FROM JURASSIC TO CLASSIC AND EAST TO WEST, AN INCONVENIENCED YOUTH: EXPLAINING, MEASURING, AND REDUCING AGE BIAS

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Abstract

This dissertation elucidates causes, consequences, measurement, interventions, and cross-cultural patterns of age-based prejudice. Chapter 1 (North & Fiske, 2012) first reviews the literature on ageism, identifying an important missing piece: intergenerational tensions, and reasons for optimism and pessimism for a society that is rapidly aging. As part of filling the intergenerational ageism gap, Chapter 2 (North & Fiske, in press) introduces a novel, prescriptive measure of ageism, centering on three domains of intergenerational tension: active Succession of enviable resources, passive Consumption of shared resources, and avoidance of symbolic, youth-centric Identity resources. Using these same three domains, Chapter 3 (North & Fiske, 2013-a) describes six experiments that further establish that younger people most endorse these prescriptions, and that they most target the old. Chapter 4 then introduces a possible moderator—perceived intergenerational abundance of resources—and demonstrates how exaggerating or minimizing scarcity can enhance or mitigate the effects found in Chapter 3. Finally, Chapter 5 presents a meta-analysis on cross-cultural attitudes toward elders; contrary to conventional wisdom, existing studies find that Easterners (East and South Asia) as compared to Westerners (North America and Europe) appear more negative in their views toward elders. I conclude with a brief summary and suggestions for future research.
# TABLE OF CONTENTS

Abstract ......................................................................................................................................... iii

Acknowledgments .......................................................................................................................... vi

Chapter 1: An Inconvenienced Youth? Ageism and its Potential

  Intergenerational Roots ............................................................................................................. 1
    Consequences of Ageism: Subtle and Complex ....................................................................... 3
    Extant Social-Psychological Theories Used to Explain Ageism ............................................. 7
    An Important Gap: Potential Socio-structural, Intergenerational Tensions ............................ 13
    Empirical Bases for Intergenerational Pessimism ................................................................... 16
    Empirical Bases for Intergenerational Optimism .................................................................... 23
    Future Research Avenues for Intergenerational Investigation ................................................ 27
    Conclusion: As the Field Moves Forward ................................................................................. 34

Chapter 2: A Prescriptive, Intergenerational-Tension (SIC) Ageism Scale ................................. 36

  The Potential Rise of Prescriptive (Hostile) Ageism ................................................................. 36
  Extant (Descriptive) Ageism Measures ........................................................................................ 38
  Prescriptive Domains: Succession, Identity, and Consumption ................................................ 39
  Study 1 (Scale Development) ..................................................................................................... 41
  Study 2 (Test of Model Fit, Convergent, and Divergent Validity) ............................................. 42
  Study 3: (Large-sample Test of Model Fit) ................................................................................ 48
  Study 4: (Test of Divergent Validity from Fraboni Scale of Ageism) ........................................ 49
  Demographic Analysis (All Studies) ............................................................................................ 51
  General Discussion and Conclusion ............................................................................................ 53

Chapter 3: Act Your (Old) Age: Prescriptive, Ageist Biases over Succession,
Consumption and Identity........................................................................................................56
Descriptive Perspectives: Ageism Held Across Age Groups.................................57
Toward a Prescriptive Approach: Age-Group Interdependence and Possible Tensions.........................................................................................................................58
Potential Domains of Resource-Based, Ageist Prescriptions.............................60
Vignette Studies (1-3)........................................................................................................64
Simulated Interaction Studies (4-6)..............................................................................71
General Discussion and Conclusion............................................................................79

Chapter 4: Enough to Go Around: Perceiving Resource Abundance Reduces
Prescriptive Ageism........................................................................................................86
Scarcity-Focused Studies (1-3).....................................................................................87
General Discussion and Conclusion............................................................................92

Chapter 5: Eastern and Western Attitudes Toward Elders: A Cross-Cultural Meta-
Analysis.........................................................................................................................95
Attitudes Toward Elders and Age-Based Prejudices.....................................................96
Evidence for Cross-cultural Differences.....................................................................98
Evidence for Cross-cultural Similarities.....................................................................100
The Current Meta-Analysis.........................................................................................101
Discussion and Conclusion.........................................................................................113
Summary and Future Directions.................................................................................121
References.....................................................................................................................123
Appendices....................................................................................................................159
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CHAPTER 1: AN INCONVENIENCED YOUTH? AGEISM AND ITS POTENTIAL INTERGENERATIONAL ROOTS

Though age, gender, and race are the three primary dimensions of interpersonal categorization (e.g., Fiske, 1998; Kite, Deaux, & Miele, 1991; Kunda, 1999), only age encompasses categories that every living person potentially joins. Despite this universality, surprisingly scant research examines age-based prejudice, compared with racism and sexism (Nelson, 2004; 2005). Indeed, a quick PsycInfo search (February 2012) yields 8491 entries with the keyword “racism” and 2836 for “sexism,” but only 750 for “ageism.” Bugental and Hehman (2007) demonstrated the problem to be even more apparent when restricting the search to two of the premier social psychology journals; in the 20 years prior to their search, only one article on ageism appeared, compared with 50 and 33 respectively for racism and sexism. Some researchers have attempted to explain this lack of research focus by citing the socially-condoned nature of ageism, causing it to be overlooked altogether as a form of prejudice (Nelson, 2005; Palmore, 1999). Whatever the reason, age-based prejudice remains drastically under-investigated, despite the salience of age in interpersonal judgments.

Notwithstanding an overall lack of research on the subject, evidence does indicate age-prejudice to potentially complicate older people’s quality of life (Butler 1969; Nelson, 2004; Ng, 1998). As demonstrated by prejudice research concerning other social groups, stereotypes are not just static beliefs; rather, many have pernicious short- and long-term consequences. In the modern world, older people face reduced social and economic opportunities, damage to self-esteem, and exacerbated physical health problems, to name only a few consequences of ageist

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treatment. Adding more complexity, some note that along with negative elements of age-based stereotyping, “positive ageism” emerges via stereotypes of wisdom and happiness—in addition to practical benefits such special tax breaks, discounts and housing programs (Palmore, 1999).

Regardless of one’s beliefs about the existence or nature of ageism, with average life expectancy increasing and the proportion of people over 65 in the United States estimated to double by the year 2030 (U.S. Department of Health and Human Services, 2007a), improving elder well-being undoubtedly warrants urgent investigation.²

This chapter represents an attempt to bring ageism into the scientific psychology mainstream through a socio-structural, intergenerational lens. We first systematically review the ageism literature, discussing (1) its complex consequences on older people and (2) theoretical perspectives that explain its causes. Although acknowledging the utility of these perspectives, we then identify an important gap in the literature: (3) intergenerational tension-based ageism, which will potentially—though not inevitably—intensify as the older population grows more prevalent and necessitates a redistribution of societal resources. Drawing from empirical literature on ageism, intergenerational perceptions, and other types of prejudice, we present both (4) empirical bases for pessimism and (5) empirical bases for optimism concerning how well generations might cope with shifting age dynamics. We conclude by suggesting (6) future avenues for research in this area, highlighting areas in which increased understanding of intergenerational perceptions seems particularly vital. Overall, this chapter elucidates what is known about the complex domain of ageism, suggests ways in which the field can move forward

² It is for this reason that this chapter—and dissertation—focuses on elders rather than youth, though we acknowledge that ageism goes both ways (and in fact targets people of any age, given the right context). Moreover, much as racism and sexism presuppose certain targets of prejudice, ageism tends to target older people most saliently—rendering them the logical starting point in a discussion on the subject.
in testing new theoretical (particularly intergenerational) ideas, and ultimately hopes to spur more researchers to investigate this increasingly important phenomenon.

1. Consequences of Ageism: Subtle and Complex

What research has been conducted on age-based prejudice and discrimination demonstrates it to be surprisingly pervasive, potentially infecting numerous societal facets. For instance, ageism appears in medicine, where medical schools under-emphasize geriatrics (Levenson, 1981) and older people often face less aggressive treatment for common ailments, which are dismissed as a natural part of aging (Bowling, 1999; 2007). In the workplace, despite considerable research indicating that job performance does not decrease with age (e.g., Cleveland & Landy, 1983; Liden, Stillwell, & Ferris, 1996; McEvoy & Cascio, 1989), evidence indicates that older job applicants are rated less positively than younger ones, even when they are similarly qualified (Avolio & Barrett, 1987). Many older people also face discrimination in the form of abuse and neglect, in nursing homes (e.g., Griffore, Barboza, Mastin, Oehmke, Schiamberg, & Post, 2009; Malmedal, Ingebrigsten, & Saveman, 2009) and even within their own families (e.g., Coyne, Reichman, & Berbig, 1993; Pillemer & Wolf, 1986; Ramsey-Klawsnik, 2004). Still more disturbing, this form of ageism is likely under-reported, due to caseworkers and doctors being less familiar with elder abuse than other forms of domestic violence (Nelson, 2005). Media representation of older people also tends to reflect age-based biases, as older people are traditionally underrepresented and typecast on television shows (Signorelli, 2001), precluded from lead roles in movies (Bildtgard, 2000), and stereotyped in magazine advertisements (Miller, Miller, McKibbin, & Pettys, 1999). Given the diverse societal facets of ageism, some argue that this form of prejudice is currently more prevalent than racism and sexism (Age Concern, 2008; Banaji, 1999; Rupp, Vodanovich, & Credé, 2005).
However, given ageism’s noted complexity, this potentially bleak picture warrants some qualification. For instance, the U.S. government does allocate a disproportionate amount of healthcare dollars toward the over-65 population; more than one-third of healthcare spending goes toward the older population, despite their forming a mere 12% of the total population (U.S. Department of Health and Human Services, 2011). And whereas the family can be a source of abuse and neglect, it is far more often a source of positive elder interaction—to the point of helping foster positive attitudes toward older people in general (Harwood, Hewstone, Paolini, & Voci, 2005; Hewstone, Harwood, Voci, & Kenworthy, 2006). Moreover, although older people may not be commonly represented in mainstream media, evidence indicates that when they are featured, they are done so positively (e.g., happy, active, and strong; Dail, 1998; Roy & Harwood, 1997), are neglected in certain domains only (e.g., car marketing, but not financial service advertisements; Roy & Harwood, 1997), and experience disparate outcomes depending on gender (older men come across more favorably than women; Vernon, Williams, Phillips, & Wilson, 1990). Complicating things further, despite ageism’s apparent prevalence, emotional well-being tends to increase with age (Carstensen, 1995; Carstensen, Pasupathi, Mayr, & Nesselroade, 2000). All of this reinforces the multifaceted nature of ageism and its consequences on targets.

Ageism is complex from the perpetrator’s perspective as well. In fact, much of what would be considered ageist treatment is quite subtle in nature, and often has well-intentioned roots. For instance, just as people address small children, well-meaning people unwittingly speak to older people using benevolent-yet-patronizing “baby talk” and demeaning, exaggeratedly slow and loud over-accommodation (Giles, Fox, Harwood, & Williams, 1994; Nelson, 2005; Williams & Giles, 1998). (This occurs more in certain contexts—such as hospitals—than in others;
Hummert, Shaner, Garstka, & Henry, 1998.) Distancing is another common, indirect form of ageist discrimination, and includes forms both physical (e.g., placing older people in retirement homes, avoiding places typically frequented by older people) and psychological (e.g., emphasizing differences in attitudes and traits between oneself and older people; Greenberg, Schimel, & Mertens, 2004). Sometimes the intentions that yield ageist consequences are even more explicitly positive, such as when discourse with anti-ageist intent (e.g. “youthful old age”) backfires by making poor health and frailty seem deviant (Coupland & Coupland, 1993). Similarly, governmental attempts to help the older population have been described as representing double-edged “compassionate ageism.” In this sense, economically assisting the “deserving” older population is apparently generous but nevertheless reinforces stereotypes of poverty, frailty, and dependence (Binstock, 2010). As another indication of ageism’s often well-intentioned roots, predominant perceptions of older people as worthy of pity foster the typical behavioral combination of well-intentioned active facilitation (desire to help), but deleterious passive harm (neglecting and demeaning; Cuddy, Fiske, & Glick, 2007). Ageism’s indirectness factors heavily in workplace age discrimination, making it notoriously difficult to prove in court, despite age being a protected category under Title VII of the Civil Rights Act of 1964.

Notwithstanding perpetrators’ good intentions, stealth ageism and general societal beliefs about aging can take a toll on older people themselves. Negative stereotypes—such as forgetfulness—are disconcertingly difficult to overcome, persistent in the eyes of perceivers even in the face of targets’ stereotype-incongruent behavior (Cuddy, Norton, & Fiske, 2005). Older people may start to talk, think, and move more slowly as a result of receiving over-accommodated speech (Giles et al., 1994). Many internalize negative stereotypes, becoming more forgetful, sickly, and depressed, simply because they anticipate adopting such
characteristics in their later life (Whitbourne & Sneed, 2004). Others may suffer lower self-esteem or less control as a result of ageist self-fulfilling prophecies (Rodin & Langer, 1980). With age, people risk internalizing negative age stereotypes; then, via a process of “self-stereotyping,” these internalizations present a host of deleterious consequences, including failing memory, cognitive confusion, physical frailty, and even cardiovascular responses to stress (Levy & Leifheit-Limson, 2009; Levy, Zonderman, Slade, & Ferrucci, 2009). Old-age stereotypes are powerful enough that in some cases young people will enact them if primed with elder stereotypes (Bargh, Chen, & Burrows, 1996), despite implicitly holding positive attitudes toward older people (Cesario, Plaks, & Higgins, 2006).

Fortunately, research has begun to focus on ways to combat ageism’s negative effects. A particularly encouraging line of research has demonstrated the importance of older people’s positive self-perceptions—that is, their attitudes toward their own aging process. Holding positive self-perceptions of aging yields numerous benefits, including increased functional health and longevity, as well as resistance to cardiovascular problems and hearing loss (Levy, Slade, & Gill, 2006; Levy, Slade, & Kasl, 2002; Levy, Slade, Kunkel & Kasl, 2002; Levy et al., 2009). In a related vein, the subtle priming of positive aging stereotypes improves performance in related domains, particularly memory tasks (Levy, 1996). Moreover, notwithstanding Bargh et al.’s seminal finding, in many cases younger adults often do not assimilate to primed age stereotypes; in fact, a contrast effect can emerge if the old-age prime is clearly irrelevant to their age group identity (such as when an elder exemplar spurs younger people to actually walk faster; Dijksterhuis et al., 1998). All of these findings provide hope that older people can combat the effects of negative age stereotypes if they perceive such perceptions as off base. Still, this relatively new line of research needs more investigation.
Another positive development has been the recent rise of research on the benefits of getting older, rather than its handicaps. Numerous researchers have tested the notion that “older is wiser,” and a variety of paradigms have demonstrated the veracity of this statement. For instance, older people act more rationally (i.e., stably) than their juniors across various problem-solving tasks (Tentori, Osherson, Hasher, & May, 2001) and more wisely reason about social conflicts (Grossmann et al., 2010). And whereas people do face declines in fluid intelligence as they age (i.e., slower in cognitive speed and novel processing; e.g., Bugg, Zook, DeLosh, Davalos, & Davis, 2006), they do not show the same pattern for crystallized knowledge or experience (e.g., Horn & Cattell, 1967). A significantly positive relationship between age and cognitive complexity also emerges in the realm of language use (Pennebaker & Stone, 2003). And as noted, older people are generally more emotionally healthy, enjoying higher levels of socio-emotional regulation, conscientiousness, agreeableness, and duration of positive emotional experience (Blanchard-Fields, 2007; Carstensen & Mikels, 2005; Carstensen et al., 2000; Helson, Kwan, John, & Jones, 2002; Williams et al., 2006) as well as reduced neuroticism (Loehlin & Marin, 2001). Despite these boons, exaggerated beliefs about sad, frail, lonely elders persist, from the interpersonal to the societal level. To understand why this might be the case, we now turn to theoretical explanations that account for ageism.

2. Extant Social-Psychological Theories Used to Explain Ageism

Clearly the overall picture of ageism is complicated. Fortunately, theoretical perspectives on ageism—largely applied from existing, more general social-psychological theories—have provided a significant foundation for understanding the roots of age-based prejudice. Such theories provide a robust understanding, operating at several levels: individual, interpersonal, evolutionary, and socio-cultural. We highlight each in turn, but focus on the latter level as the
most relevant to the current chapter, given its focus on ageism’s potential broad, socio-structural, intergenerational roots.

