowitz & Montepare, 2000). This practice may cause young people to adopt negative elderly stereotypes because they are so far removed from transitioning into the elderly social group (Levy & Banaji, 2002). Negative beliefs and attitudes toward the elderly are unlikely to be outgrown when children develop into adults and then into the elderly. This resilience is especially evident when researchers use implicit measures of attitudes and stereotypes (Nosek, Banaji, & Greenwald, 2002). Using self-report (explicit) measures, old people are routinely less ageist than young people (Foos & Clark, 2011; Henss, 1991). By contrast, using the young-old age IAT and a large Internet sample ( $N =$

68,144), Nosek and colleagues (2002) found more negative implicit attitudes towards the elderly than any other stigmatized group, and that the elderly were just as likely to be automatically ageist as other age groups (see also Hummert, Garstka, & Shaner, 1997). They also found that the dissociation between explicit and implicit ageism is more extreme in older people, who have the most positive explicit attitudes, but the same negative implicit attitudes as younger people.

### **The Role of Appearance Stigma in Implicit Ageism**

I propose that appearance stigma plays a critical role in automatic ageism, for two main reasons. First, given that cultural values influence implicit attitudes more so than explicit attitudes (Rudman, 2004), people might be unable to resist automatic negativity toward old people regardless of their own age. Second, the nature of the perception of physical attractiveness suggests that it might effortlessly influence implicit attitudes: Attractiveness is apprehended in as little as 13 milliseconds (Olson & Marshuetz, 2005); can occur without awareness (Palermo & Rhodes, 2007); and preference for attractive people forms in infancy (Geldert, Maurer, & Carney, 1999; Van Duuren, Kendell-Scott, & Stark, 2003). Coupled with the halo effect, the automatic processing of attractiveness likely influences implicit attitudes even when explicit evaluations can exclude this information. In other words, “what is beautiful is good” may be an irresistible source of automatic evaluations.

Of importance, I also propose that appearance stigma affects women more so than men. For example, Haboush, Warren and Benuto (2012) found that female college students held more negative attitudes towards the elderly to the extent they had internalized cultural standards of female beauty. As people age, the culture’s pro-youth

bias can lead to a reduced self-image (Johnson, 1989), which is especially true of women. Women who do not think of themselves as youthful are more likely to hold negative attitudes towards themselves (Kaschak, 1992). Slevec and Tiggermann (2010) found that women aged 35-55 experienced anxiety from aging to the extent their self-worth was contingent on their appearance; further, they were more likely to pursue cosmetic surgery to the extent they reported high levels of television exposure. In the next section, I elaborate on why I suspect that women suffer from appearance stigma more so than men as they age.

### **Gender and Ageism: Double Standard of Aging**

Regardless of what perceivers think, aging disproportionately affects women because they are taught to strongly associate their self-worth with their physical appearance (Katz 1985). American culture pressures women to meet impossible beauty standards, with the ideal woman being thin, young, and wrinkle-free (Davalos, Davalos, & Layton, 2007; Halliwell and Dittmar 2003). Since youth is associated with attractiveness, looking young is an important part of a woman's role in American society (Davalos et al., 2007; Haber 2004; Halliwell and Dittmar 2003; Hodgetts et al. 2003; Mehlman et al. 2004). Maintaining an attractive physical appearance is believed to be related to life satisfaction, financial security, and success in relationships and other areas of life (Heinberg 1996). Therefore, older women who do not meet cultural beauty standards may be susceptible to low self-esteem, diminished self-worth, anxiety, and depression (Bartky, 1990; McConatha et al., 1999; Saucier, 2004). Some older women report that they experience a sense of relief as they age because they feel immune from the culture's strict beauty ideals (Gosselink, Cox, McClure, & De Jong, 2008; Halliwell

& Dittmar, 2003). Others report that they would be valued if they maintained a youthful appearance as they age and that looking old would reduce their status and self-worth (Halliwell & Dittmar, 2003). Age even accounts for more variance in ratings of women's attractiveness than waist-to-hip ratio (Furnham, Mistry, & McClelland, 2004).

Susan Sontag (1972) observed that American culture penalizes elderly women more so than elderly men. She coined the term the "double standard of aging" which refers to the fact that men are valued for their accomplishments (which increase with age), whereas women are valued for their appearance (which diminishes with age). As a result, aging is more consequential for women than for men. Consistent with this view, young women are viewed by society as the most attractive group (Foos & Clark, 2011), but that advantage turns into a penalty such that older men are viewed as more attractive than women of the same age (Deutsch, Salenski, & Clark, 1986). Further, as women age, their appearance is judged as "old" sooner than men's (Crawford, 2000), and women suffer ageist stereotyping earlier than men (Hummert, Garstka, & Shaner, 1997). As women lose their youth and sexual attractiveness, they may come to fear aging and develop a diminished evaluation of themselves as they develop signs of aging (Higgins, 1987). By contrast, men can compensate for their loss of sexual attractiveness with gains in respect and achievement, allowing them to feel that their worth *increases* as they age (Franzino, Kessenich, & Sugrue, 1989). According to Sontag, the double standard for aging reflects and reinforces patriarchy because it prevents women from escaping their role as a low status group valued chiefly for passive sexual objectification, in order to develop into a fully realized person.