**Individual-Level Theories**

At the individual level, theorists have described age stereotyping as serving an ego-protective function. For instance, one approach conceptualizes ageism in terms of terror management theory (TMT, e.g., Becker, 1973), positing that when confronted with the realization of their own mortality, people push away reminders of eventual death (i.e., older people) and identify more closely with similar others (i.e., younger or middle-aged people; Greenberg et al., 2004; Popham, Kennison, & Bradley, 2011).

Social Identity Theory (SIT), which highlights the relationship between personal identity and group identity, along with the need to feel positive about one’s group, may also account for ageism. According to SIT’s individual-level predictions, younger individuals should identify more strongly with their ingroup (other younger people) and consequently push away outgroup members (older people) in an effort to promote self-esteem (Kite & Wagner, 2004; Tajfel & Turner, 1979). (Older people may also do so, but as noted we focus here on prejudice against elders, rather than among them.)

A functional approach to age stereotyping (Snyder & Miene, 1994) likewise explains ageism at the individual level: Ageism may serve an *ego-protective* function that buffers the self from the threat of getting older (similar to TMT), or a *social function* that facilitates interaction with the young ingroup (similar to SIT). Buttressing all of these individual-level theories is the finding that negative attitudes toward death significantly predict devaluation of older adults among younger and middle-aged people (Collette-Pratt, 1976; Montepare & Zebrowitz, 2004).

**Interpersonal Theories**
Other theories step away from the individual and focus directly on face-to-face interactions. Many of these perspectives emphasize the role of older people’s physical appearance in fostering ageism (Palmore, 2003). One such premise is that ageism develops due to *negative halo effects*—that is, because older people are perceived as generally unattractive, they are also seen as having negative traits and abilities (Langlois et al., 2000). Another approach incorporates *overgeneralization effects*, whereby people believe that because older people’s appearance implies certain traits (e.g., lonesome, inferred from droopy eyes; sad, inferred from stooped posture), then they must be that way (Montepare & Zebrowitz, 2004). One other appearance-based theory centers on how older people’s facades generally lend clues about interaction potential. These clues, dubbed *social affordances*, may cause children, for instance, to learn that the wrinkles or slow gait in an older person signify someone who is not enthusiastic or outgoing (Palmore, 2003). Each of these theories highlights the idea that older people may be devalued simply from having more repellent bodily “blemishes” than the average person; these uncontrollable, highly visible characteristics undoubtedly devalue older people, paralleling other types of stigma as a marked status (Bugental & Hehman, 2007; Crocker, Major, & Steele, 1998; Jones et al., 1984).

**Evolutionary Theories**

Some ageism accounts suggest an evolutionary basis for the devaluation of older people. One study found that in hypothetical decisions to help, Darwinian cues for inclusive fitness lead to decisions with ageist implications—specifically, younger, fit people are favored over older, infirm people, and the healthy are favored over the sick (Burnstein, Crandall, & Kitayama, 1994). Another suggestion is that people have evolved to perceive changes in older people’s appearance and behavior as signs of weakness (Jensen & Oakley, 1980). Though not addressing ageism
directly, one evolutionary approach to stigma (Kurzban & Leary, 2001) identifies people who indicate contagion (e.g., frequent illness) and those who lack the promise of ongoing resource-holding as prime targets for social exclusion; predominant perceptions of older people fit the bill on both counts. Others cite socio-developmental evidence that people are hard-wired to hold ageist beliefs. Illustrating this, children hold prejudicial feelings and stereotypic beliefs about older people as early as age three (Seefeldt, Jantz, Gapler, & Serock, 1977), which continues through adolescence (Doka, 1985-6), apparently rendering inevitable lifelong prejudices (Montepare & Zebrowitz, 2004).

A broader, socio-evolutionary, sociofunctional perspective of intragroup relations can also explain ageism (Cottrell & Neuberg, 2005; Cottrell, Neuberg, & Li, 2007). According to this theory, people have evolved to live in effective, interdependent groups to maximize group (and consequently individual) success. As a result, when certain group members threaten group returns, corresponding reactions ensue. Older people may be perceived as threats in that they allegedly cannot reciprocate benefits from other group members. This generally leads to paternalistic, prosocial helping behavior toward them as ingroup members, but in some cases their perceived inadequacy in assisting ingroup success can also foster anger and resentment. Given its broad applicability to different social groups living in a society (particularly older people), we will return to the sociofunctional approach in our socio-structural discussion of ageism.

**Socio-cultural Theories**

Socio-historical accounts of ageism cite major events that caused society as a whole to evolve in ageist ways. Nelson (2005) emphasizes two such occasions: the first, the advent of the printing press, naturally improved record-keeping of important events; this in turn replaced the
traditional storytelling, wisdom-sharing role of older people. The second turning point was the industrial revolution, which necessitated greater mobility in the family (to re-locate for available jobs) and placed increased value on workers who could quickly adapt to and perform difficult manual labor tasks, with less value on experienced employees per se (Butler, 2009; Nelson, 2005). Some theorists have suggested other causes as a result of modernization. For instance, improved education has created a literate majority of young people and thus reduced the role of older people as primary sources of knowledge. Another consequence of modernization is improved medical care, which has created a disproportionately large (and ever-increasing) older population that society has not traditionally accommodated (Cuddy & Fiske, 2004).

In a related vein, a social role perspective on ageism might link perceptions of older people with the societal roles they are seen as playing—a theory used to explain beliefs about other social groups (predominantly women; Eagly, 1987). For instance, because many older adults are retired, they might be correspondingly perceived as less agentic (Kite & Wagner, 2004). These hypotheses may explain why older people are less valued than in the past, and indeed studies show that an unfortunate but common attitude toward older people is that they are dispensable and useless members of society (Levy & Banaji, 2004).

Other theories focus on modern social structure in fostering prejudice, including ageism. The Stereotype Content Model (SCM; Fiske, Cuddy, & Glick, 2007; Fiske, Cuddy, Glick, & Xu, 2002) theorizes that the dimensions of warmth (“How friendly and trustworthy are this person’s intentions?”) and competence (“How well can this person enact those intentions?”) are fundamental in people’s perceptions of others. As established by convenience samples of older and younger adults and by a U.S. national random-sample survey, warmth and competence combinations drive perceivers’ stereotypes, emotional prejudices, and behavioral reactions.
toward members of specific groups. From this standpoint, older people by default compose a
*pitied* social group—that is, stereotypically warm but incompetent. This pattern is in contrast to
*pride*-inducing societal reference groups (stereotypically high in both warmth and competence),
*envied* groups (competent but not warm), and contemptible, *disgusting* groups (low on both).

Reflecting ageism’s complexity, mainstream society quite reliably stereotypes older
people in a simultaneously positive and negative light—that is, as both warm and incompetent
(Cuddy & Fiske, 2004; Cuddy, Norton, & Fiske, 2005; Fiske, Cuddy, Glick, & Xu, 2002; Glick
& Fiske, 2001). The high-warmth, low-competence perception of older people is not only
pervasive—spanning Eastern cultures traditionally believed to hold their elders in higher
esteem—but also persistent, even in the face of counter-stereotypic behavior (Cuddy et al., 2009;
Cuddy, Norton, & Fiske, 2005). Importantly, warmth and competence stereotypes drive (and
derive from) socio-structural perceptions of cooperativeness and status, respectively. Given their
high-warmth, low-competence stereotype, in the default case older people are correspondingly viewed as non-competitive and low-status (e.g., Fiske, Cuddy, Glick, & Xu, 2002). Low-
competence elder stereotypes resemble the sociofunctional threat of non-reciprocation, as well as
social role theory’s described lack of agency.

Overall, these theories might seem pessimistic, portraying older people as irrelevant in a
modernized society. However, because an ever-growing older population will inevitably change
the social structure of age, and because older people will become increasingly difficult to ignore,
so too might social structure-based perceptions of older people shift. But resembling ageism’s
overall complexity, this shift can occur in a potentially positive or negative direction. In light of
the socio-cultural perspectives, which best capture broad societal perceptions of older people
changing for the better or for the worse, we discuss these possibilities in the coming sections.
3. An Important Gap:

Potential Socio-structural, Intergenerational Tensions

A crux underlying virtually all of the reviewed ageism theories is that older people are largely absent from the mainstream—out of societal sight and mind. Individually, people are motivated to push them away (e.g., TMT, SIT). They are allegedly unattractive and representative of undesirable traits from which people dissociate themselves (interpersonal). Ostensibly representing illness and contagion, they are to be avoided (evolutionary). Broader socio-cultural theories portray older people as peripheral members of society: low in status and competitiveness (SCM), lacking in agency (social role theory), and allegedly non-reciprocating (sociofunctional) and useless in an industrialized, modernized world (socio-historical). All of these notions jibe with common and all-too-accurate depictions of older people as “invisible,” existing far away from conventional media, marketing and culture (Robinson & Skill, 1995; Thompson, 2001; Thompson & Thompson, 2009).

Nevertheless, socio-structural age dynamics are quickly changing in the United States. As noted, the older population is expected to double in the next twenty years. By 2050, the number of older people should swell to almost one-fourth of the population, outnumbering the number of children for the first time in history (Gale, 2010; United Nations, 2002, 2009). According to experts, growth trends portend half of all children born since 2000 living past their 100th birthday (Tugend, 2011). In other words, the people society now considers older and irrelevant are about to become far more common and visible—perhaps more so than ever in modern society.

A more noticeable older population presents the very real chance of antiquating invisibility-driven stereotypes. Nevertheless, the way in which such a redefinition occurs could yield either positive or negative consequences. That is, the new older population will be bigger
and potentially more influential than ever, but also potentially more depletive, putting an unprecedented burden of care on younger generations. Either way, prevailing beliefs about older age eventually making way for young may not continue to function as they traditionally have.

Various media outlets have taken note of these possibilities. For instance, *The New York Times* now contains a regular online section on “The New Old Age” ([http://newoldage.blogs.nytimes.com](http://newoldage.blogs.nytimes.com)). A plethora of bestselling books have also emerged in this arena, both relatively optimistic (e.g., Ken Dychtwald’s [1999] *Age Wave: How the 21st Century Will Be Ruled by the New Old*) and relatively pessimistic (e.g., Susan Jacoby’s [2011] *Never Say Die: The Myth and Marketing of the New Old Age*). Posturing on budgetary issues concerning Medicare and Social Security, political leaders have also recognized the delicate, hot-button issue of the newly-prominent older population and its implications for intergenerational resource distribution. In all cases, there is potential for resentment against the older population as policymakers strive to maintain generational balance.

Unfortunately, psychological research has lagged behind mainstream pundits in pondering the intergenerational consequences of an aging population. In fact, social scientists have seldom cited generational differences as a mechanism in age prejudice at all (for a notable exception, see Hagestad & Uhlenberg, 2005). Braithwaite (2004) does note that “Stepping back to take a broader view of our institutional structures for dealing with all types of ‘isms’ may be a necessary first step for making progress on addressing ageism,” (p. 332). But despite this, and in spite of other social psychologists lamenting social psychology’s lack of focus on broad socio-structural forces (Oishi, Kesebir, & Snyder, 2009), intergenerational dynamics are nevertheless largely missing from the ageism literature.
Part of the reason for psychology’s lack of intergenerational focus might be that research has been largely uncertain about whether younger people particularly hold ageist attitudes toward their elders (Kite & Wagner, 2004). In identifying ageist perpetrators—at least as measured by general attitudes toward aging and the aged—studies have found equal evidence for younger and older ageists (Bailey, 1991; Chasteen, Schwarz, & Park, 2002; Nosek, Banaji, & Greenwald). Some research even suggests that older people themselves are the greater culprits (Hellbusch, Corbin, Thorson, & Stacy, 1995; Kite, Stockdale, Whitley, & Johnson, 2005), corroborated by recent evidence that younger people hold greater positive attitudes toward older people than previously thought (as measured by the Fraboni Scale of Ageism; Fraboni, Saltstone, & Hughes, 1990; Lin, Bryant, & Boldero, 2010). But other studies implicate younger people as the greatest endorsers of negative old-age stereotypes (Finkelstein, Burke, & Raju, 1995; Kalavar, 2001; Sanders, Montgomery, Pittman, & Balkwell, 1984; Rupp et al., 2005). Although clearly inconclusive, this overall body of research suggests that people of all ages are prone to reacting negatively to the concepts of aging and the aged, presumably due to universally associated negative characteristics of both (e.g., reminders of mortality and unattractiveness).

Still, a socio-structural analysis might yield different results, in that different generations might feel differently about generational deservingness. In the modern era, age groups typically take their turn at reaping different levels of societal resources. Younger people start out with very few resources; for instance, many are dependent on caregivers for support, and society curbs various freedoms (e.g., driving and voting restrictions; Garstka, Schmitt, Branscombe, & Hummert, 2004; Westman, 1991). But as people grow into middle age, they reap many more resources—including maximal prestige, influence, income, wealth, employment, mainstream media coverage, and societal leadership positions (Garstka, Schmitt, Branscombe, & Hummert,
Eventually at some point in older age people begin to tail off, largely stepping down from prominent positions and ceding a degree of resources (and, as discussed, less mainstream exposure). Though this pattern may not hold universally within particular societal sectors (e.g., athletics may favor the younger, and certain political offices may favor the older), broader society tends to follow default age progression—spurring pity for older people but also relegating them to a low-status, irrelevant position.

But the rapid growth of the older population, along with the potentially more visible “new old age” alters the system, adding a layer of ambiguity to the traditional pattern and changing the dynamics of intergenerational interdependence. It is not so clear whether younger generations will appreciate an old-age revolution if they themselves are negatively affected by it (as underscored by Social Security concerns). In other words, in contrast to global, negative attitudes toward aging—which, as noted, potentially implicates people of all ages—sociostructural, resource-based research approaches might yield more age-differentiated results, with people tending to favor their own generation. This is not to say that intergenerational conflict is inevitable, nor that pure harmony is entirely feasible; each potential outcome presents a wealth of empirical and social questions to be investigated. For now, we can draw upon the empirical literature on ageism, age relations, and general intergroup prejudice to infer reasons for both optimism and pessimism in forthcoming intergenerational relations and perceptions.

4. Empirical Bases for Intergenerational Pessimism

Several lines of evidence suggest grounds for pessimism based on intergenerational interdependence: resource threat, “benevolent” prejudices, prescriptive stereotypes, and age progressions.
Resource Threat

As noted, age prejudice lacks theory on potential intergenerational competition over resources. Nonetheless, social psychological theories on other forms of intergroup prejudice do often stem from a finite-resource perspective (Allport, 1954)—a concept that dates back to at least the early 20th century (Sumner, 1906). For instance, classic Realistic Group Conflict Theory (RCGT; Sherif, Harvey, White, Hood, & Sherif, 1961) states that competition over scarce resources drives prejudice between groups. Other theories, such as the SCM and the sociofunctional approach, also view perceived conflict as a source of prejudice. Given an aging population, scarce resources, and the social structure of age almost certainly changing from the status quo in some form, forthcoming circumstances present risk for intergenerational prejudice and tension—particularly from younger generations who might bear the brunt of taking care of an enlarged older population.

From the standpoint of age specifically, it is possible that older people who increasingly delay retirement or receive an increasingly disproportionate amount of government funding will face backlash from a younger generation eager to take their turn at such societal rewards. Though empirical work in this area is sorely lacking, various social scientists have at least speculated about impending “age wars” between younger and older generations over scarce resources (Binstock, 2005; Dychtwald, 1999; Hamil-Luker, 2001; Kingson, Hirshorn, & Cornman, 1986; Longman, 1986; Minkler, 2006). In fact, some have argued that the very concept of a generation stems from inter-age conflict over cultural resources (Turner, 1998).

Although work on age-based resource tension is lacking, broader work on prejudice indicates that favorable or mixed views of a stigmatized outgroup can quickly turn into purely antagonistic ones if the outgroup becomes a direct threat (Dear & Gleeson, 1991; Lee, Farrell, &
Likewise, when an outgroup’s goals conflict with those of the ingroup, the ingroup ascribes negative traits toward the outgroup (e.g., untrustworthy, ill-intentioned) and experiences negative feelings toward them (Fiske & Ruscher, 1993). If the younger generation starts perceiving the older one as inhibiting their own success, these reactions are likely to be particularly strong. Sociofunctionally speaking, “people are most attuned to threats to ingroup success when there are tangible outcomes at stake” (Cottrell & Neuberg, 2005, pp. 772-773).

**Benevolent Prejudices**

Extant prejudice research also depicts subtle, benevolent forms of prejudice (which ageism is, as delineated) turning overt and hostile due to interdependence-based tensions. For instance, the combination of male dominance in society and male-female interdependence in intimate spheres forms *benevolent sexism*; this combines paternalistic, benevolent prejudice (e.g., chivalry) toward women if they “know their place” but backlash and resentment if they act in threateningly nontraditional manners (as is the case with activist and agentic women; Glick & Fiske, 1996, 2001; Rudman & Glick, 2001). Likewise, older forms of race relations spurred Whites to be motivated to view African Americans as benignly subservient—stemming from the combination of White superiority beliefs and the need for Black labor (Baron, 2000)—but risked hostility if Blacks acted in ways that were too assertive or “uppity” (Jackman, 1996). (Such a reaction is also reflected in people’s willingness to scapegoat minority groups when they become successful; Glick, 2005.) Naturally, age groups are similarly independent, as they tend to live in the same society (not to mention often in the same family), and draw from the same resource pool. Thus, the risk for generational tension will be particularly ripe if younger generations view older ones as increasingly overstepping their boundaries.

**Prescriptive Stereotypes**
Potential beliefs about what older people deserve in relation to the young reflect “should”-based, *prescriptive* stereotypes, which attempt to maintain a certain social status quo and control what other social groups are to do (in contrast with descriptive, “are”-based stereotypes; Burgess & Borgida, 1999; Fiske & Stevens, 1993; Prentice & Carranza, 2002; Terborg, 1977). Again, researchers have applied this concept to forms of intergroup prejudice other than age, such as sexism (Rudman & Glick, 2001). However, as noted, forthcoming age trends might signal a broad violation of the traditional progression of age—whereby older people do not transition away from mainstream society as much as they traditionally have, thereby (possibly) infringing upon the traditional territory of younger generations.

**Age Progressions**

Despite ageism’s apparent similarities with other forms of prejudice, some elements are likely to differentiate it, given the unique, inevitable, universal progression of age. One approach proposes three distinct, age-driven domains, within which younger people might be particularly motivated to hold prescriptive stereotypes aimed at curbing elder control of resources: ensuring older people’s active *succession* of enviable resources, minimizing the older population’s passive *consumption* of shared resources, and prevention of elder *identity* infringement on symbolic resources. Though these domains yield various empirical questions to be tested, recent work does already implicate the young as the strongest endorsers of such stereotypes (North & Fiske, 2013-a, in press). In their focus on a turn-based queue, these domains conceptualize a natural age-driven progression—thereby differentiating age (and ageism) from other social categories (and prejudices).

For instance, age groups take turns in enjoying prime resources; as noted, at some point older people are expected to step aside and make way for younger generations. In this vein,
Succession suggests younger people’s desire to limit older people’s active control of envied resources, such as wealth, seniority, political clout, and more recently, employment. Some pundits argue that elder perceptions will shift increasingly from pity to envy, based on the predicted upsurge in healthy, pensioned older people with greater disposable incomes than many young workers (Friis, 1991). Others argue that the prevailing stereotype of American elders already constitutes a wealthy and powerful voting bloc (Binstock, 1985; Minkler, 2006). The swelling of the older population might only exacerbate tensions made apparent by the recent recession, which has made all too salient the limited number of available jobs. A poor economy sparks debates about mandatory retirement within diverse professional fields, ranging from neurosurgery and gastroenterology, to aviation and the judiciary, and even to academia (Day, 2009; La Corte, 2009; Scarrow, Linskey, Asher, Anderson, & Selden, 2009; Thomson, Bernstein, & Leddin, 2008; Wilber, 2007). As real-world evidence for the delicacy of succession issues, older-worker layoffs and age discrimination claims have already reached record numbers (Elmer, 2009). From the standpoint of the younger generation, the outcry for older people to “just retire already” has intensified in recent years (e.g., Quindlen, 2009), and may only increase as the population’s age imbalance grows.

Additionally, age groups take turns at reaping shared resources, such as when younger and middle-aged people pay into Social Security with the promise of enjoying the benefits in later life. Thus, in contrast to Succession’s active withholding of desirable resources and positions, a second potential area of intergenerational tension revolves around passive Consumption, or depletion of shared, allotted resources. From the standpoint of the younger generation, a swollen older population might necessitate a redistribution of resources that will favor the old. Already, despite the fact that there are twice as many children as older people,
governmental spending ratios range from four-to-one to three-to-one in favor of the older population (Howard, 2008). Additionally, despite currently representing less than a quarter of the total population, older people consume 51 percent of government expenditures for social services (Minkler, 2006). The predicted increase of the older population intensifies fears that older people will bankrupt the economy and pillage natural resources by their sheer existence (Schulz & Binstock, 2006). With real concerns over Medicare and Social Security running out of funds (e.g. Wolf, 2011), younger people might resent elder depletion of social programs that the former may never enjoy. Complicating the issue, empirical experiments utilizing trolley-problem paradigms (where participants must choose to sacrifice one person to save a number of others or vice-versa) indicate that people generally sacrifice older and other low-status people to spare other types of people (Cikara, Farnsworth, Harris, & Fiske, 2010). This finding suggests that policies catered toward the older population might face significant backlash.

Age groups take turns enjoying symbolic resources as well; for instance, what is considered “cool” among younger people tends to differ drastically from what is valued by other age groups. From this, a third, more figurative domain of intergenerational tension, Identity, revolves around activities and roles usually reserved for the young. This dimension offers caution to those who envision a smooth reinvention of older age, with older people increasingly venturing into traditionally young territory. For example, research indicates that older people who attempt to cross ingroup boundaries, such as those who try to look younger, are no longer pitied but often resisted (at least as measured by vignettes about targets in their fifties; Schoemann & Branscome, 2010; Walz, 2002). In light of extant group identity-based theories, younger people might have particular motivation to maintain generational boundaries, for two main reasons. The first centers around maintaining self and group-level esteem; for instance,
Social Identity Theory (Tajfel & Turner, 1979) would predict that younger people push away and demean older outgroup members as a means of protecting group-level self worth, as does a functional approach to ageist stereotyping (Snyder & Miene, 1994). Likewise, the creation of a strong, exclusive youth culture may be a way of asserting autonomy and esteem among younger people (Bytheway, 1995; Hagestad & Uhlenberg, 2005; Sardiello, 1998), satisfying higher-order needs for power and identity (Carroll, Howard, Vetere, Peck, & Murphy, 2002). Research supports these identity-based theoretical applications, in that younger people are more likely to mimic and look more favorably upon ingroup members who express stereotypic statements toward old-agers, rather than stereotype-inconsistent ones (Castelli, Pavan, Ferrari, & Kashima, 2009).

A second potential purpose of maintaining generational identity boundaries is the ego-protective maneuver of precluding identity threat. As noted, because older people are reminders of eventual mortality, younger people might emphasize a difference in attitudes and personality traits to maintain psychological distance (Greenberg et al., 2004). Snyder and Miene’s functional approach also encompasses such motivations, explaining how barring older people from the young ingroup buffers the self from its future negative aspects, such as declines in daily functioning and physical appearance. From a scarce-resource (pessimistic) perspective, diminishing the identity of older people causes them to be viewed as repellent and societally useless; younger people may use this to create social inequalities, mirroring other forms of stigma-based prejudice (Crocker, Major, & Steele, 1998).

Though more empirical investigation is warranted, from a theoretical standpoint, these domains (succession, consumption, identity) build upon the socio-structural theories of prejudice already described, in that each represents a potential elder departure from default perceptions of
pity. In SCM terms, older people’s succession-based denial of desired resources might be associated with envy—that is, a forfeiture of traditional high-warmth attributions, but perhaps a (begrudging) gain of increased competence. By contrast, the consumption-based portrayal of older people as passive societal freeloaders might comprise the contemptuous combination of low warmth (i.e., selfishness) along with default low competence (i.e., dependency)—similar to that of other perceived “parasitic” social groups, such as homeless people. Additionally, identity motivations reinforce the ingroup pride cluster, in the sense that youth-based, ingroup boundaries exclude people (particularly older people) who are not “us.” A sociofunctional perspective would corroborate all of these notions: Succession violations might arouse anger or envy among younger people, and a consequent attempt to obtain desired resources (Cottrell & Neuberg, 2005), over-Consumption represents a threat to ingroup economic resources, property, and reciprocity relations—which arouses anger and disgust—and crossing Identity boundaries might be a “contamination by an unpalatable object or idea” that yields active avoidance or rejection (Cottrell & Neuberg, 2005, p. 772). Even social role theory would depict a newly “obstructive” older population as deviating from its traditional position of non-agency. In all cases, the growing older population and related violations of these intergenerational dimensions potentially give rise to novel, more hostile elder subtypes in the eyes of the young, as discussed later in this chapter.

5. Empirical Bases for Intergenerational Optimism

Several lines of evidence suggest a more optimistic outlook: age-specific interests, improved elder images, increased contact, less cognitive impairment, and elder altruism.

Age-Specific Interests
In spite of the potentially distressing picture depicted in the prior section, intergenerational tensions are not inevitable. Some question the inherent structural conflict between younger and older age groups. For instance, in contrast to Turner’s (1998) noted views on generational conflict, Irwin (1996, 1998) counters that little empirical evidence supports different age groups’ sharing homogenous interests; by extension, there is therefore little motivation to pit their interests against those of other generations, as doomsayers claim.

Similarly, Higgs and Gillear (2010) argue that the situation is more complex than mere generational tensions over resources. In particular, they argue that social policies (such as Social Security) do not have nearly the impact on generational relative well-being that more powerful, volatile market forces do. A similar argument avers that the aging of the population is a fairly minor factor in the rising cost of health care, as compared to the alternative explanation of health-related costs simply outpacing the general rate of inflation (Binstock, 2010; Reinhardt, 2003).

**Improved Elder Images**

Moreover, though a larger, older population possibly enhances perceptions of intergenerational competition over resources, such a development can also improve long-held perceptions of older people. Research has already demonstrated that younger people, when given the opportunity, can subtype older people in meaningful and often positive ways. For example, Brewer, Dull, and Lui (1981) first showed that younger people reliably differentiate the nurturing “grandmother,” and distinguished “elder statesman” from the lonely “senior citizen.” Follow-up work by Schmidt and Boland (1986)—and later Hummert (1990)—has suggested that younger people’s favorable representations of older people can get even more specific, including the “John Wayne conservative,” “perfect grandparent,” and “sage.” A greater, more diverse pool of
older people might mean even more opportunities for positive elder subtypes to emerge in the eyes of the young, particularly if the predicted redefinition of older age occurs.

**Increased Contact**

Additionally, shifting age dynamics will likely necessitate greater intergenerational interaction. Fortunately, a wealth of social psychological research suggests that intergroup contact can effectively reduce prejudice, under the right circumstances (Amir, 1969; Dovidio & Gaertner, 1999; Gaertner & Dovidio, 2000, Pettigrew & Tropp, 2006). Specific to intergenerational interaction, high levels of contact with older people predict low levels of ageist stereotypes, regardless of perceiver age (Hale, 1998). Existing evidence already indicates that high-quality intergenerational interaction can be a successful buffer for elder stereotype threat, allowing older targets to overcome beliefs about cognitive impairment (Abrams, Eller, & Bryant, 2006). Other research suggests that arenas in which generations already tend to interact homogeneously—such as religious communities—are effectively free of ageist sentiment (Evans, 2011; Grefe, 2011). These findings indicate that more frequent intergenerational contact might yield significantly positive social outcomes.

**Less Cognitive Impairment**

When contact between members of different age groups has not worked, it has often been because older people confirm prior stereotypes of cognitive impairment (Griff, Lambert, Dellman-Jenkins, & Fruit, 1996; Seefeldt, 1987). But in line with the idea of older age’s reinvention, increasingly more research is starting to show that age-related cognitive decline is largely overblown (Verhaeghen, 2011). For example, the link between age-based neuroanatomical changes and age-related cognitive decline is less clear than traditionally believed (Salthouse, 2011). Naturally this is a contentious issue, and one that has already become
a prime research topic, in large part due to the continual fight against Alzheimer’s disease. Nevertheless, much as increased contact might beget positive intergenerational perceptions, so too should increased awareness of the exaggerations of age-related cognitive decline.

**Elder Altruism**

More directly related to intergenerational competition, empirical evidence suggests that older people who are demonstrably altruistic can escape perceptions of stinginess and self-interest. For example, research indicates that many older people would be willing to give up their place in line for cardiac services and believe that this is the right thing to do (Mariotto et al., 1999). Likewise, despite stereotypes that they merely care about their own self-interests and unanimously endorse taxing the young for their own benefit, research shows that older people are actually much more altruistic and support generational equity much more often than most believe (Logan & Spitze, 1995). Thus, much as greater elder exposure should help disconfirm stereotypes of universal senility, increased public view of older people should also help alleviate exaggerations of self-interest.

That older people can garner favorable views by assisting younger ambitions also fits with the noted socio-cultural theories of ageism. From an SCM point of view, being perceived as appropriately assisting younger generations may suggest a degree of competence to go along with the traditional high-warmth stereotype of older people. In this more generous context, older people are likely to be perceived as trustworthy allies to younger success; as a result, reactions involving admiration (high warmth and high competence) might ensue. Similarly, from a sociofunctional perspective, the ability of older people to share (or give up) resources to benefit the young entails cooperative “ultrasociality,” which enhances perceptions of trustworthiness. Because these traits are considered extremely important among interdependent groups, they are
likely to predict increased prosocial and affiliatory behaviors (Cottrell, Neuberg, & Li, 2007). Social role theory once again might conceptualize these newly-active older people as atypical of their traditional unagentic role, but in a more positive light. Still, how perceptions of a more visible, consuming older population develop comprises numerous empirical questions—largely dependent on how the “new old age” ultimately defines its societal place. We suggest particularly important directions for future research in the following section.

6. Future Research Avenues for Intergenerational Investigation

Proverbial wisdom suggests that it behooves younger people to be sympathetic toward their elders. Unfortunately, the anticipated graying of the population and a recessional societal resource pool may only increase generational competition, fostering resentment instead of respect. Nevertheless, the optimist might counter that a larger old population will increase opportunities for intergenerational contact and understanding, which has the potential to improve relations, increase understanding, and debunk intergroup misconceptions. Stronger, consistent relationships between old and young may form mutually respectful relationships that enhance the portrayal of older people as helpful societal allies. With this aim in mind, we suggest various future research directions.

Framing of the “Graying” Problem: Can Perceptions of Intergenerational Competition be Changed?

There is a certain “inconvenient truth” inherent in shifting age dynamics; a greater number of older people does inevitably increase societal influence and resource consumption, and a healthier older population might increasingly participate in traditionally young activities. Nevertheless, journalists, pundits, and other media merchants of doom may exaggerate competition between generations, and unflatteringly depict older people as wealthy yet costly
burdens (Schulz & Binstock, 2006). Likewise, implicating Social Security and Medicare for society’s economic woes inflames canes-versus-kids battles, which may deflect attention from more central potential causes of economic crisis (e.g., income inequality; Minkler, 2006; Pollack, 1986). Inter-age hostility is likely to result from proclamations of a zero-sum intergenerational game.

Increased awareness of realities (rather than exaggerations) underlying these issues will become all the more important as the older population grows. Researchers should test interventions that de-emphasize the notion of older people as responsible for societal age inequalities or problems, and see if this increases how favorably younger people perceive them. Taking a cue from Binstock (2010), reframing “old-age entitlements” as part of a broader social contract that benefits all generations might go a long way to maintaining positive images of older people in an aging society.

**Ensuring Successful Intergenerational Contact: What Works and What Doesn’t?**

Another key research track should focus on the impact of intergenerational programs in undermining perceptions of intergenerational exploitation. Some research does evaluate such programs, which attempt to foster contact, cooperation and understanding between generations (e.g., Newman et al., 1997). Encouragingly, the benefits of intergenerational contact have already been demonstrated within the family: Frequent contact with grandparents predicts changing attitudes toward older people (Harwood et al., 2005), and higher levels of self-disclosure with grandparents leads to more positive explicit attitudes toward older people in general (Hewstone et al., 2006). As noted, many religious communities have demonstrated that contact is an effective mechanism for reducing ageism under certain circumstances.
However, to date it remains to be seen whether beneficial intergenerational contact extends beyond a few select domains. Indeed, the overall evidence of intergenerational programs consistently altering younger attitudes toward older people appears mixed at best (Montepare & Zebrowitz, 2004). Extending the benefits of intergenerational contact outside the family is not out of the realm of possibility, but a major obstacle is pervasive, socialized age segregation (Hagestad & Uhlenberg, 2005). This may be a primary reason that people generally hold ageist attitudes toward older people in general, despite holding mostly positive views toward specific older people that they know intimately (Kite & Johnson, 1988). As the burden of caring for an enlarged older population falls more heavily on the young, it is imperative that research continue to establish what works and what does not in intergenerational contact.