Nonetheless, research investigating target gender differences in the attractiveness of old people is inconsistent, with some researchers finding no evidence of a double standard (e.g., Drevenstedt, 1981; Locke-Connor & Walsh, 1980; for a review, see Kite et al., 1995). In fact, a meta-analysis was unable to determine evidence for a double standard for attractiveness (due to insufficient research), but it did conclude that old men are viewed as more incompetent than aging women (Kite et al., 1995), likely because competence is a central component of the male stereotype, so men are believed to lose agency with age (Kite, 1996). Therefore, one might expect the same for women's attractiveness, given the centrality of appearance for women's value. In Halliwell and Dittmar's (2003) qualitative research, they found that men primarily valued the functionality of their bodies, whereas women valued its appearance; in addition, women reported that aging had a negative impact on their appearance, whereas men reported that aging had a neutral or positive impact on their appearance. Women even suffer more negative consequences to their careers than men do as they age (Itzin & Phillipson, 1995); as a result, some women report that their primary motive for maintaining youthful appearance is to improve how colleagues perceive them in the workplace (Clarke & Griffin, 2008).

Whether researchers use self-reports or implicit measures, there is suggestive evidence that prejudice against the elderly may stem, in part, from differences in perceived attractiveness that may disadvantage old women more so than old men. Rudman and McLean (unpublished manuscript) examined attitudes towards culturally attractive and unattractive social groups. Like implicit ageism in the elderly, racial attitudes typically show outgroup favoritism (Ashburn-Nardo et al., 2003) or neutrality

on the part of Blacks (Nosek, Banaji, & Greenwald, 2002). In two studies, Rudman and McLean examined automatic attitudes and aesthetic preferences, finding that participants tended to implicitly prefer the group valued as culturally attractive (Whites and young people) regardless of participants' ingroup. Study 1 found that Blacks showed outgroup favoritism on the attitude IAT, and an absence of ingroup bias on the aesthetic IAT; Whites showed robust ingroup bias on both. Blacks explicitly preferred their own group, but their implicit evaluations showed the reverse. Similarly, Study 2 found that older participants implicitly preferred the young on both the attitude IAT and the aesthetic IAT. Although they reported ingroup bias on attitude measures, their aesthetic preferences favored youth. In both studies, the aesthetic IAT helped to explain why culturally attractive groups (Whites and young adults) possessed stronger ingroup bias, compared with unattractive groups (Blacks and older adults), likely because implicit attitudes are informed by cultural values (Rudman, 2004), including pro-youth aesthetic bias. Study 2 provided evidence that aesthetic preferences inform attitudes towards the elderly, but because targets (both young and old) were male and female, it could not detect whether appearance stigma influences attitudes towards elderly women more so than towards elderly men (the gender aging double standard). Therefore, I conducted a study in which people performed the young-old attitude IAT and the aesthetic IAT with stimuli consisting of either women or men.

### **Hypotheses**

Hypothesis 1: To support the idea that American culture devalues the beauty of old women (while promoting the value of young women), I expected old women to be

rated as explicitly less attractive than all other groups, and for young women to be rated as more attractive than all other groups, for at least cultural (if not personal) preferences.

Hypothesis 2: To support the gender aging double standard, I hypothesized that old women would be penalized more so than old men on the aesthetic IAT.

Hypothesis 3: I expected the aesthetic IAT to inform automatic ageism more so than implicit stereotypes in the female target condition, whereas the reverse was expected for the male target condition (because older men are less at risk for attractiveness stigma, but more subject to stereotyping when using self-reports; Kite et al., 1995).

Hypothesis 4: I hypothesized that female prescriptions for attractiveness would predict aesthetic (but not stereotype) IAT scores in the female target condition, whereas male prescriptions for agency would predict attitude and stereotype (but not aesthetic) IAT scores in the male target condition. If Hypothesis 3 is also supported, these results would indicate that automatic ageism for women is best informed by the gender double standard for aging, whereas for men, it may be best informed by a loss of competence (Kite, 1996).

Hypothesis 5: For female (but not male) participants, I expected aesthetic IAT scores to predict youthful maintenance behaviors even after accounting for implicit ageism and stereotyping. By contrast, I expected men's youthful maintenance behaviors would be better predicted by implicit stereotyping (i.e., men may wish to preserve youthfulness in the service of agency more so than attractiveness).

## Method

### Participants

Only American Whites were recruited from Mechanical Turk ( $N = 257$ ). After excluding nine respondents who stopped during the first IAT, 248 participants were retained (167 women, 81 men). Their mean age was 37.77 ( $SD = 12.45$ ) with a range of 18 - 71. I based my sample size on a power analysis using a small-to-medium effect size ( $d = .35$ ) for the expected difference between female and male targets (which required 102 people per group for .80 power).