**Established Elder Subtypes: Reintroducing the Young-Old Versus Old-Old Distinction**

Despite lay beliefs that older people are relatively uniform in appearance, attitudes, and health, the older population is actually one of the most diverse. A particularly critical distinction lies between the “young-old”—the age group roughly 65 to 75, who are relatively healthy, active, and socially involved—and the less active “old-old” (McGinnis & Zelinsky, 2003; Neugarten, 1974; Yasuda et al., 1997). In terms of research on allocation of resources between generations, this division is crucial. For instance, policymakers may have an easier time making a case for healthcare resources being spent on more-active young-old versus the old-old. By contrast, debates about mandatory retirement might disproportionately target the young-old (who are more often still employed, and thus more at risk for accusations of delaying retirement). Again, these are empirical questions, but research findings concerning these potential differences will have important policy implications. In certain contexts, society’s traditional over-65 definition of “senior” may be more usefully broken down into these more meaningful sub-categories. Notably,
aging researchers have further revised these original subtypes to encompass an additional “oldest-old” category (e.g., Suzman, Willis, & Manton, 1992), suggesting that many are beginning to realize the importance of subtyping what has vaguely been conceptualized as a generalized older age.

**Emergent Elder Subtypes: Hostile Ageism and Elder Admiration**

Backlash from the young against older people who violate their alleged societal place represents a hostile form of ageism rarely considered in the ageism literature. In fact, a search for “hostile ageism” on PsycInfo currently yields exactly zero results. (Bugental & Hehman [2007] do speculate briefly that a hostile form of ageism might occur if older people appear to seek resources at the expense of the young, as the current chapter has argued.) To date, research has indicated that, when ageism is expressed in a basically negative manner, it occurs more often via implicit measures than explicit ones (Bugental & Hehman, 2007; Cesario et al., 2006). However, younger people might have little reason to hide their resentment if they feel that their natural path to social resources is blocked by the older generation. This is especially so given that explicit expressions of common old-age stereotypes are rewarded by greater affiliation with young ingroup members (Castelli et al., 2009).

On the other hand, as noted in the “optimistic” section, older people can potentially break away from their predominant low-status perception in a positive way. One of the running themes of Ken Dychtwald’s (1999) *Age Power: How the 21st Century Will Be Ruled By the New Old* is that the next older generation will be unlike any other: larger, healthier, more active, and, with hope, more societally productive than merely consuming. This latter aspect may be the most important in changing mainstream perceptions of decrepitness, or from a socio-structural perspective, older people who refuse to stay in a low-status, unobtrusive place. New, societally-
friendly social policies—such as the creation of an elder corps—could go a long way in not only accommodating an enlarged older population, but changing these negative perceptions.

Nevertheless, empirical evidence on the potential impact of such policies is lacking, and thus this is a direction ripe for future research.

**Cross-cultural Explorations**

Cross-cultural research has been a major crux of social psychology for the past 30-plus years, but surprisingly little research has examined directly whether ageist beliefs differ between cultures. Prevailing wisdom is that ageist beliefs may not be as prevalent in Eastern cultures, which traditionally hold their elders in higher esteem (e.g. Nelson, 2009). One important factor in this belief is the historical Eastern tradition of filial piety, or *xiao*—the Confucian ideal that places responsibility on younger people to respect, obey, and care for their elders (Ng, 1998, 2000). A more general line of support for this hypothesis is that Eastern cultures tend to be more interdependent and holistic. Thus, people within them should allegedly more often seek to maximize collectivist, relational success—in contrast to more independent, individual agency-focused Western cultures (Nisbett, 2003). Given greater cultural focus on the relational, as well as a tradition of filial piety, Easterners theoretically should place greater importance on maintaining effective relationships with and taking care of elders.

However, empirical evidence that such beliefs result in a cultural reduction in ageism is surprisingly sparse. One notable exception is Levy and Langer’s (1994) study with older Chinese and American participants. They found that (a) views toward aging and memory performance were positively correlated, and (b) the Chinese elders exceeded the older Americans on a memory task. From this they concluded that cultural beliefs about aging shape older people’s degree of memory loss, which implied that Chinese cultural beliefs about aging were more
positive. However, even this particular instance provides only indirect support, not aiming to directly demonstrate ageism being less common in Chinese culture.

Even more rare are comparisons based on intergenerational resource perspectives. Speculatively, beliefs about age-based allocation of societal resources may not be so different across cultures that are historically distinct but similarly industrialized in the modern world. As previously indicated, one plausible explanation for why older people may have come to be less valued than in the past is that they do not offer as much value in modernized societies. From this standpoint, even traditionally interdependent-focused cultures may come to perceive their elders as consuming but not contributing. As recent evidence, Eastern elders face many of the same forms of discrimination as Western ones do, such as outright abandonment in Japan (Fackler, 2010). Moreover, the warm-but-incompetent older-age stereotype pervades Eastern societies as well as Western ones (Cuddy et al., 2009), and even includes rural Eastern cultures (Chen, n.d.). More research is needed to make definitive cross-cultural conclusions, but a similarly aging population in the East implies that the risk for intergenerational ageist sentiment may prevail across borders.

**Gender and Race Explorations**

As the default conception of older people—like other social groups—likely comprises White, male targets, this presents an obvious bias in itself against women and minorities (admittedly, we ourselves have not speculated about demographic differences in this chapter). But little empirical investigation focuses on the compounding factors of gender and race in prejudice toward older people. Concerning the former, some research indicates that older women, compared with older men, may be viewed more positively by younger people (Narayan, 2008), but other work suggests that older women might suffer the “double-whammy” of sexism in
addition to ageism. For instance, attributions of dependency, ineffectiveness, and passivity might render their situation more dire than that of older men (Block, Davidson, & Grambs, 1981; Duncan & Loretto, 2004; Nuessel, 1982).

Concerning racial and ethnic differences, surprisingly little research investigates attitudes among African American or Latino populations toward older people. Preliminary findings might suggest that minority groups hold lower levels of ageism. For instance, African Americans report respect for older African Americans (Fiske, Bergsieker, Russell, & Williams, 2009). It is also possible that the Hispanic emphasis on familism—loyalty and solidarity among family members, including the extended family (Sabogal, Marin, Otero-Sabogal, Marin, & Perez-Stable, 1987)—and higher incidence of co-residence with older family members (Burr & Mutchler, 1999) may indicate lower levels of ageism among younger Latinos. In any case, these potential demographic differences are another domain that promises importance, considering that half of the older population is female, and that the current older population is fast becoming more ethnically diverse than any in U.S. history (U.S. Department of Health and Human Services, 2007b).

**Ageism Against the Young**

Though its focus usually connotes prejudice toward older people, the word ageism naturally includes people discriminated against at any age. As under-researched as ageism generally is, even more scant is the sub-field of ageism against the young. Indeed, if intergenerational contentions exist, then they might exist in both directions. For instance, an older generation may view younger people as uncultured, and immature (as evidenced by Mark Bauerlein’s [2008] book, *The Dumbest Generation: How the Digital Age Stupefies Young Americans and Jeopardizes Our Future*). And while the current chapter has outlined how younger people might prescriptively stereotype older people to stay out of the way, it remains to
be seen whether older people hold corresponding resentments toward a younger generation that might be forced to support them. Such a development is not likely to transpire harmoniously if perceptions of inadequate, illiterate, and intransigent youngsters continue to stew. 

Though research in this area is scarce, a small empirical foundation does suggest younger people’s being the target of prejudice from adults (if not older ones specifically). The workplace is a prime arena, as large-scale surveys find at least 25% of younger workers indicate the experience of some form of age discrimination (Loretto, Duncan, & White, 2000). Specifically, younger workers often feel persecuted in the form of negative (demeaning) attitudes, denial of promotions, and disproportionately lower pay (Duncan & Loretto, 2004). This latter belief is corroborated by statistical evidence that the relative wages and employment rates of young workers have fallen in recent decades (Blanchflower & Freeman, 1996). Moreover, outside the workplace, younger people face comparable forms of prejudice to their elders (as noted), such as patronizing speech (Giles & Williams, 1994) and restricted freedoms (Westman, 1991). As psychological research moves further into age-related territory, it behooves researchers to simultaneously consider ways in which all age groups endure age-based bias.

**Conclusion: As the Field Moves Forward**

A recurring theme throughout this chapter is that an ever-growing older population might stoke issues of generational injustice. From this standpoint, despite society’s treatment of age-bias as a mere second-class civil rights issue (Cohen, 2009), ageism should become a prime research topic across multiple social sciences. Organizations such as the National Institute on Aging and the Alliance on Aging Research have been instrumental in nudging the social sciences into this important territory. Still, the need for more work—and broader, forward-thinking structural approaches—is evident, given changing age dynamics.
Fortunately, social psychologists already have the tools to increase understanding of this stealth phenomenon. By characterizing younger and older people as distinct social groups, social psychology can draw upon one of its strengths—a wealth of literature on intergroup and interpersonal biases—in order to shed light on intergenerational ageist resentments. Moreover, structural, intergenerational approaches present the advantage of taking into account both traditional psychological foundations of prejudice at the interpersonal level and the broader sociological contexts in which they occur. Such a multi-level perspective exemplifies what psychologists have recommended more generally (Oishi et al., 2009). Ageism research should certainly be no exception, especially within an increasingly complex, rapidly aging society.
CHAPTER 2: A PRESCRIPTIVE, INTERGENERATIONAL-TENSION (SIC) SCALE

As noted in the previous chapter, ageism is a peculiar prejudice. Despite the reality that every living person potentially joins every age group, ageism remains relatively under-researched (comparatively rare in prejudice literature), underappreciated (overlooked as a prejudice), and under-the-radar (subtle in nature; North & Fiske, 2012). Nevertheless, a rapidly growing older population necessitates its increased understanding—for both social psychology and society at large.

The current chapter analyzes potential intergenerational tensions over practical and symbolic resources and introduces a measure of ageism with contemporary relevance. Although prior scales focus mainly on what older people allegedly “are” (descriptive stereotypes), the current analysis centers on the role of more controlling, “should”-based, prescriptive beliefs. This approach proposes three prescriptive dimensions that younger generations are particularly likely to endorse: (1) active Succession of enviable positions and influence, (2) age-appropriate, symbolic Identity maintenance, and (3) minimizing passive shared-resource Consumption (SIC).

We argue that a rapidly growing older population—intensifying potential intergenerational tensions—necessitates the new, prescriptive ageism scale presented here.

The Potential Rise of Prescriptive (Hostile) Ageism

Demographic shifts render ageism a particularly ripe research topic. Already the largest proportion in history—currently 13 percent of the U.S. populace—the older population is expected to compose almost 20 percent by 2030 (U.S. Census, 2012). Though prevailing stereotypes place elders outside mainstream consciousness—spurring negative (or at best,
mixed) descriptive elder stereotypes of ineptness, illness, and irrelevance—an era of more conspicuous older age is forthcoming.  

How increased visibility will change elder images is an empirical question (North & Fiske, 2012). An optimistic standpoint posits a more visible older age debunking negative elder stereotypes. The pessimistic counterpoint cites the potential for hostile ageism to brew among younger generations, if elders do not step aside and cede resources in the traditional manner (e.g., if they postpone retirement or reap disproportionate government benefits).

Theoretically, backlash for overstepping societal boundaries is particularly likely when group outcomes are interdependent (as younger and older age groups are). For instance, because the genders are intimately interconnected in everyday outcomes, women face negative repercussions for violating expectations (e.g., by being too agentic; Glick & Fiske, 1996). Such controlling, prescriptive (“should”-based) stereotypes aim to dictate other groups’ behavior so as to benefit ingroup outcomes (Rudman & Glick, 2001; Prentice & Carranza, 2002). Thus, prescriptive expectations yield far greater between-group differences in endorsement than do descriptive stereotypes.

But despite the reality that age groups co-exist within society, and the fact that everyone (with luck) eventually joins each age group, different ages’ inherent interdependence has not been considered as an integral factor in driving ageism. Therefore, even though age groups largely agree about descriptive elder-stereotype content (Greenberg et al., 2004; Nosek et al., 2002), because of resource interdependence, younger people theoretically should endorse

4 Underlying the numerous issues arising from a more visible older age is the question of, “How old is old?” On one hand, social policies still conceptualize 65 as senior; on the other hand, an ever-growing, healthier older population might be antiquating this idea. Admittedly, we do not speak to this question in this chapter (for one helpful discussion, see Dychtwald, 1999, Chap. 4), but it’s an important consideration for researchers, psychologists and policymakers.
prescriptive stereotypes more than older people do. Ageism measures have largely overlooked these prescription-based possibilities, as discussed next.

**Extant (Descriptive) Ageism Measures**

Although useful, extant prejudice measures focus primarily on content (“are”) -based notions about older people. Various scales gauge ageist sentiment indirectly, focusing on descriptive aging-process knowledge. A prominent example is the Facts on Aging Quiz (Palmore, 1998).

Other instruments focus more directly on prejudicial attitudes. Two early scales—Tuckman and Lorge’s (1953) Attitudes toward Old People measure and The Negative Attitudes Toward Old People Scale (KOPS; Kogan, 1961)—both gauge agreement with descriptive elder statements. The Aging Semantic Differential (Rosencranz & McNevin, 1969) organizes descriptive statements into three overarching constructs.

The three-factor Fraboni Scale of Ageism (FSA; Fraboni et al., 1990) aims to “measure the affective component of [ageist] attitude, to supplement the cognitive aspect measured by other instruments” (p. 56). It includes both attitudinal beliefs—via descriptive, *antilocution* items (e.g., “Many old people just live in the past”)—and discriminatory behavior (*avoidance*; e.g., “I sometimes avoid eye contact with old people when I see them). Though the word “should” does appear in a third subscale, *discrimination* (e.g., “Old people should be encouraged to speak out politically”), these prescriptions tend to focus more on what society as a whole should do, rather than expectations targeting elders themselves. Moreover, prescription is not a conceptual focus of the largely descriptive measure. Nevertheless, to demonstrate the current (SIC) measure’s divergence from the FSA, we conduct a study with circumstances in which we expect the SIC measure to have greater predictive power than the FSA.
Prescriptive Domains: Succession, Identity, and Consumption

Age differs from any other social category in its permeability: provided they live long enough, all people eventually join each group. Another way to think of this is that age groups take turns along a hypothetical age queue—with younger people entering, middle-agers enjoying, and elders exiting (e.g., retiring). Although societal allocation of practical and figurative resources tends to favor the middle-aged (North & Fiske, 2012), as long as the line keeps moving, everyone generally gets his/her privileged turn.

However, those at the back of the line are dependent on those at the front transitioning away in order to keep the line moving. Thus, we posit three key ways that older people particularly are expected to relinquish resources, each pertinent to blocking a different aspect of the theoretical queue. Although not the only possible prescriptive dimensions, we focus on these three as central ones.

Succession-based prescriptions derive from expectations surrounding enviable resources and societal positions. Although middle-agers predominately hold the greatest societal influence, younger people’s opportunities more realistically depend on the old stepping aside—primarily in employment (where retirement opens up jobs for the young) and political influence (where older voters form a powerful bloc, while minors face age restrictions). In other words, acceding to Succession means allowing those waiting to move predictably toward their turn at the front.

Consumption-based prescriptive stereotypes center on passive depletion of currently shared resources. Elder violations derive from apparent exploitativeness, reaping more than a fair share of allotted societal resources—characterized by dilemmas involving government money (e.g., healthcare) and shared public space (e.g., the highway). Put another way, sharing Consumption of societal resources means not using up everything before others get there.
Identity involves resources more symbolic than Succession or Consumption, limiting elder participation in activities usually reserved for younger people. Although in this case who is considered “old” often depends on context, elders are particularly barred from youth culture (Greenberg et al., 2004). Unwanted intrusions into young ingroup territory can be both direct (e.g., frequenting youth-centered hangouts) and indirect (e.g., attempting to act “cool”). Thus, avoiding Identity invasion means not trying to go back through the line again by adopting youth’s territory.

Research Overview and Hypotheses

A priori, we aimed to test empirically a three-factor model of prescriptive ageism. The methodological foundation for the proposed scale utilized four samples, totaling 2,010 participants.

Study 1 (scale development) had participants rate their agreement with pilot-generated SIC-based statements; exploratory factor analysis (EFA) ascertained the number of latent factors underlying these items. Study 2 (initial scale validation) tested the scale’s convergent and divergent validity, comparing it to other measures of prejudice and potentially related factors. Study 3 tested elder-focused SIC’s divergent validity from anti-young ageism. Finally, Study 4 tested the scale’s predictive validity, exploring whether high scorers—controlling for another ageism measure (the FSA)—would exhibit the most bias toward older prescription-violators. This also served as a test of divergent validity from the descriptive-focused FSA, exploring which scale best predicts reactions to older people who do and do not “know their place” (i.e., adhere to versus violate expectations).