### Design

Participants completed three IATs (attitude, aesthetic, stereotype) that either contrasted young and old women or young and old men. Order was fully counterbalanced (there were three possible orders), and block order within the IATs was counterbalanced: half the participants completed the youth + positive blocks first, the other half completed the old + positive blocks first. The design was a 3 (IAT: ageism, aesthetic, stereotype) x 3 (IAT order) x 2 (IAT block order) x 2 (target gender) x 2 (participant gender) mixed factorial, with repeated measures on the first factor.

### Implicit Measures

The *ageism* IAT used 4 names typical of young people (e.g., Brianna, Ryan), 4 names typical of older people (e.g., Ethel, Oscar), 8 good words (e.g., paradise, happy), and 8 bad words (e.g., failure, poison). The *stereotype* IAT used the same target concepts (young and old names), plus 10 attributes associated with youth (e.g., quick, sharp, bold) and 10 attributes associated with age (e.g., slow, forgetful, cautious). Young and old names were generated by Rudman et al. (1999) with the aid of Internet Web Sites



indicating popular baby names (for young names) and Civil War genealogy (for old names). Stereotypic attributes were adopted from past research (Rudman et al., 1999; see also Purdue & Gurtman, 1990). The *aesthetic IAT* used four black and white pictures of each category type: either young vs. old women, or young vs. old men (depending on random assignment) that were categorized with either high or low attractiveness words (e.g., *beauty, handsome, attractive* vs. *ugly, nasty, gross*). Images were used instead of names for the attractiveness IAT because images provide a more direct link to attractiveness associations that rely on areas of the brain dedicated to facial processing (Chatterjee et al., 2009). Names may not activate these associations to the same extent that images can. The 16 pictures were pretested to be similar on attractiveness within each age category and across gender, but young targets were rated as far more attractive than old targets, for both conditions (see the stimuli ratings results below; see Appendix A for the stimuli).

IAT effects were computed as *D* scores so that high scores indicated more pro-young bias. The order of IATs was also counterbalanced, and IAT blocks within each IAT were counterbalanced, such that participants either completed the Young + positive (Old + negative) or the Young + negative (Old + positive) blocks first, two procedural variables that I did not expect would influence results.

### **Explicit Measures**

**Stimuli ratings.** As a manipulation check, participants were separately shown all four young or old targets at once and asked to rate the average attractiveness of the old and young images used in the IATs for their target gender (therefore they either rated old and young men or old and young women) on scales ranging from 1 (*not at all attractive*)

to 7 (*extremely attractive*). Using the same procedure, participants also estimated the average age of the old and young images for the target gender that appeared in their version of the IATs (see Appendix A).

**Attractiveness ratings.** To measure how attractive participants believe American culture views the old and young, participants rated on a scale of 1 (*low in attractiveness*) to 10 (*high in attractiveness*) how society views young and old American men and women (see Appendix A). Difference scores were computed such that high scores reflected rating old women (or men) as less attractive than younger counterparts. In order to measure participants' personal opinions, participants rated the attractiveness of old and young men and women on a scale of 1 (*not at all*) to 10 (*extremely*).

**Explicit stereotypes.** Participants responded to eight semantic differential items for young and old people as separate categories (Rudman et al., 1999). These 7-point scales ranging from 3 (positive) to -3 (negative) were anchored by the following polar-opposite adjectives: *slow-quick*, *forgetful-sharp*, *closed-open*, *frail-healthy*, *reserved-passionate*, *cautious-bold*, *rigid-flexible*, and *thrifty-generous* (see Appendix B). After rescaling, high scores indicated stereotyping the young with young qualities ( $\alpha = .82$ ) and the old with young qualities ( $\alpha = .84$ ). The difference between these averaged indexes was computed such that positive scores reflect pro-youth stereotypic judgments.

**Gender and age prescriptions.** Depending on target gender condition, participants rated prescriptions for men or for women on a scale ranging from 1 (*not at all desirable*) to 9 (*very desirable*). Four questions pertained to prescriptions for women ("Attractive as an older adult"; "Strives to be sexually appealing as an older adult"; "Diets to maintain weight as an older adult"; and "Maintains youthful appearance as an older

adult") that were averaged to form the female prescriptions index ( $\alpha = .78$ ). Four other items pertained to prescriptions for men ("Intelligent as an older adult"; "Strives to increase wealth as an older adult"; "Ambitious about career as an older adult"; and "Strives to maintain mental quickness as an older adult") that were averaged to form the male prescriptions index ( $\alpha = .80$ ; see Appendix C).

**Explicit attitudes.** To measure explicit attitudes towards the young and old, participants rated how they personally feel towards young Americans and old Americans on a scale ranging from 1 (*very cold*) to 10 (*very warm*). Participants rated how society feels towards old and young Americans from 1 (*very cold*) to 10 (*very warm*) to measure participants' beliefs in cultural ageism (see Appendix D).

**Youth maintenance.** Participants reported their engagement in youth maintenance behaviors (e.g. anti-aging creams, sunscreen, hair coloring, botox, and plastic surgery) on 4-point scales labeled 1 (*never will use*) 2 (*do not use*) 3 (*will use in the future*) 4 (*currently use*) which were averaged to form the youth-maintenance index ( $\alpha = .77$ ). Women ( $M = 2.56, SD = .46$ ) outscored men ( $M = 2.07, SD = .58$ ),  $t(246) = 7.23, p < .01$ , indicating known groups validity (see Appendix E).