Using structural equation modeling, each study conducted a confirmatory factor analysis (CFA), testing the proposed model’s fit to the data. We hypothesized a three-factor solution to be
the best fit via both EFA and CFA. We also expected younger people to score the highest on the scale, given SIC’s emphasis on prescriptive tensions arising from generational interdependence.

Study 1

Method

Item generation. Forty-one potential scale items derived from lab and participant samples’ open-ended reports. Responses generally answered the question, “What are things older people should or shouldn’t do?”

Participants. Participants (N = 427; 264 female, mean age = 32.9, median = 32, range 16-81) included 397 online participants from Amazon Mechanical Turk (mTurk) and 30 undergraduates. Participants were primarily White (74.5%), followed by 6.3% or fewer East Asian, African American, Latino, South Asian, and “Other”/mixed.

Procedure. As part of a “social statements survey,” participants rated the SIC-based items from 1 (strongly disagree) to 6 (strongly agree). Online participants received a nominal payment; undergraduate lab participants received appropriate course credit.

Results

EFA examined the intercorrelation pattern among the 41 preliminary items, utilizing principal components extraction and a Varimax rotation. All items with loadings below .40 on their respective factors were discarded, as were strongly double-loading items. Based on the

5 This study also appeared as part of my masters’ thesis. However, I report it in here because it was fundamental in the scale development processes described in Studies 2-4.

6 We used a 6-point scale so as to force participants to take a stand one way or the other.

7 Varimax rotation presents well-documented strengths, such as simplifying factor structure and aiding interpretability (Abdi, 2003). It is also the method typically used if the proposed factors are expected to represent generally separate constructs (Rattray & Jones, 2007), as the current (SIC) framework does.
scree plot of variance explained, three overall factors were specified for subsequent extraction, (explaining 46.51% of the variance). Factor 1 apparently represented Consumption, Factor 2 reflected Succession, and Factor 3 comprised Identity items.

The final total number of items across these three factors was 20 (Table 1 shows item factor loadings across studies), with an overall alpha reliability of .90, and substantial subscale reliabilities (Table 2). These three subscales correlated moderately with each other, Pearson r’s ranging from .46 to .61. Descriptive statistics for this and all subsequent studies appear in Table 3.

An initial CFA examined whether the proposed model (Figure 1)\textsuperscript{8} fit well with the current dataset. A structural equation modeling technique used AMOS 7.0 (Arbuckle, 2006). Given that the model was created from this dataset, this was not an independent test of fit (Studies 2-4 conduct this analysis). Nevertheless, across various standard indices, initial evidence emerged for good 3-factor model fit (Table 4).\textsuperscript{9} Moreover, in line with comparative practices utilized by other SEM scale-development studies (e.g. Glick & Fiske, 1996; Luhtanen & Crocker, 1992), these same fit indices were considerably worse for a comparative one-factor model (Table 4).

**Study 2**

Measuring potential convergence and divergence, Study 2’s participants completed the SIC scale, in addition to measures of prejudice, social control orientation, and political ideology.

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\textsuperscript{8} In addition to the first-order model illustrated here, we also evaluated the fit of a second-order model (one overarching factor with three underlying subfactors). However, fit statistics didn’t change meaningfully to include the model in this chapter, so for simplicity’s sake we report only the first-order model.

\textsuperscript{9} Three pairs of highly similar items—marked in Table 1 and delineated in Figure 1—were considered intercorrelated, to assist with overall model fit.
We expected the SIC dimensions to correlate with each other (as in Study 1). We also hypothesized SIC to correlate relatively highly with another ageism measure (due to measuring the same general construct), moderately with other types of prejudice (because biases tend to correlate), and slightly with general social control measures (given SIC’s emphasis on control-oriented stereotypes). Finally, we expected political ideology to be uncorrelated with SIC-based bias because ageism has not provoked partisan debate, not yet having featured a salient civil rights movement; thus (unlike sexism and racism) strong political correctness norms have not developed regarding ageism.

Figure 1. Three-factor structural equation model.
Table 1: Item factor loadings across studies.

<table>
<thead>
<tr>
<th>Factor 1: Consumption</th>
<th>S1</th>
<th>S2</th>
<th>S3</th>
<th>S4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctors spend too much time treating sickly older people.*</td>
<td>.69</td>
<td>.74</td>
<td>.71</td>
<td>.76</td>
</tr>
<tr>
<td>Older people are too big a burden on the healthcare system.*</td>
<td>.64</td>
<td>.73</td>
<td>.67</td>
<td>.72</td>
</tr>
<tr>
<td>Older people are often too much of a burden on families.</td>
<td>.62</td>
<td>.67</td>
<td>.56</td>
<td>.72</td>
</tr>
<tr>
<td>At a certain point, older people’s maximum benefit to society is passing along their resources.</td>
<td>.60</td>
<td>.59</td>
<td>.51</td>
<td>.65</td>
</tr>
<tr>
<td>Older people shouldn’t be so miserly with their money if younger relatives need it.</td>
<td>.57</td>
<td>.43</td>
<td>.42</td>
<td>.55</td>
</tr>
<tr>
<td>Older people don’t really need to get the best seats on buses and trains.</td>
<td>.53</td>
<td>.45</td>
<td>.68</td>
<td>.63</td>
</tr>
<tr>
<td>AARP (American Association of Retired Persons) wastes charity money.</td>
<td>.48</td>
<td>.30</td>
<td>.38</td>
<td>.38</td>
</tr>
</tbody>
</table>

Factor 2: Succession

| If it weren’t for older people opposed to changing the way things are, we could probably progress much more rapidly as a society. | .66 | .65 | .69 | .77 |
| The older generation has an unfair amount of political power compared to younger people. | .65 | .80 | .65 | .74 |
| Most older people don’t know when to make way for younger people.* | .58 | .60 | .75 | .65 |
| Most older workers don’t know when it’s time to make way for the younger generation.* | .55 | .53 | .74 | .67 |
| Older people are often too stubborn to realize they don’t function like they used to. | .53 | .33 | .62 | .45 |
| Younger people are usually more productive than older people at their jobs. | .50 | .44 | .59 | .54 |
| Job promotions shouldn’t be based on older workers’ experience rather than their productivity. | .50 | .28 | .47 | .54 |
| It is unfair that older people get to vote on issues that will impact younger people much more. | .50 | .58 | .65 | .71 |

Factor 3: Identity

| Older people typically shouldn’t go to places where younger people hang out.* | .81 | .80 | .81 | .83 |
| In general, older people shouldn’t hang out at places for younger people.* | .78 | .80 | .84 | .79 |
| Generally older people shouldn’t go clubbing. | .70 | .74 | .72 | .82 |
| Older people probably shouldn’t use Facebook. | .66 | .74 | .47 | .57 |
| Older people shouldn’t even try to act cool. | .62 | .82 | .63 | .60 |

Note. * † ‡ Similar items denoted as co-varying in the structural equation model.

Method

Participants. Participants (N = 93; 69 female, M age = 25.11, median = 21, range 18-60) were online paid university participants in a “social statements survey.” Participants were 60.9% White, followed by 12.0% or less of the noted minority or mixed groups.

Procedure. Participants completed the SIC measure using the same 6-point scale as
Study 1. Additional prejudice measures included the 29-item FSA (Fraboni et al., 1990), the 22-item Ambivalent Sexism Inventory (ASI; Glick & Fiske, 1996), and an 8-item version of the Symbolic Racism Scale (Henry & Sears, 2000). Intergroup threat/control scales included the 16-item Social Dominance Orientation scale (SDO; Pratto, Sidanius, Stallworth, & Malle, 1994) and the 20-item Right-Wing Authoritarianism scale (RWA; Altemeyer, 1998). Finally, participants reported their political orientation (1 = definitely liberal; 7 = definitely conservative) and party affiliation (1 = strongly Democrat; 7 = strongly Republican). After the SIC scale, the sequence of the other scales was counter-balanced to avert potential order effects. Participants were entered into a monetary-prize lottery.

**Results**

Inter-item reliability was once again high for the 20-item SIC scale (.91) and each subscale (Table 2).

<table>
<thead>
<tr>
<th>Scale</th>
<th>S1</th>
<th>S2</th>
<th>S3</th>
<th>S4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Succession</td>
<td>.84</td>
<td>.84</td>
<td>.85</td>
<td>.85</td>
</tr>
<tr>
<td>Identity</td>
<td>.85</td>
<td>.87</td>
<td>.83</td>
<td>.84</td>
</tr>
<tr>
<td>Consumption</td>
<td>.83</td>
<td>.75</td>
<td>.83</td>
<td>.86</td>
</tr>
<tr>
<td>Total Scale</td>
<td>.90</td>
<td>.90</td>
<td>.91</td>
<td>.91</td>
</tr>
</tbody>
</table>

Table 2: SIC Scale alpha reliabilities across studies.

**Model fit.** Like Study 1, CFA found the three-factor model to provide good structural fit for the new dataset, and a better fit across all indices than a one-factor model comprising all 20 items (see Table 4).
<table>
<thead>
<tr>
<th>SIC Scale</th>
<th>S1</th>
<th>S2</th>
<th>S3</th>
<th>S4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Succession</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>2.97</td>
<td>3.01</td>
<td>2.96</td>
<td>3.24</td>
</tr>
<tr>
<td>SD</td>
<td>0.92</td>
<td>0.82</td>
<td>0.96</td>
<td>0.93</td>
</tr>
<tr>
<td>Min</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.38</td>
</tr>
<tr>
<td>Max</td>
<td>5.88</td>
<td>5.75</td>
<td>6.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Identity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>2.62</td>
<td>2.84</td>
<td>2.65</td>
<td>2.63</td>
</tr>
<tr>
<td>SD</td>
<td>1.09</td>
<td>1.20</td>
<td>1.05</td>
<td>1.02</td>
</tr>
<tr>
<td>Min</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Max</td>
<td>6.00</td>
<td>6.00</td>
<td>6.00</td>
<td>5.80</td>
</tr>
<tr>
<td>Consumption</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>2.30</td>
<td>2.31</td>
<td>2.34</td>
<td>2.44</td>
</tr>
<tr>
<td>SD</td>
<td>0.88</td>
<td>0.72</td>
<td>0.91</td>
<td>0.90</td>
</tr>
<tr>
<td>Min</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Max</td>
<td>5.86</td>
<td>5.00</td>
<td>6.00</td>
<td>5.71</td>
</tr>
<tr>
<td>Total Scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>2.65</td>
<td>2.72</td>
<td>2.66</td>
<td>2.81</td>
</tr>
<tr>
<td>SD</td>
<td>0.79</td>
<td>0.74</td>
<td>0.83</td>
<td>0.79</td>
</tr>
<tr>
<td>Min</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.25</td>
</tr>
<tr>
<td>Max</td>
<td>5.65</td>
<td>5.25</td>
<td>5.50</td>
<td>5.85</td>
</tr>
</tbody>
</table>

*Note.* Each scale ranged from 1 (*strongly disagree*) to 6 (*strongly agree*).
Table 4: Full (3-Factor) and restricted (1-Factor) model fit indices across studies

<table>
<thead>
<tr>
<th>Fit index</th>
<th>S1</th>
<th>S2</th>
<th>S3</th>
<th>S4</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Three-factor model</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$X^2$/ df</td>
<td>1.94</td>
<td>1.38</td>
<td>4.36</td>
<td>1.87</td>
</tr>
<tr>
<td>IFI</td>
<td>.96</td>
<td>.92</td>
<td>.95</td>
<td>.93</td>
</tr>
<tr>
<td>CFI</td>
<td>.96</td>
<td>.92</td>
<td>.95</td>
<td>.93</td>
</tr>
<tr>
<td>TLI</td>
<td>.95</td>
<td>.91</td>
<td>.94</td>
<td>.92</td>
</tr>
<tr>
<td>RMSEA</td>
<td>.047</td>
<td>.065</td>
<td>.05</td>
<td>.065</td>
</tr>
<tr>
<td><em>One-factor model</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$X^2$/ df</td>
<td>4.19</td>
<td>1.90</td>
<td>9.14</td>
<td>3.05</td>
</tr>
<tr>
<td>IFI</td>
<td>.85</td>
<td>.81</td>
<td>.87</td>
<td>.83</td>
</tr>
<tr>
<td>CFI</td>
<td>.85</td>
<td>.81</td>
<td>.87</td>
<td>.82</td>
</tr>
<tr>
<td>TLI</td>
<td>.85</td>
<td>.78</td>
<td>.85</td>
<td>.80</td>
</tr>
<tr>
<td>RMSEA</td>
<td>.087</td>
<td>.10</td>
<td>.08</td>
<td>.10</td>
</tr>
</tbody>
</table>

Note. $X^2$/ df = chi-square-to-degrees-of-freedom ratio, IFI = Incremental Fit Index, CFI = Comparative Fit Index, TLI = Tucker-Lewis coefficient, RMSEA = Root Mean Square Error of Approximation (see Kenny, 2011, for explanations).

**Divergent and convergent validity.** Alpha reliabilities were high for all comparative scales: FSA (.86), ASI-Hostile (.93), ASI-Benevolent (.88), SDO (.93), RWA (.94), and Symbolic Racism (.81).

As expected, the SIC subscales correlated with each other moderately to strongly ($r$'s .48 to .65). Also anticipated, SIC correlated most strongly with the FSA ($r = .70, p < .001$), then more moderately with Symbolic Racism, ASI-Hostile, and ASI-Benevolent ($rs .32$ to $.40, $ps < .003$). Though total SIC correlated significantly with intergroup-hierarchy-focused SDO ($r = .31, p = .003$), it did not so with intergroup-value-conflict-based RWA ($r = .15, p = .14$). As
predicted, correlations with political and party affiliations were nonsignificant (both \( r < .02 \)).

Notably, with the exception of the FSA (\( \beta = -.24, p = .02 \)) and its avoidance subscale (\( \beta = -.27, p = .009 \)), rater age did not predict scores on any comparative scale, all \( ps > .05 \). This contrasts with consistent age trends for the SIC scale (see “Demographic Analyses”).

**Study 3**

**Method**

**Participants.** Participants (\( N = 1283; 808 \) female) were recruited from Princeton University’s paid participant pool (\( N = 97 \)) and mTurk (\( N = 1186; M \) age across samples = 33.23, median = 30, range 18-81). Participants were 75.4% White, followed by 6.0% or less of the noted minority groups.

**Measures and procedure.** Participants completed the 20 validated SIC items using the same 6-point scale; in addition, a subset of the sample completed 21 items reflecting prescriptive stereotypes of younger people taken from a separate project by the current authors (e.g., “Young people shouldn’t use so much foul language”; “Today’s youth are too idealistic”).

**Results**

Substantial reliability again emerged among all 20 SIC scale items (\( \alpha = .91 \)), as well as each subscale (Table 2), and the 21 anti-young items (\( \alpha = .90 \)).

As with the prior two studies, the Succession, Identity, and Consumption subscales correlated with one another, \( rs \) ranging from .53 to .66, all \( ps < .001 \).

**Model fit.** The three-factor model again provided good structural fit for this dataset, despite a large chi-square/df ratio (as noted by Kenny [2011] and others, this is a poor test of fit for data sets with more than 400 cases); see Table 4. A three-factor model again bested a one-factor version on all noted indices.
Divergence from anti-young ageism. Though the total SIC scale did correlate significantly with the anti-young items, the effect size was small \((r = .14, p = .01)\). Moreover, only the Identity subscale significantly correlated with the anti-young scale \((r = .19, p = .001)\); Consumption was a marginal correlate \((r = .10, p = .08)\), and Succession was nonsignificant \((r = .07, p = .22)\).

Demographic analysis also underscored divergence between SIC and anti-young items. Participant age was not a significant predictor of anti-young ageism \((\beta = .02, p = .68)\). Moreover, the two genders did not differ in their endorsement of the anti-young items \((t(332) < 1)\), nor did Whites and non-Whites differ, \(t(332) = 1.17, p = .24\). These null results contrast with predicted, consistent, significant trends for the SIC scale (see “Demographic Analyses”).

Study 4

Method

Participants. These mTurk participants \((N = 207, 88\text{ female, mean age } = 26.87, \text{ median age } = 25, \text{ age range } 18-59)\) were 70.0% White, followed by 9.2% or fewer of the noted minority groups.

Procedure. Participants completed a study ostensibly connecting mTurk participants with professionals from an “online career network.” This involved reading a randomly assigned profile of another person’s brief self-description.

Participants read about a 74-year-old with the name “Max [last name withheld]” who either violated or adhered to SIC prescriptions. Six between-subjects versions were possible: Three different targets violated, respectively, Succession (refusing to retire despite blocking younger potential hires), Identity (displaying affinity for the latest pop music), and Consumption (undergoing a resource-intensive medical procedure). Three adhering counterparts, respectively,
stated that “it’s probably time to step aside,” enjoyed oldies music, and decided against the burdensome treatment.

After viewing one of the six profiles, participants provided two types of target ratings: Three separate items composed an overall measure of perceived warmth ($\alpha = .88$); three other items formed a competence measure ($\alpha = .69$). These two dimensions, considered by many to be fundamental dimensions of person perception, serve as useful valence snapshots of target judgments, at both the individual and group level (Fiske et al., 2007). Participants also responded to six behavioroid items ($\alpha = .80$) indicating their desire to interact with Max (Table 5).

Afterward, participants completed both the SIC scale and the FSA. Participants were thanked, debriefed, and compensated.

**Results**

The total SIC scale exhibited strong reliability ($\alpha = .91$), as did each subscale (Table 2). The FSA also had high reliability ($\alpha = .91$).

**Model fit.** The three-factor model again fit the data, and outperformed a one-factor counterpart per all noted indices (Table 4).

**Main effects.** As the prescriptive framework predicts, SIC-violating targets were perceived as less warm ($M = 3.16, SD = 0.93$) than adherers ($M = 3.96, SD = 0.70$), and less worthy of interaction (violator $M = 3.23, SD = 0.82$; adherer $M = 3.58, SD = 0.73$), both $t$s > 3.20, both $p$s < .003. No differences in competence emerged (violator $M = 3.54, SD = 0.72$; adherer $M = 3.57, SD = 0.80$), $t < 1$.

**Predictive ability of SIC versus FSA.** The framework also predicts that SIC scores will predict reactions to SIC-violating older people; thus, multiple regressions tested the ability of each scale to predict prescriptive reactions toward targets. Indeed, SIC score (controlling for
FSA) marginally predicted violating targets’ perceived warmth, (β = -.32, p = .08), competence (β = -.33, p = .06), and significantly predicted interaction desire (β = -.46, p = .007). However, FSA (controlling for SIC) did not significantly predict any of these dependent variables, all ps > .34 (Table 5).

As expected, for adhering targets, SIC score (controlling for FSA) did not significantly predict target ratings (Table 5). Controlling for SIC, FSA did significantly predict warmth, competence, and (marginally) interaction desire, but in the opposite direction: The more ageist participants were, the more negatively they viewed the older, adhering targets.10

Rater age significantly predicted FSA score, β = -.21, p = .002. However, controlling for FSA, rater age still significantly predicted SIC (β = -.22, p = .04), whereas the reverse was nonsignificant (FSA controlling for SIC, β = -.05, p = .67). A cross-study demographic analysis on SIC, including rater age, appears next.

**Demographic Analyses (All Studies)**

Pooling all 2,010 responses, consistent and predicted demographic trends emerge for age, gender, and race/ethnicity. Younger people and men should show more prescriptive ageism; the ethnicity results are unexpected.

**Age**

As expected, participant age was a significant inverse predictor of total SIC score (β = -.31, p < .001) and each subscale: Succession (β = -.37, p < .001), Identity (β = -.22, p < .001), and Consumption (β = -.17, p < .001).

**Gender**

10 We interpret this unexpected finding as adhering elder targets most resembling the default. Because (like other ageism measures) FSA captures general resentment toward elders, predicting hostility toward default elder targets isn’t shocking.
Men ($M = 2.94$, $SD = 0.82$) scored significantly higher overall than women ($M = 2.51$, $SD = 0.76$), $t(1558.99) = 11.84$, $p < .001$). This held for sub-scores of Succession (male $M = 3.24$, $SD = 0.99$; female $M = 2.83$, $SD = 0.89$, $t(1530.72) = 9.41$, $p < .001$), Identity (male $M = 2.89$, $SD = 1.09$; female $M = 2.50$, $SD = 1.02$, $t(1587.79) = 8.03$, $p < .001$), and Consumption (male $M = 2.74$, $SD = 0.76$; female $M = 2.35$, $SD = 0.74$, $t(1565.99) = 10.52$, $p < .001$).

Table 5: Study 4 elder target ratings as a function of SIC Scale and FSA.

<table>
<thead>
<tr>
<th></th>
<th>SIC (cont. for FSA)</th>
<th>FSA (cont. for SIC)</th>
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<tbody>
<tr>
<td></td>
<td>Standardized β</td>
<td>Standardized β</td>
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<tr>
<td>Warmth¹</td>
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<tr>
<td>Violators</td>
<td>-.32+</td>
<td>.17</td>
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<tr>
<td>Adherers</td>
<td>-.03</td>
<td>-.27*</td>
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<tr>
<td>Competence²</td>
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<tr>
<td>Violators</td>
<td>-.33+</td>
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<td>Adherers</td>
<td>.12</td>
<td>-.45***</td>
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<tr>
<td>Interaction Desire³</td>
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<tr>
<td>Violators</td>
<td>-.46**</td>
<td>.03</td>
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<tr>
<td>Adherers</td>
<td>-.15</td>
<td>-.21+</td>
</tr>
<tr>
<td>Participant Age</td>
<td>-.22*</td>
<td>-.05</td>
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</tbody>
</table>

Notes. SIC = Succession, Identity, and Consumption scale; FSA = Fraboni Scale of Ageism.
1. “Warmth” comprises 3 items: “Overall, how warm might people think Max is?”; “Overall, how kind might people think Max is?”; “Overall, how good-natured might people think Max is?”
2. “Competence” comprises 3 items: “Overall, how competent might people think Max is?”; “Overall, how capable might people think Max is?”; “Overall, how confident might people think Max is?”
3. “Interaction Desire” represents 6 items: “Would you be willing to interact further with Max after the study is over?”; “Would you recommend other participants in this survey to interact with Max?”; “Would you be willing to write and send Max a supportive message?”; Reverse-scored: “Would you prefer to ignore Max altogether?”; “If you were to interact further, how likely would you be to say mean things to Max?”; “Would you suggest to other participants in this survey that they ignore Max.”
= 2.64, SD = 0.92; female $M = 2.15$, $SD = 0.82$, $t(1519.42) = 12.20$, $p < .001$).

**Race/Ethnicity**

A one-way ANOVA found significant ethnic differences on the total SIC scale [$F(4, 1883) = 13.84$, $p < .001$, partial $\eta^2 = .03$] and each subscale [all $Fs > 6.90$, all $ps < .001$].

On the total scale, East Asians ($M = 3.07$, $SD = 0.71$) and South Asians ($M = 3.02$, $SD = 0.84$) scored the highest. Post-hoc Tukey comparisons found both scores to be significantly higher than Whites’ ($M = 2.63$, $SD = 0.80$) and Blacks’ ($M = 2.56$, $SD = 0.86$), all $ps \leq .001$. Latinos ($M = 2.87$, $SD = 0.93$) scored marginally higher than both Whites and Blacks (both $ps = .06$), but not significantly different from East or South Asians ($ps > .38$).

Subscales showed similar trends, with East Asians scoring significantly higher than Whites and Blacks on all three subscales, South Asians outpacing Whites and Blacks on the Succession and Consumption subscales, and Latinos similarly scoring higher than Blacks and Whites on the Succession subscale and lower than East Asians on the Consumption subscale (all $ps < .05$). All other comparisons were nonsignificant.

**General Discussion**

Four studies created a three-factor (SIC) scale of prescriptive ageism, affirming its convergent validity (with other ageism and prejudice measures), divergent validity (from other types of prejudice, group hierarchy endorsement, political orientation and anti-young ageism) and predictive validity (in a SIC-based experiment, doubling as evidence for divergence from FSA).

Demographic findings contribute to the larger body of ageism research, helping answer unresolved questions. The younger participants were, the more they endorsed prescriptive, ageist stereotypes across all three SIC domains. Similar young-as-ageist results have emerged with the
FSA (Rupp et al., 2005); however, the opposite trend appears on other descriptive measures (e.g. the KOPS; Hellbusch et al., 1994). Such conflicting findings reflect the ageism literature as whole, which has left largely unresolved the question of whether the young are the most ageist (North & Fiske, 2012). The current prescription-based findings implicate the young as focal proponents of this explicitly controlling prejudice.

Moreover, men scored consistently higher than women. Men do tend to exhibit higher levels of prejudice than women in various other domains (e.g. racism; Ekehammar & Sidanius, 1982; Nosek et al., 2002), and the FSA yields the same pattern (Fraboni et al., 1990).

That Asians scored consistently higher than other groups on the SIC scale contrasts with lay beliefs that Eastern filial piety traditions reduce ageism (Ng, 1998). Admittedly, this chapter’s U.S.-only samples do not necessarily speak directly to this issue; to clarify this picture, future studies might employ the SIC scale using non-American Asian samples. Meanwhile, Whites and Blacks tended to score at or among the lowest (with Latinos falling somewhere in between). This latter result echoes prior findings of young African Americans’ respect for their elders (Fiske et al., 2009).

One potential limitation is that the current measure’s development relied heavily on mTurk samples. Though initial testimony touted the website as an inexpensive, reliable source of data (Buhrmester et al., 2011; Paolacci et al., 2010), others have expressed concerns about reduced quality (Reips et al., 2012). Less debatable is mTurk’s wider age range of participants than undergraduate samples offer—particularly relevant for the current research’s focus on age-based bias and the moderating impact of perceiver age on such perceptions.

Another potential limitation is the current research’s focus on a Western population. This is an intentional starting point; many of the issues concerning intergenerational resource
distribution seem particularly salient in industrialized societies, where modernization perhaps has made elders’ utility less obvious than in the past (Nelson, 2005). Nevertheless, it remains to be seen whether prescriptive ageism exists at equally high levels in other cultures that are at least believed to be more reverent of their elders.

**Conclusion**

Departing from extant ageism scales, which focus primarily on descriptive elder stereotypes, the SIC scale introduces a novel, prescriptive ageism measure. In incorporating intergenerational tensions over practical and symbolic resources—and finding the young to most endorse ageist prescriptions—the SIC measure diverges from prior measures in both focus and findings. Given its relevance to current real-world resource concerns (such as healthcare and employment), the scale is a promising tool for cutting-edge ageism research, as the population grays and generational equity concerns grow more salient.
CHAPTER 3: ACT YOUR (OLD) AGE: PRESCRIPTIVE, AGEIST BIASES OVER SUCCESSION, CONSUMPTION, AND IDENTITY

As noted, a burgeoning older population necessitates greater focus on aging and intergenerational relations. One issue of increasing importance is ageism and its risks for targets (North & Fiske, 2012). Despite negative consequences, age discrimination has seemed a mere second-class civil rights issue in labor and legal circles (Cohen, 2009). Social psychologists, too, have long established the salience of age in interpersonal judgments but have seldom examined ageism, compared with racism and sexism (Nelson, 2002). As a likely cause and consequence of such widespread disregard, this form of prejudice is currently one of the most socially condoned—or as some claim, the most prevalent (Age Concern, 2008; Banaji, 1999).

In confronting the under-studied topic of ageism, this chapter departs from traditional views that center on default, descriptive perceptions of what older people are like. Instead, we focus on should-based, prescriptive beliefs about older people’s use of certain social resources. We identify three key ways in which older people are expected to limit their resource usage: Acceding to Succession of enviable resources, limiting Consumption of shared resources, and avoiding symbolic Identity invasions. In all cases, we propose that younger people are the most likely to endorse such expectations of elders.

This standpoint presents three implications. First, a prescriptive approach goes beyond descriptive stereotypes about older people’s physical or cognitive capabilities per se. Second, implicating younger people as the focal ageists posits age differences in ageist endorsers not found by descriptive approaches (which have implicated people of all ages—including older

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people themselves—as holding equivalent general attitudes toward “older people”). Finally, elder subtypes emerge: those who abide by age-based expectations, and those who don’t. This chapter thus provides novel ways of understanding intergenerational, ageist tensions—particularly important in a rapidly graying society that will soon find its traditional age structure altered.

**Descriptive Perspectives: Ageism Held Across Age Groups**

Ageism theories mainly focus on descriptions of what older people (allegedly) are—generally centering on perceptions of illness, incompetence, invisibility, and irrelevance (see North & Fiske, 2012, for a review). These descriptive stereotypes have shaped virtually all existing explanations for ageism: Individual-level theories often focus on mortality and related anxieties or physical repulsion as spurring age-based prejudice (Greenberg et al., 2002; Palmore, 2003). At the group level, maintaining psychological distance from elders may bolster group self-worth or adaptively favor the fittest (Burnstein, Crandall, & Kitayama, 1994; Kite & Wagner, 2002). Group-level perspectives also characterize elders as descriptively non-reciprocating, low-status, and pitiable—or high-warmth and low-competence (Cottrell & Neuberg, 2005; Cuddy, Norton, & Fiske, 2005; Fiske, Cuddy, Glick, & Xu, 2002).

The focus on elders’ descriptive characteristics yields considerable agreement across age groups. Persistently, old and young alike hold negative attitudes toward the concepts of “old people” and the “elderly,” both explicitly and implicitly (Greenberg et al., 2002; Kimmel, 1988; Kite & Wagner, 2002; Nosek, Banaji & Greenwald, 2002, Rodin & Langer, 1980). Stereotype Content Model research has failed to find participant age differences in placing older people squarely in a high-warmth, low-competence cluster (Cuddy, Fiske, & Glick, 2007). Even development-focused studies—which emphasize increased complexity in older-age perceptions
Descriptive ageist beliefs spur older people to dissociate themselves psychologically from their own age group, considering themselves younger at heart than those typical of their actual age group, to maintain a positive self-image (Weiss & Lang, 2011). Thus, unlike many other forms of prejudice, descriptive ageism differs in that many of its perpetrators include its most salient targets. But whereas descriptive ageist stereotypes span perceivers of all ages, prescriptive age-based beliefs may differ, for reasons discussed next.

**Toward a Prescriptive Approach:**

**Age-Group Interdependence and Possible Tensions**

Common phrases (“Act your age!”; “Isn’t he too old for that?”) indicate expectations for age-based behavior, as do formative psychological theories (e.g. Erikson, 1959; Piaget, 1971). Nevertheless, social psychological investigations of prescriptive prejudices virtually always center on gender-based expectations, generally upheld by men and targeting women (Burgess & Borgida, 1999; Fiske & Stevens, 1993; Prentice & Carranza, 2002; Rudman, 1998). For instance, the prescriptive belief that women should be nice fosters backlash when they act in threateningly agentic ways (Carli & Eagly, 1999; Eagly & Karau, 2002; Rudman & Glick, 2001). Thus, in contrast to mere norms or expectancies—typically shared by everyone in a given society—prescriptive stereotypes typically involve one group disproportionately targeting another, so as to foster some degree of social control.

Notwithstanding its focus in gender, prescriptive stereotype research has unearthed an important divergence from descriptive stereotypes: Whereas descriptive beliefs tend to be held
comparably across groups (which, as noted, includes descriptive ageist beliefs), prescriptive stereotypes tend to be espoused unevenly. Indeed, despite mostly agreeing about descriptive gender stereotypes, men and women differ in their endorsement of prescriptive ones (Burgess & Borgida, 1999; Martin, Osmond, Hesselbart, & Wood, 1980; Twenge, 1997). Theoretically, this is because men and women are highly interdependent in their outcomes, although men’s higher societal status means that subjugating women directly benefits them. Controlling stereotypes about women’s traditional powerless roles protect men’s own privileged status (Pratto, Stallworth, Sidanius, & Siers, 1997).

Given its predominantly descriptive focus, the ageism literature has not considered the possibility of a similar descriptive-prescriptive endorsement disparity. Nevertheless, parallels exist between age and gender: Age groups are clearly interdependent, in the family and broader society. Moreover, resembling gender’s traditional power imbalances, age groups do not hold equal status: Across many domains, a curvilinear pattern emerges, with younger and older age taking a comparatively low-status backseat to middle-agers (e.g., in income level, entrepreneurship, and cultural exposure; Gerbner, 1998; Szafran, 2002; U.S. Census Bureau, 2009-a). Consequently, people of all ages perceive middle-aged people as the highest in status (ESS, 2008), and the most entitled to maximal societal resources (Garstka, Schmitt, Branscombe, & Hummert, 2004; Garstka, Hummert, & Branscombe, 2005). In other words, age groups take turns, at different levels of privilege.