## **Procedure**

After completing the screening block (gender, age, and race), followed by the IATs, participants completed the explicit measures in the order described above. Afterwards, they were fully debriefed and compensated within three days.

## Results

### Preliminary Analyses

**Participant gender.** A series of planned contrasts revealed no differences for men and women on the IATs, all  $t(246) < .95$ ,  $ps > .34$ . Regardless of their gender, participants were implicitly ageist on the attitude IAT ( $M = .40$ ,  $SD = .40$ ,  $d = 1.00$ ), the aesthetic IAT ( $M = .33$ ,  $SD = .37$ ,  $d = .89$ ), and the stereotype IAT ( $M = 1.02$ ,  $SD = .90$ ,  $d = 1.13$ ). Every IAT effect was significantly different from zero, all  $t(247) > 13.92$ ,  $ps < .01$ . As expected, people automatically associated young people with positivity, attractiveness, and youthful traits more so than old people.

**Manipulation check.** I used paired sample  $t$ -tests to check on the manipulation. As anticipated, young images used in the aesthetic IAT were rated as younger ( $M$  age = 22.38,  $SD = 5.28$ ) than old images ( $M$  age = 58.11,  $SD = 14.87$ ),  $t(221) = 45.16$ ,  $p < .01$ . Young images were also rated as more attractive ( $M = 4.61$ ,  $SD = 1.26$ ) than older images ( $M = 3.39$ ,  $SD = 1.17$ ),  $t(247) = 12.27$ ,  $p < .01$ . Thus, the attractiveness manipulation functioned as intended. I computed a difference score such that high scores reflected rating young images as more attractive than old images for use as a covariate for all analyses involving the IATs. This is because the difference score [imagedif] covaried with the aesthetic IAT,  $r(246) = .16$ ,  $p = .01$ , and also with the attitude IAT,  $r(246) = .19$ ,  $p < .01$ . In other words, the more people rated young people as more attractive than old people, the more they automatically associated young people with positivity and attractiveness and old people with negativity and ugliness.

**IAT procedural variables.** A separate 3 (IAT order) x 2 (IAT block order) ANOVA for each IAT showed main effects for both, all  $F_s > 12.23$ ,  $ps < .01$ . As is

usually the case, participants showed stronger IAT effects when they completed compatible tasks (young + positive/old + negative) first ( $M d = 1.25$ ) rather than second ( $M d = .76$ ). Analyses of IAT order effects revealed no reliable pattern, so it was not the case that practice effects systematically reduced scores for the third IAT. Nonetheless, I adjusted for both procedural variables in all analyses involving the IATs.

**Participant age.** Although ingroup bias is generally observed using the IAT, this is not the case with automatic ageism (old people generally show the same bias as young people; Hummert, Garstka, & Shaner, 1997; Nosek et al., 2002). Indeed, adjusting for IAT procedural variables, no age differences emerged on the attitude IAT,  $r(244) = .05$ , *ns*. Unexpectedly, older participants scored higher on the aesthetic IAT,  $r(244) = .14$ ,  $p = .03$ , and higher on the stereotype IAT,  $r(244) = .17$ ,  $p = .007$ . I therefore adjusted for participant age in all subsequent analyses involving the IATs.

### **Hypotheses Testing**

Hypothesis 1 stated that, as a group, old women would be perceived as less attractive than all other groups, whereas young women would be rated as more attractive than all other groups, for at least cultural (if not personal) preferences. Table 1 shows that this hypothesis was supported for cultural preferences. Subscripts were used to indicate which means differ within type of belief (cultural or personal). Older women were viewed by society as the least attractive of all four groups, all  $ts(247) > 6.52$ ,  $ps < .001$ , whereas younger women were viewed by society as the most attractive of all four groups, all  $ts(247) > 5.62$ ,  $ps < .001$ . Using personal ratings, young women were rated as more attractive than all other groups,  $ts(247) > 6.76$ ,  $ps < .001$ , whereas old women were rated as less attractive than young people, both  $ts(247) > 13.22$ ,  $ps < .001$ , but similarly

unattractive compared with old men,  $t(247) = .90, p = .37$ . Thus, the idea that society penalizes older women for aging more so than older men was supported using cultural preferences. Although people did not personally agree with the double standard for aging, the correlations between personal and cultural ratings were positive, ranging from  $r(246) = .46, p < .01$  (for young men) to  $r(246) = .35, p < .01$  (for old women).

Hypothesis 2 stated that to support the gender aging double standard, old women would be penalized more so than old men on the aesthetic IAT. A 2 (Target Gender) x 2 (Target Age) ANOVA (adjusting for age, image ratings, and the two IAT procedural variables) did not support this hypothesis. The expected main effect for target gender was weak,  $F(1, 240) = 2.03, p = .15$ . Aesthetic IAT scores were just as robust when targets were male ( $M = .34, SD = .35, d = .94$ ), as when they were female, ( $M = .31, SD = .39, d = .86$ ).