Given middle-agers’ relative high-status security, and given the age-progression of resources—with older people at the front, potentially blocking that orderly sequence—we posit that younger people stand the most to gain from older people’s relinquishing or avoiding age-related resources. After all, younger people lack resources, whereas older people who already
had their turn are perceived as less entitled than middle-agers. Therefore, older people might face greater expectations to transition away from various forms of resource access, and might face backlash (similar to agentic women) when they overstep prescriptive boundaries—and earn reward when they adhere to them. Such a pattern would contradict research on descriptive elder stereotypes, whereby older people’s nonconformity often goes ignored, persistent even in the face of stereotype-incongruent behavior (Cuddy et al., 2005).

**Potential Domains of Resource-Based, Ageist Prescriptions**

Generational-tension themes in the ageism literature suggest probable sectors of prescriptive ageism. We focus on three overarching domains, though we acknowledge the possibility of other areas.

**Transition of Desirable Resources and Positions: Succession**

**Employment.** Recent job markets have increased layoffs, prolonged unemployment, postponed retirement, and fostered age-discrimination lawsuits (AARP, 2011; Elmer, 2009). All-too-common beliefs about older workers involve perceived inflexibility, resistance to change and training, and health problems (Loretto & White, 2006), despite evidence that job performance doesn’t decrease with age (Liden, Stillwell, & Ferris, 1996). From the perspective of younger people, elders’ delayed retirement limits their own opportunities, potentially intensifying prescriptions concerning older people’s prolonged employment.

**Wealth and influence.** Younger people might particularly resent elders’ political sway, given that younger people have much longer to live into a future over which they feel little control. The youth-advocacy group Americans for a Society Free from Age Restrictions argues that young-age voting restrictions reflect “taxation without representation”—restricting the political power of the young, who nevertheless are taxed on their income (ASFAR, n.d.). Older
people also comprise a substantially powerful, ever-growing voting bloc (Binstock, 2011). Additionally, older people tend to have more accumulated wealth than the young, and face the pejorative “greedy geezer” stereotype, persistent for centuries in Western culture (Covey, 1991).

**Depletion of Shared Public Goods: Consumption**

Common debates concerning a growing older population center on shared entitlements. With Medicare and Social Security both due to run out sooner than expected, many young people feel disproportionately disadvantaged by current resource distributions to older populations (Wolf, 2011). Despite the fact that children outnumber older people 2-to-1, elders enjoy greater governmental spending by a factor of 3 or 4, and 51 percent of social service expenditures (Howard, 2008; Minkler, 2006). Combined with concerns over societal burden (e.g., McFall & Miller, 1992), these concerns might exaggerate fears about the passive inconvenience posed by a growing older population.

**Symbolic, Cultural Assets: Identity**

Optimists forecast an enlarged older population to reinvent old age (Dychtwald, 1999)—presumably by acting in ways that are historically youth-related. But social psychology suggests caution: Older people who attempt to cross ingroup boundaries, such as trying to look younger, face backlash from the young (Schoemann & Branscome, 2010). Younger people are motivated to maintain generational boundaries: doing so maintains self and group-level esteem, asserts autonomy, and buffers the self from future adversity (Bytheway, 1995; Greenberg et al., 2002; Hagestad & Uhlenberg, 2005; Snyder & Miene, 1994; Tajfel & Turner, 1979).

**Research Overview**

Six experiments tested whether these prescriptive stereotypic expectations—punishing violators and rewarding adherers—particularly target elders and garner support from the young.
Studies 1-3 each presented a brief vignette describing a fictitious person in a Succession, Consumption, or Identity scenario, respectively. Each study’s between-subjects, six-condition design manipulated the character’s age (older, middle-aged, or younger) and behavior (either violating or adhering to a prescription corresponding with the relevant domain). Participants rated targets’ perceived warmth and competence—arguably fundamental dimensions of person perception (Fiske, Cuddy, & Glick, 2007).12

Studies 4-6 simulated behavioral analogues, with the same six-condition design, repeated once each for Succession, Consumption, or Identity. An apparently live, on-line target presented himself in ways similar to the vignette targets. Dependent measures added questions regarding participants’ expectations and enthusiasm for the upcoming interaction.

Analyses and Hypotheses

Two types of analyses examined the combined impact of participant (rater) age and target characteristics (age and behavior) on each dependent variable. The first primarily examined different-aged raters within each condition, whereas the second compared different ratings of targets.

Regressions gauging rater differences.13 First, simple slopes regressions examined whether rater age significantly moderated the impact of vignette condition on target perceptions (in other words, for each vignette target, whether younger and older raters differed in their trait ratings). For each condition, an interaction term was computed by multiplying a dummy variable

12 Technically, perceived target capability was the precise variable gauged in each experiment. However, because prior research shows “competence” and “capable” judgments to correlate highly (Cuddy, Fiske, & Glick, 2007), the two seem virtually interchangeable. Other dependent variables varied across studies, but for simplicity, we present the two that appeared consistently and behaved consistently across studies.

13 We also explored a curvilinear pattern of rater age for each DV, but this pattern was consistently nonsignificant.
(coded as 1 for the condition of interest, with the rest coded as 0) by the centered, continuous variable of participant age. Regressions then tested the significance of each simple slope, effectively testing whether rater age significantly predicted target rating within each condition relative to the other five.14 Per predictions, we expected younger and older raters to diverge in their older-target perceptions, but to converge for comparable middle-aged and younger ones.

**Orthogonal contrast ANOVAs gauging target differences.** As a follow-up analysis, ANOVAs examined differences between the six target ratings on a young-only subset of participants (at or below the median age, usually about 30).15 Weighted, a priori ANOVA contrasts16 expected the greatest polarization between the prescription-violating older target (-3) and the prescription-adhering older counterpart (+3), moderate polarization between comparable middle-aged targets (-2 for the violator, +2 for the adherer), and little difference between the two younger targets (-1, +1). Given these adherence-violation predictions, we present these means as z-scores—thereby showing judgments relative to the mean and emphasizing polarization.

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14 Because simple slope beta weights represent the relationship between rater age and DV within each condition relative to the other five, they should not be interpreted as the proportion of the variance account for by rater age overall (which is actually much greater within each condition in isolation).

15 In this chapter I report findings among the younger half of samples, due to their consistently polarized responses toward older targets. Among older raters, this specific pattern did not arise (polarization was almost nonexistent toward older targets, compared with that toward middle-aged and younger targets), nor did a clear overall pattern emerge; thus, we do not report these results.

16 We used weighted contrasts given specific predictions regarding polarization (punishment for the older, violating target and reward for the older, adhering target). Two-way ANOVAs testing for 3 (target age) x 2 (target behavior) interactions do yield largely similar, significant results; however, because contrast analyses allow for more focused analyses than omnibus ANOVAs followed by post-hoc tests (Rosenthal, Rosnow, & Rubin, 2000), this approach seemed best in guiding our analysis.
Studies 1-3: Vignette-based Trait Ratings\textsuperscript{17}

Method

Each sample was recruited on-line. For their participation, participants were paid a nominal amount.

**Participants.** The samples were similar: Study 1 ($N = 238$, 123 female, 75.5% White) featured an age range of 18 to 69 ($M = 33.23$, median = 31). Study 2 ($N = 140$, 88 female, 82.1% White) ranged in age from 19 to 68 ($M = 32.76$, median = 31). Study 3 ($N = 150$, 96 female, 76.7% White) spanned a slightly broader age range (18 to 72; $M = 32.23$, median = 28).

**Procedure.** In each study, participants agreed to complete a “social perceptions and attitudes” survey. In all cases, participants read about an older, middle-aged, or younger target in a vignette (Appendix A), which consisted of neutral background information followed by a manipulation, whereby the character either violates or adheres to a prescription corresponding with the relevant dimension. For Study 1 (Succession of enviable resources), the protagonist was described as being financially comfortable, but either stingy (“reluctant to lend or share his money”) or generous (“generally willing to lend or share his money”). For Study 2 (Consumption of shared resources), the vignette target had come down with a serious illness requiring a resource-intensive procedure; he then either “stubbornly” decided to go through with the procedure anyway (thereby violating over-Consumption) or else understandingly decided it was best to not go through with the procedure (adhering). Finally, Study 3 (symbolic Identity resources) described targets who either acted symbolically young (appreciating current pop artists, such as the Black-Eyed Peas) or symbolically old (appreciating “oldies” artists, such as Frank Sinatra).

\textsuperscript{17} These three studies appeared as part of my master’s thesis. However, I report them here for continuity’s sake, as they were foundational for Studies 4-6 reported in this chapter.
After reading the vignette, participants rated the vignette character’s capability and warmth on a 5-point scale (1 = not at all, 5 = extremely), and provided demographic information.

**Study 1 Results**

**Capability.** For the linear regressions, rater age significantly predicted perceived target capability within the stingy older-person condition, $\beta = .18$, $t = 2.65$, $p = .009$. Thus, younger people most often disrespected the older, Succession-violator as low in capability; progressively older participants became more forgiving. Conversely, rater age was a marginally significant inverse predictor of target capability within the generous older-person condition, $\beta = -.12$, $t = -1.72$, $p = .09$, and a marginally significant inverse predictor within the generous (middle-aged) condition, $\beta = -.13$, $t = -1.88$, $p = .06$. Thus, notably, the younger the rater, the more the Succession-adhering elder was respected. Rater age did not significantly or marginally predict perceived capability within any of the other conditions, all $p$’s > .10 (see Table 1).

Analysis on younger participants similarly demonstrated the most polarization toward the older target relative to the other targets. For participants median-aged and below, the predicted linear contrast was significant, $t(123) = 2.92$, $p = .004$. These younger participants indicated the greatest polarization in capability between the stingy ($M = -0.89$, $SE = 0.24$) and generous older target ($M = 0.23$, $SE = 0.21$; mean difference = 1.12). This difference was far greater than that toward the middle-aged (stingy $M = 0.57$, $SE = 0.19$; generous $M = 0.48$, $SE = 0.20$; mean difference 0.09) or younger targets (stingy $M = -0.01$, $SE = 0.22$; generous $M = -0.18$, $SE = 0.23$; mean difference 0.17)

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**Footnotes:**

18 In all analyses, we explored whether relevant demographic variables (gender, race) impacted target perceptions. However, aside from the age effects reported, no consistent demographic trends emerged.

19 To further test our predicted linear contrast pattern, as per Abelson & Prentice (1997), we also tested the significance of contrast residuals. However, a linear pattern emerged as easily the most consistent pattern across studies and DVs, so we report its significance only.
mean difference -0.17; see Figure 1).

**Warmth.** Rater age significantly predicted perceived target warmth within the older, stingy condition, $\beta = .14, t = 1.94, p = .05$, such that younger raters disliked the stingy old target more than older raters did. Rater age was neither a significant nor marginal predictor of target warmth within any of the other vignette conditions, all $p’s > .10$ (see Table 1).

Once again, taking only younger participants revealed a similar polarized pattern. The predicted contrast for the DV of warmth was again significant, $t(123) = 8.68, p < .001$. Younger participants indicated the greatest warmth polarization toward the elder protagonist based on his Succession behavior (stingy $M = -0.72, SE = 0.12$; generous $M = 1.01, SE = 0.12$; mean difference = 1.73). This polarization was greater than that toward the middle-aged target (stingy $M = -0.83, SE = 0.19$; generous $M = 0.61, SE = 0.16$; mean difference 1.44) and far greater than that toward the younger target (stingy $M = -0.56, SE = 0.13$; generous $M = 0.33, SE = 0.19$; mean difference = 0.89; see Figure 2).

**Study 2 Results**

**Capability.** Rater age significantly predicted perceived target competence within the older, stubborn condition, $\beta = .20, t = 2.20, p = .03$. Thus, younger raters were the most resentful of older, Consumption-violating Max; as participants grew progressively older, they became more forgiving. This opposite trend emerged for the other two
Table 1: *Regressions of Participant Age on Rated Traits of and Reactions to Older, Middle-Aged, and Younger Targets Violating and Adhering to Ageist Prescriptions*

<table>
<thead>
<tr>
<th>Prescription-Based Target</th>
<th>Older Violator</th>
<th>Older Adherer</th>
<th>Middle-aged Violator</th>
<th>Middle-aged Adherer</th>
<th>Younger Violator</th>
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</table>

Notes: 1. Higher standardized betas indicate that younger raters made more negative judgments and older raters made more positive ones: ***$p < .001$, **$p < .01$, *$p < .05$, +$p < .10$, ns = not significant. Beta weights represent the relationship between rater age and DV within each condition relative to the other five; thus, a significant simple slope indicates a difference from that of the other five conditions. It should not be interpreted as the proportion of the variance account for by rater age per se, which is actually much higher within each condition in isolation.

2. Across studies, the correlation between warmth and competence judgments ranged from .23 to .63. In Studies 4-6, correlations between trait ratings and interaction variables ranged from .28 to .46.

3. This table presents Identity violations for the middle-aged target in Studies 3 and 6 to represent the pop music condition, and adherences to represent the oldies music condition. This is for clarity’s sake only; one could easily argue the other way around, and we do not intend to make a strong claim about this here.
stubborn targets: Rater age was a significant inverse predictor of capability within the middle-aged, stubborn condition, $\beta = -.17, t = -1.95, p = .05$, and a marginally significant inverse predictor within the young-stubborn condition, $\beta = -.16, t = -1.75, p = .08$. Thus, for the middle-aged and younger consumption-violators, younger raters accorded them more respect for their capability than did older raters. Rater age did not significant predict within any of the understanding targets’ judged competence, regardless of age, all $p$’s > .05 (see Table 1).

Examining younger participants only (median age and below), the predicted contrast was marginally significant, $t(60) = 1.78, p = .079$. Younger participants perceived the older, stubborn target as the least capable ($M = -0.77, SE = 0.24$), whereas the understanding older target appeared most capable ($M = 0.52, SE = 0.20$; mean difference = 1.29). The polarization was virtually nonexistent toward middle-aged Max (stubborn $M = 0.02, SE = 0.32$; understanding $M = -0.079, SE = 0.35$; mean difference = 0.10) and substantially reversed for younger Max (stubborn $M = 0.54, SE = 0.17$; understanding $M = -0.37, SE = 0.42$; mean difference = -0.91; Figure 1).

**Warmth.** Rater age again significantly predicted within the older, stubborn condition, $\beta = .18, t = 1.99, p = .048$: younger participants were once again more likely to perceive Consumption-violating, older Max as low warmth than were older raters. Rater age was once again a marginally significant inverse predictor within the middle-aged, stubborn condition, $\beta = -.15, t = -1.69, p = .09$. Rater age was not a significant predictor within any of the other conditions, all $p$’s > .05 (Table 1).

Focusing on younger participants only, the predicted contrast was significant, $t(60) = 4.63, p < .001$. Younger participants perceived the older, stubborn target as the
least warm ($M = -0.78$, $SE = 0.19$) and far less warm than the older, understanding target, who was considered the highest in warmth ($M = 0.73$, $SE = 0.16$; mean difference = 1.51). The polarization was reduced toward middle-aged Max (stubborn $M = 0.40$, $SE = 0.30$; understanding $M = 0.31$, $SD = 0.28$; mean difference = 0.71) and younger Max (stubborn $M = -0.13$, $SE = 0.19$; understanding $M = 0.47$, $SD = 0.43$; mean difference = 0.60; Figure 2).

Study 3 Results

Capability. Rater age marginally predicted capability within the older, pop-music condition, $\beta = .16$, $t = 1.84$, $p = .068$. The younger participants were, the (marginally) less likely they were to perceive the identity-violating older Max as capable than were older raters. Rater age also significantly predicted capability within the middle-aged, pop-music condition, though in the other direction; that is, older participants were less forgiving of the middle-aged target’s
identity-violating behavior and saw him as less capable, \( \beta = -0.20, t = -2.19, p = .03 \). (We will come back to this point.) Rater age was not a significant or marginal predictor within any of the other conditions, all \( p \)'s > .10 (Table 1).

**Figure 2.** Z-Scored target warmth ratings as a function of target age and behavior. Positive scores indicate greater warmth. P-values represent t-tests relative to the mean: ***\( p < .001 \), **\( p < .01 \), *\( p < .05 \), +\( p < .10 \), ns = not significant.