Hypothesis 3 stated that the aesthetic IAT would covary with automatic ageism more so than implicit stereotypes in the female target condition, whereas the reverse might be expected for the male target condition (if older men are less at risk for attractiveness stigma, but more subject to low perceived competence; Kite et al., 1995). No support was found for this hypothesis. As seen in Table 2, correlations among the IATs (adjusted for age, image ratings, and IAT procedural variables) were positive, robust, and practically identical for both female and male targets.

Hypothesis 4 stated that female prescriptions for maintaining attractiveness as women age should predict aesthetic (but not stereotype) IAT scores in the female target condition, whereas male prescriptions for maintaining agency (intelligence, ambition, and wealth) should predict stereotype (but not aesthetic) IAT scores in the male target

condition. Table 3 shows these correlations as a function of target gender. As can be seen, in the female target condition, women's prescriptions to maintain their youth and appearance covaried with only the aesthetic IAT; no other relationships were significant, including male prescriptions to maintain agency. This finding partially supports Hypothesis 4.

Table 3 also reveals that men's prescriptions to maintain agency covaried significantly only with the attitude IAT in the male target condition, not the stereotype IAT (both correlations were expected). That is, older men were punished on the ageism measure to the extent people believe men should maintain their competence, ambition, and wealth as they age. Unexpectedly, men's prescriptions to maintain their youth and appearance covaried with both the attitude and the aesthetic IAT (but not the stereotype IAT; see Table 3). These results suggest that prescriptions to maintain youthful appearance similarly inform implicit attractiveness stigma for both genders (not just women), contrary to the double standard for aging. Not shown in Table 3, the correlations between women's and men's prescriptions were robust in each condition, both  $r_s > .62$ ,  $p_s < .001$ . Thus, people who agreed that women or men should preserve their appearance also agreed that women or men should preserve their agency. This finding suggests that attractiveness and agency prescriptions for people as they age are not particularly "gendered."

Hypothesis 5 turns to participant gender differences. For female (but not male) participants, I expected aesthetic IAT scores to predict youthful maintenance behaviors even after accounting for implicit ageism and stereotyping. By contrast, men's behaviors will be better predicted by implicit stereotyping (i.e., men may wish to preserve

youthfulness in the service of agency more so than attractiveness). Table 4 reveals no support for this hypothesis. As can be seen, the correlations between youth maintenance behaviors and the three IATs were negligible for women (top half) and weak for men (bottom half), whether or not I adjusted for age, image ratings, and the IAT procedural variables (partial correlations are shown in Table 4).

In summary, only Hypothesis 1 was fully supported: participants were aware of their culture's double standard for aging, as shown by their rating old women as the least attractive group. However, they did not show this effect using personal ratings, and there was no evidence for the double standard using the aesthetic IAT (Hypothesis 2). In contrast to my expectation that aesthetics [stereotypes] would inform automatic ageism for women [men], the IATs positively correlated in both target gender conditions to about the same extent (Hypothesis 3). Further, although explicit prescriptions that older people should maintain their youthful appearance covaried with the aesthetic IAT, they did so in both the female and male target gender conditions, countering the double standard for aging (Hypothesis 4). Finally, youth maintenance behaviors were unrelated to the aesthetic IAT, regardless of participant gender. Thus, it was not the case that women who reported using (or planning to use) products and procedures that combat aging were especially likely to automatically associate older adults with ugliness (Hypothesis 5).

### **Analyses of Explicit Measures**

For completion's sake, Table 5 provides descriptive statistics for the explicit measures by target gender. The only difference between the conditions was a tendency to especially rate older people as less attractive than younger people in the female, as compared with the male, target condition,  $p = .05$  ( $d = .25$ ). In both conditions,



participants professed liking old people more than young people on the explicit attitude measure, resulting in significant age differences, both  $ps < .01$  ( $M d = -.28$ ). This result supports the need for the IAT in order to detect ageism. By contrast, when asked how society views people, participants reported more positive attitudes toward young people than old people, both  $ps < .001$  ( $M d = .54$ ). For both cultural and personal attractiveness, large age differences emerged favoring young over old, all  $ps < .001$  ( $M ds = 1.64$  and  $1.41$ , respectively). For stereotypes, young traits were attributed to young people more so than to old people in both conditions, both  $ps < .001$  ( $M d = 1.26$ ). Unexpectedly, prescriptions that older people should maintain their agency were stronger than prescriptions that they maintain their attractiveness in both target gender conditions, both  $ps < .001$  ( $M d = .52$ ). Thus, men were held to stronger agency than attractiveness prescriptions as expected, but so were women.

Table 6 shows the partial correlations among explicit and implicit measures (controlling for age, image ratings, and both IAT procedural variables). Although not hypothesized, participants in the female (but not male) target condition who showed ageism on the attitude IAT also reported higher levels of youth-maintenance behaviors. This result provides some predictive utility for the attitude IAT, but I expected this link to be strongest for the aesthetic IAT, and particularly for women. The remaining results were already noted, with two exceptions. Personal attractiveness (i.e., aesthetic preferences for young over old) covaried with both the attitude and the aesthetic IAT in the male (but not female) target condition. This result provides some convergent validity for the aesthetic IAT; the comparable correlation in the female target condition was similar but not significant ( $r = .15$ ).

### Exploratory Analyses

Because participant age was positively associated with aesthetic and stereotype IAT scores, suggesting that older people were especially ageist on these measures, I explored other covariates of participant age. I found that older people were more likely than young people to agree that the culture was ageist regarding aesthetic value,  $r(246) = .18, p = .004$ . They were also marginally more likely to endorse attractiveness and agency prescriptions, both  $r(246) > .11, ps < .08$ . Surprisingly, older people were not more likely than young people to report engaging in youth maintenance behaviors,  $r(246) = -.06, ns$ . The remaining correlations were weak, all  $ps > .16$ .

## Discussion

The main objective of my thesis was to investigate the double standard for aging (Sontag, 1972). Results showed that both genders are aware of society's double standard for aging: participants reported that society views older women as less attractive than all other groups and younger women as the most attractive (Table 1; see also Deutsch, Salenski, & Clark, 1986; Foos & Clark, 2011). However, their personal ratings did not reflect the double standard for aging. Although participants personally viewed young women as the most attractive, they rated older men and women as equally unattractive, suggesting explicit resistance to the double standard for aging. To counteract this resistance, I used the IAT, on which responses are unlikely to be controlled.

Unexpectedly, rather than reflecting the double standard for aging, older men and women were similarly associated with bad words using the attitude IAT, with unattractiveness on the aesthetic IAT, and with negative traits on the stereotype IAT. Additionally, aesthetics and stereotypes similarly informed automatic ageism in both the female and male target conditions (Table 2). Finally, explicit prescriptions that older people should maintain their youthful appearance covaried with the aesthetic IAT for both target gender conditions (Table 6). Although ageism may be best measured using the attitude IAT given that people reported liking older people more than young people (whereas the IAT revealed the reverse; Nosek et al., 2002; Hummert, Garstka, & Shaner, 1997), I did not find evidence for the double standard for aging using implicit measures.

A possible reason why I did not find implicit support for the double standard for aging is that the IAT is a relative measure. That is, participants compared young women to older women or young men to older men as they completed the attitude, aesthetic, or

stereotype IATs. Therefore, IAT scores represent people's implicitly favorable associations with young people as well as their implicitly negative associations with old people. This design was used (1) to capture ageism, and (2) because contrasting young women and men is likely to show pro-female bias (Rudman & Goodwin, 2007). However, positive associations with young people may be so potent in each condition that they overwhelmed potential target gender differences. Future research should contrast older women and men on attitude, aesthetic, and stereotype IATs to more directly test the double standard for aging. Using a within subjects design, this study should also contrast young women and men on the same measures to explore whether favoring young women (over young men) covaries with disfavoring old women on the aesthetic IAT. This design would afford testing whether older women are penalized on attitudes and aesthetics (relative to older men), and also whether young women's aesthetic advantage informs stigmatizing older women. If so, the results will provide evidence that young women's desirability advantage underpins the costs to older women as they age. That is, it may be precisely because women's power is based on their looks that older women are stigmatized (relative to older men).

Another similarity I did not expect to find was participants' endorsement of agency prescriptions for the elderly in both target gender conditions. Similar to old men, old women were held to stronger agency than attractiveness prescriptions. Perhaps people explicitly accept that older women should not have to maintain their youthful appearances, so they value the elderly's competence over their appearance, but older women might still be stigmatized more than older men for not meeting the aesthetic

standards applied to women. This question remains to be answered in future research that directly compares implicit associations between old men and old women.

Also unexpectedly, women who showed automatic ageism on the aesthetic IAT did not report more youth-maintenance behaviors (Table 4). That is, it was not the case that women who associated older women with ugliness were especially keen to ward off the physical effects of aging for themselves. Instead, participants in the female target condition who reported higher levels of youth-maintenance behaviors showed less ageism on the attitude IAT (Table 6). Although this suggests that engaging in youth-maintenance behaviors may protect people from negative attitudes toward older women, the correlation was small and unexpected, and is therefore viewed with caution.

As expected from prior research, older people were just as ageist as young people using the attitude IAT, showing evidence of outgroup favoritism (Hummert, Garstka, & Shaner, 1997; Nosek et al., 2002). Unexpectedly, older participants were more ageist than young people on the aesthetic and stereotype IATs. Why? Exploratory analyses revealed only that older participants were more likely than young participants to score high on cultural ratings (i.e., society's preference for young over old people's appearance). Because cultural ratings did not covary with the IATs (see Table 6), it cannot account for the age gap on the aesthetic and stereotype IATs. However, because this gap was small and unpredicted, I view these results with caution.

### **Limitations and Future Directions**

Future research should determine the factors contributing to older people's robust outgroup favoritism on attitude, aesthetic, and stereotype IATs in order to develop effective strategies to reduce automatic age bias, especially since it may be harming older

people's self-image and promoting age prejudice. Indeed, older people may be especially critical of ingroup members who fulfill negative age stereotypes regarding competence and attractiveness because they demean their own self-image and strengthen their own and other people's negative associations with the elderly. Future research might vary the characteristics of older targets to pursue this hypothesis.

In the aesthetic IAT, terms related to attractiveness are positively valenced and terms related to unattractiveness are negatively valenced, raising the question of whether the aesthetic IAT may simply be measuring good and bad associations with young and old people (i.e., it may be another measure of implicit age attitudes). The same issue arises with the stereotype IAT. The robust correlations among the IATs in both target gender conditions (Table 2) point to the difficulty of disentangling attitudes from aesthetic and semantic evaluations. Future research should attempt to do so because understanding the distinct mechanisms that propel implicit ageism and age discrimination is necessary in order to create the best bias reduction strategies.

## **Conclusion**

American culture penalizes elderly women more so than elderly men (Sontag, 1972). I expected to find evidence for the double standard of aging which refers to the fact that men are valued for their accomplishments (which increase with age), whereas women are valued for their appearance (which diminishes with age). Consistent with this view, participants agreed that society views young women as the most attractive group (Foos & Clark, 2011), and they also agreed that the advantage turns into a penalty such that older women are viewed as the least attractive group (Deutsch, Salenski, & Clark, 1986). Although I expected to find the double standard for aging reflected in implicit

measures with attitudes towards older women (1) more negative than attitudes toward older men, and (2) informed by aesthetic evaluations, whereas attitudes towards older men were expected to be better informed by stereotypes, I did not find supporting evidence. Future research should directly compare old men to old women using implicit measures to establish a better comparison between gender-based ageist associations.

## Appendix A

## Stimuli and Attractiveness Ratings

Instructions:

What do you think is the average age of the people in this group?

Using open-ended responses, participants rated the average age of each of the four groups.

Instructions: Please rate the average attractiveness/unattractiveness of the individuals in the following groups.

Extremely Unattractive   1   2   3   4   Average   5   6   7   Extremely  
Attractive









Instructions: Now consider cultural ideals and standards in the U.S. and rate how society views the attractiveness of each of the following groups. We are not interested in your own personal beliefs, but instead how American society views each group.

low in attractiveness    1 2 3 4 5 6 7 8 9 10    high in attractiveness

Society views YOUNG AMERICAN MEN as...

Society views OLD AMERICAN MEN as...

Society views YOUNG AMERICAN WOMEN as...

Society views OLD AMERICAN WOMEN as...

Instructions: Now consider your own personal beliefs.

low in attractiveness    1 2 3 4 5 6 7 8 9 10    high in attractiveness

I view YOUNG AMERICAN MEN as...

I view OLD AMERICAN MEN as...

I view YOUNG AMERICAN WOMEN as...

I view OLD AMERICAN WOMEN as...

## Appendix B

## Explicit Stereotypes

Instructions: Now consider your own personal beliefs.

I view OLD [YOUNG] AMERICAN MEN [WOMEN] as...

Slow 1 2 3 4 5 6 7 8 9 10 Quick

Forgetful 1 2 3 4 5 6 7 8 9 10 Sharp

Bold 1 2 3 4 5 6 7 8 9 10 Cautious

Closed 1 2 3 4 5 6 7 8 9 10 Open

Healthy 1 2 3 4 5 6 7 8 9 10 Frail

Thrifty 1 2 3 4 5 6 7 8 9 10 Generous

Passionate 1 2 3 4 5 6 7 8 9 10 Reserved

Rigid 1 2 3 4 5 6 7 8 9 10 Flexible

These two items were not combined but instead formed the competent index and an alternative index of attractiveness stereotype (not used in analyses):

Incompetent 1 2 3 4 5 6 7 8 9 10 Competent

Unattractive 1 2 3 4 5 6 7 8 9 10 Attractive

## Appendix C

## Gender and Age Prescriptions

Instructions: Now consider how desirable you find each of the following traits to be for men [women].

not desirable for men [women] 1 2 3 4 5 6 7 8 9 very desirable for men [women]

Attractive as an older adult

Strives to be sexually appealing as an older adult

Diets to maintain weight as an older adult

Maintains youthful appearance as an older adult

Intelligent as an older adult

Strives to maintain mental quickness as an older adult

Ambitious about career as an older adult

Strives to increase wealth as an older adult

## Appendix D

## Explicit Attitudes

Instructions: Please click on the scale to answer each of the following.

very cold 1 2 3 4 5 6 7 8 9 10 very warm

How do YOU feel toward YOUNG AMERICANS?

How do YOU feel toward OLD AMERICANS?

How does SOCIETY in general feel toward OLD AMERICANS?

How does SOCIETY in general feel toward YOUNG AMERICANS?

## Appendix E

## Youth Maintenance

Instructions: Please report whether you use or plan to use any of the following products or procedures

1	2	3	4
Never will use now	I do not use	I will use when older	I use

Sunscreen

Facial moisturizer

Anti-aging creams

Botox

Plastic surgery

Hair coloring

Products or procedures that hide or reverse balding

Products or behaviors (e.g., diet and exercise) that help me to lose or maintain my weight

Puzzles, games, pills, or other procedures that maintain your intellect and mental sharpness

Hormone therapy (using pills or injections) that delays aging

Drugs that improve sexual performance problems (e.g., Viagra)

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Table 1

## Attractiveness Ratings by Target Gender

	<u>Female Targets</u>		<u>Male Targets</u>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
<u>Cultural Beliefs</u>				
Young People	8.71a	1.62	8.19c	1.77
Old People	3.45b	2.17	4.54d	2.36
<u>Personal Beliefs</u>				
Young People	8.21a	1.66	7.40c	2.00
Old People	4.77b	2.21	4.90b	2.29

*Note.* High scores reflect high attractiveness ratings. Means not sharing a subscript differ within type of belief (all  $ps < .001$ ).

Table 2

Correlations Among IAT Measures for Female and Male Targets

	<u>Aesthetic</u>	<u>Stereotype</u>
	<u>IAT</u>	<u>IAT</u>
<u>Female Targets</u>		
Attitude IAT	.57***	.52****
Aesthetic IAT	---	.61****
<u>Male Targets</u>		
Attitude IAT	.56***	.53***
Aesthetic IAT	---	.49***

*Note.* Positive scores reflect pro-young bias on all measures. Correlations are partial, adjusting for age, image ratings, and two IAT procedural variables.

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



Table 3

Correlations Among the IATs and Gender Prescription Measures by Target Gender

	<u>Attitude</u> <u>IAT</u>	<u>Aesthetic</u> <u>IAT</u>	<u>Stereotype</u> <u>IAT</u>
<u>Female Target</u>			
Female Prescriptions	-.02	.21*	.04
Male Prescriptions	-.07	.05	.03
<u>Male Target</u>			
Female Prescriptions	.20*	.18*	.12
Male Prescriptions	.21*	.09	.15

*Note.* Positive scores reflect pro-young bias on the IATs. Female [male] prescriptions pertain to beliefs that women [men] should maintain their attractiveness [agency] as they age. Correlations are partial, adjusting for age, image ratings, and IAT procedural variables.

\* $p < .05$ .

Table 4

Correlations Among the IATs and Youth Maintenance Behaviors by Participant Gender

	<u>Attitude</u> <u>IAT</u>	<u>Aesthetic</u> <u>IAT</u>	<u>Stereotype</u> <u>IAT</u>
<u>Women</u>			
Youth-Maintenance	-.02	.03	.07
<u>Men</u>			
Youth-Maintenance	-.22	-.07	-.04

*Note.* Positive scores reflect pro-young bias on the IATs and youth preserving behaviors for the explicit measure. Correlations are partial, adjusting for age, image ratings, and IAT procedural variables.

Table 5

## Descriptive Statistics for Explicit Measures by Target Gender

	<u>Female Targets</u>		<u>Male Targets</u>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
<u>Personal Attitudes</u>				
Young	7.06	2.06	6.64	2.14
Old	7.66	1.97	7.32	1.96
<u>Cultural Attitudes</u>				
Young	6.84	2.25	6.47	2.44
Old	4.93	2.35	5.06	2.20
<u>Cultural Attractiveness</u>				
Young	8.71	1.62	8.19	1.77
Old	3.45	2.17	4.54	2.36
<u>Personal Attractiveness</u>				
Young	8.21	1.66	7.40	2.00
Old	4.77	2.21	4.90	2.29
<u>Personal Stereotypes</u>				
Young	7.46	1.22	7.47	1.30
Old	4.60	1.38	4.28	1.28
Male Prescriptions	7.43	1.33	7.52	1.08
Female Prescriptions	6.94	1.44	7.01	1.19
<u>Behaviors</u>				
Youth Maintenance	2.39	.55	2.41	.56

Table 6  
Correlations Among the IATs and Explicit Measures by Target Gender

	<u>Attitude</u>	<u>Aesthetic</u>	<u>Stereotype</u>
	<u>IAT</u>	<u>IAT</u>	<u>IAT</u>
<u>Female Targets</u>			
Cultural Attitudes	-.05	.00	-.03
Personal Attitudes	.03	.09	.16
Cultural Attractiveness	.01	.06	.10
Personal Attractiveness	.04	.15	.07
Personal Stereotypes	.14	.17	.06
Male Prescriptions	-.07	.05	.03
Female Prescriptions	-.02	.21*	.04
Youth-Maintenance	-.18*	.03	-.02
<u>Male Targets</u>			
Cultural Attitudes	.04	.05	.05
Personal Attitudes	.08	.12	-.02
Cultural Attractiveness	.15	.17	.13
Personal Attractiveness	.21*	.19*	.08
Personal Stereotypes	.07	.07	-.04
Male Prescriptions	.21*	.09	.15
Female Prescriptions	.20*	.18*	.12
Youth-Maintenance	.01	-.04	.09

*Note.* Positive scores reflect pro-young bias on all measures IATs. Correlations are partial, adjusting for age, image ratings, and IAT procedural variables.

\* $p < .05$ .