Examining younger participants only, the predicted contrast was significant, \( t(89) = 2.51, p = .014 \). Younger participants perceived the older, pop-music target to be the least capable (\( M = -0.56, SE = 0.35 \)); this contrast with the older, oldies-music target, who seemed the most capable (\( M = 0.52, SE = 0.22 \); mean difference = 1.08). This polarization was far less toward middle-aged Max (pop-music \( M = 0.05, SE = 0.17 \); oldies \( M = 0.15, SE = 0.22 \); mean difference = 0.20) and younger Max (pop music \( M = -0.09, SE = 0.19 \); oldies \( M = 0.11, SD = 0.25 \); mean difference = 0.20; Figure 1).
**Warmth.** Participant age significantly predicted warmth within the older, pop-music condition, $\beta = .20$, $t = 2.23$, $p = .03$. Again, younger people viewed Identity-violating, older Max as the least warm, but as raters grew progressively older, they were more likely to grant him warmth. For all other vignette conditions, rater age was not a significant or marginal predictor of warmth rating, all $p$’s > .10 (Table 1).

Among younger participants, the contrast was again significant, $t(89) = 3.35$, $p = .001$. Younger participants perceived the older, pop-music target ($M = -0.32$, $SE = 0.29$) to be far less warm than the older, oldies target ($M = 0.69$, $SE = 0.12$, mean difference = 1.01). This polarization was greater than that toward middle-aged Max (pop music $M = -0.19$, $SE = 0.15$; oldies $M = 0.50$, $SE = 0.18$; mean difference = 0.69). Also in line with predictions, this warmth polarization was even less toward younger Max (pop music $M = -0.62$, $SE = 0.29$; oldies $M = -0.13$, $SE = 0.24$; mean difference = 0.50; Figure 2).

**Studies 1-3 Summary**

Overall, these vignette studies provide strong evidence that age-based prescriptions most substantially exist among younger people, and that they most notably target older people, as a function of their violation of or adherence to prescriptions. However, these studies are preliminary in that they gauge bias in a third-person, text-based manner and cannot make strong predictions about actual behavior. In other words, raters could have been communicating an abstract belief that they would not enact in person. Thus, the next three studies utilized a more involving environment to examine the impact of prescription-focused expectations.

**Studies 4-6: Simulated Interactions**

**Method**

**Participants.** Study 4 recruited undergraduates ($N = 137$, 89 female, 49.6% White) in
exchange for course credit. Although focusing on undergraduates in the lab limited the age range ($M = 19.25$, median = 19, $SD = 1.19$), it allowed testing for the robustness of the preliminary effects. Study 5 ($N = 157$, 109 female, 68.1% White; ages 17 to 78; $M = 29.94$, median = 25) and Study 6 ($N = 200$, 111 female; 80.0% White; ages 18 to 70, $M = 35.26$, median = 32.0) recruited on-line samples.

**Measures.** The same trait items used in the vignette studies (capability and warmth) measured reactions to the expected-interaction partner. In addition, behavioral items were included for each experiment (described next).

**Procedure.** In each study, participants expected to interact with another person. After viewing an initial on-line introduction from the other person (Appendix B), participants provided trait ratings (just described) and behavioroid ratings indicating the desirability of the upcoming interaction.

Study 4 (Succession) ostensibly gauged students’ perceptions of local community members and explored the utility of modern technology in interacting with the local community. Achieving both aims involved participants (allegedly) meeting and interacting with a local community member over webcam. The crux of this interaction was a purported trivia task, which participants believed would take place at the end of the session; moreover, a potential $50$ prize motivated participants to take the task seriously. As a first step, participants viewed a pre-recorded video introduction of their future acquaintance: a man named Max, resembling prior studies. This scripted introduction—presented in the form of an interview—was performed by a younger, middle-aged, or older actor of comparable appearance except for age. Max’s self-portrayal either adhered to Succession (financially assisting other-generation relatives) or violated it (reluctant to do so).
Study 5 (Consumption) represented a study of “online first impressions,” which ostensibly involved meeting a randomly assigned person in an online chat room. For increased believability, participants customized their own screen name, provide a self-introduction for the other person to read, and experienced pauses indicating that the chat room was “loading.” Resembling prior studies, participants encountered a person with the screen name “Max.” Like Study 2, Max explained his impending resource-intensive medical treatment, and either adhered to or violated Consumption prescriptions. Afterwards, participants rated Max on the noted traits, as well as two key behavioral items indicating the extent to which he was desirable for further interaction.

For Study 6 (Identity), participants agreed to participate in an online “local community study,” taking place in Hamilton, New Jersey and “working with local businesses to gauge people’s anonymous perceptions of our community members.” This ostensibly involved learning about a person local to the researchers via an email introduction, and having the opportunity to contact him. Tactics similar to Study 5—a customizable login name and “loading” pauses—added realism to the paradigm. Also resembling prior studies, participants read an email from a person named “Max [last name withheld].” Like Study 3, Max portrayed himself as either adhering to or violating Identity in the context of music appreciation.

**Study 4 Results**

Because Study 4’s undergraduate sample did not feature a wide age range, no age-regressions would be meaningful; however, like prior studies, a set of a-priori contrasts assessed the predicted effects among the young participants.

**Capability.** The predicted orthogonal contrast was significant, $t(131) = 2.06, p = .04$. Younger raters who encountered the older, stingy target viewed him as significantly less capable
than did participants who met the older, generous one ($M = 0.44$, $SE = 0.18$; mean difference = 0.75). However, little difference emerged between the two middle-aged targets in capability rating (stingy $M = 0.26$, $SE = 0.24$; generous $M = 0.12$, $SD = 0.27$; mean difference = -0.14), and ratings were identical for the two younger targets (both stingy and generous $M = -0.22$, $SE = 0.19$; Figure 1).

Warmth. The contrast was also significant for the DV of warmth, $t(131) = 7.11$, $p < .001$. Participants viewed the older, stingy target as much less warm ($M = -0.54$, $SE = 0.17$) than the older, generous one ($M = 0.90$, $SE = 0.18$; mean difference =1.44). To a lesser extent, these analyses also demonstrated participants to view the middle-aged, stingy target as less warm ($M = -0.55$, $SE = 0.20$) than the middle-aged generous target ($M = 0.28$, $SE = 0.22$; mean difference = 0.83). Participants also viewed the younger, stingy target as less warm than the younger, generous target, but here the difference was even smaller (stingy $M = -0.47$, $SE = 0.18$; generous $M = 0.14$, $SE = 0.11$; mean difference = 0.61; Figure 2).

Behavioral interaction expectancy. A variable comprising three collapsed items (“How much rapport do you anticipate having with the other person?”; “How useful do you feel your partner will be in the trivia challenge?”; “How well do you think you will be able to work with the other person on the trivia task?”; $\alpha = .62$) gauged participants’ expectations for the anticipated interaction. With this dependent variable, the predicted orthogonal contrast was significant, $t(131) = 3.32$, $p < .001$. Resembling the familiar pattern, participants held the lowest expectations for the interaction with stingy, older Max ($M = -0.38$, $SE = 0.22$), and the highest expectations for generous, older Max ($M = 0.48$, $SE = 0.18$; mean difference = 0.86). Like results for capability and warmth, the analogous comparison for middle-aged Max was smaller (stingy $M = -0.26$, $SE = 0.24$; generous $M = 0.32$, $SE = 21$; mean difference = 0.58). This difference was
inconsequential toward younger Max (stingy $M = -0.17, SE = 0.18$; generous $M = -0.06; SE = 0.18$; mean difference = 0.11; Figure 3).

![S4: Succession Interaction](image1)
![S5: Consumption Interaction](image2)
![S6: Identity Interaction](image3)

*Figure 3. Z-Scored interaction anticipation ratings as a function of target age and behavior. Positive ratings indicate greater desire to interact. P-values represent t-tests relative to the mean: ***$p < .001$, **$p < .01$, *$p < .05$, $^\dagger p < .10$, ns = not significant.*

**Study 5 Results**

**Capability.** Rater age was a marginally significant predictor of perceived target capability within the older, stubborn condition, $\beta = .15, t = 1.70, p = .09$. The younger participants were, they less they tended to perceive the Consumption-violating older Max as capable than did older raters. Rater age was not a significant or marginal predictor within any of the other conditions, all $p$’s > .10 (Table 1).

Focusing on younger participants only, the predicted contrast was nonsignificant, $t(115)$ = 1.10. Participants viewed little difference in capability between any of the targets; stubborn, older Max ($M = -0.10, SE = 0.22$) was perceived as slightly less capable as understanding older Max ($M = -0.30, SE = 0.22$; mean difference = 0.20), as was younger Max (stubborn $M = 0.08, SE = 0.24$; understanding $M = -0.18, SE = 0.25$; mean difference = 0.26) and middle-aged Max (stubborn $M = 0.39, SE = 0.25$; understanding $M = 0.18, SE = 0.18$; mean difference = 0.21). Moreover, none of these means was significantly different from the overall midpoint (i.e. mean)
of 0 (Figure 1). These isolated null findings are discussed further below.

**Warmth.** Rater age significantly predicted perceived target warmth within the older, stubborn condition, $\beta = .17$, $t = 1.95$, $p = .05$. As participants were progressively younger, they were significantly less likely to grant the Consumption-violating older Max as warm. Rater age did not significantly or marginally predict target warmth within any of the other conditions, all $p$’s > .10 (Table 1).

For younger participants only, the contrast was significant for the DV of warmth, $t(115) = 3.63$, $p < .001$. Younger participants perceived the older, stubborn target as less warm ($M = -0.48$, $SE = 0.23$) than his understanding counterpart ($M = 0.28$, $SE = 0.19$; mean difference = 0.76). The polarization was slightly smaller toward the two versions of middle-aged Max (stubborn $M = -0.26$, $SE = 0.21$; understanding $M = 0.37$, $SE = 0.23$; mean difference = 0.63) and those of younger Max (stubborn $M = -0.42$, $SE = 0.25$; understanding $M = 0.18$, $SE = 0.24$; mean difference = 0.60; Figure 2).

**Behavioral interaction preference.** A two-item variable (“To what extent would you prefer to ignore Max altogether?”; “Would you recommend to others that they ignore Max?”) gauged participants’ interest (or lack thereof) in the potential interaction. This variable was reverse-scored to better match Study 4’s behavioral interaction variable (i.e., so that higher scores signaled greater desire for interaction, much as higher scores in Study 4 reflected greater expectancy for the interaction). From this perspective, younger participants were again more resentful of the prescription-violating target than were older participants: rater age was a significant predictor of interaction interest within the older, Consumption-violating condition, $\beta = .19$, $t = 2.17$, $p = .03$—demonstrating that the younger the rater, the more they wanted to ignore him. Rater age was not a significant or marginal predictor of interaction desire within any of the
other conditions, all $p$’s > .10 (Table 1).

Among younger participants only, the predicted contrast was marginally significant, $t(115) = 1.80, p = .08$. Younger participants were less likely to desire interaction with the older, stubborn target ($M = -0.42, SE = 0.27$) than with the older, understanding target ($M = 0.01, SE = 0.17$; mean difference = 0.43). The polarization was virtually nonexistent toward the two versions of middle-aged Max (stubborn $M = 0.24, SE = 0.19$; understanding $M = 0.28, SE = 0.19$; mean difference = 0.04), but comparable to that toward younger Max (stubborn $M = -0.40, SE = 0.21$; understanding $M = 0.15, SE = 0.22$; mean difference = 0.55; Figure 3).

**Study 6 Results**

**Capability.** Rater age significantly predicted perceived target capability within the older, pop-music condition, $\beta = .19, t = 2.45, p = .015$. The older participants were, they more likely they were to perceive the Identity-violating older Max as capable than were younger raters. Rater age also significantly predicted target capability in the other direction within the older, oldies condition, $\beta = -.18, t = 2.38, p = .019$. Rater age was not a significant or marginal predictor within any of the other conditions, all $p$’s > .10 (Table 1).

Focusing on younger participants only, the predicted contrast was significant, $t(95) = 3.52, p < .001$. Pop-music older Max ($M = -0.26, SE = 0.20$) was perceived as less capable than oldies-music older Max, who was well above the mean in perceived competence ($M = 0.68, SE = 0.15$, mean difference = 0.94). However, this effect was less pronounced for the comparable middle-aged targets; whereas pop-music middle-aged Max was below the mean in competence ($M = -0.18, SE = 0.22$), oldies-music Max was above the mean ($M = 0.27, SE = 0.22$, mean difference = 0.45). Likewise, both pop-music younger Max ($M = -0.10, SE = 0.33$) and oldies-music younger Max ($M = -0.02, SE = 0.19$, mean difference = 0.08) were right around the mean.
Warmth. Rater age marginally predicted perceived target warmth within the older, stubborn condition, $\beta = .14$, $t = 1.79$, $p = .075$. As participants were progressively younger, they were significantly more likely to grant the Identity-violating older Max as warm. Rater age did not significantly or marginally predict target warmth within any of the other conditions, all $p$’s $>.10$ (Table 1).

Among younger participants, the predicted orthogonal contrast was significant, $t(95) = 2.14$, $p = .038$. Younger participants perceived the older, pop music target as less warm ($M = 0.37$, $SE = -.20$) than his oldies counterpart ($M = 0.67$, $SE = .14$, mean difference $= 0.30$). The polarization was smaller than that toward the two versions of middle-aged Max (pop $M = -0.36$, $SE = 0.22$; oldies $M = 0.26$, $SE = 0.26$, mean difference $= 0.62$) but larger toward that toward younger Max (pop $M = -0.03$, $SE = 0.27$; oldies $M = 0.004$, $SE = 0.15$, mean difference $= 0.03$; Figure 2).

Behavioral interaction preference. The same two-item behavioral variable as Study 5 assessed participants’ desire to interact further with the various targets. Regressions yielded no significant simple slopes (though resembling prior trends, rater age most strongly predicted interaction desire in the older-violating condition, $\beta = .10$, $t = 1.25$, $p = .21$). Nevertheless, focusing on younger participants only, the predicted contrast was significant, $t(95) = 2.25$, $p = .027$. Younger participants were most likely to want to interact with the older, oldies target ($M = 0.50$, $SE = 0.19$), more so than the older, pop target ($M = -0.04$, $SE = 0.16$, mean difference $= 0.54$). The polarization was smaller toward the two versions of middle-aged Max (oldies $M = 0.03$, $SE = 0.25$; pop $M = -0.20$, $SE = 0.26$, mean difference $= 0.23$) and those of younger Max (oldies $M = -0.16$, $SE = 0.17$; pop $M = -0.41$, $SE = 0.42$, mean difference $= 0.25$; Figure 3).
General Discussion

Six studies provided a foundation for a prescriptive approach to ageism, implicating the young as primary perpetrators. Results across studies indicated that younger people care disproportionately about whether older people abide by prescriptions. Concerning succession of enviable resources between generations (wealth; Studies 1 and 4), depletion of the shared resource pool (healthcare assets; Studies 2 and 5), and adoption of symbolic, youth-centric resources (music; Studies 3 and 6), older targets faced the most extreme reactions, compared to other-aged targets who behave similarly.

Five out of the six studies (Study 4’s undergraduate sample being the exception) featured a relatively wide participant-age range; this allowed regressions testing the impact of rater age on prescriptive ageism. Across the board, these experiments found younger raters (as compared with older raters) to view prescription-violating older people as lower in capability and warmth (Table 1’s first column). This pattern did not occur toward any of the other five targets on either trait dimension, and in seven of 30 cases, it reversed (Table 1’s columns 2-6). Thus, as participants grew progressively older, they became more forgiving of the older target’s prescription-violating behaviors; moreover, younger raters apparently did not care as much about how the middle-aged or younger target behaved.

All six experimental studies featured a substantial number of younger participants, allowing us to test further whether these raters would care the most about an older target’s prescription-concordant behavior. Using an a-priori-contrast approach, the clear majority of tests confirmed the general hypothesis that older targets would garner the greatest rating polarization—that is, the greatest combination of punishment for violation and reward for adherence—from these younger raters.
For judgments of capability, the approval gap between the older adherer and violator was larger than that between comparable middle-aged targets in five out of six cases, and larger than between younger targets five out of six times (Figure 1). (The one exception, Study 5, featured an online chat room and may have presented an unexpected contamination; older adults who appear comfortable navigating online chat rooms might already seem surprisingly competent, given the stereotype that older people are not comfortable with modern technologies.)

Judgments of warmth followed suit, with older targets garnering greater polarization than younger targets in all six experimental studies, and greater polarization than middle-aged targets in all but one experiment (Figure 2). (In the one exception, Study 6, the older, pop-music target was above the mean in warmth; this could have been caused by the study’s community-service frame. In this context, young participants might have come to perceive the older target as worthy of pity.) Ultimately, these capability and warmth patterns further demonstrate the young’s apparent preoccupation with older targets’ abiding by ageist prescriptions.

Finally, the last three studies (Studies 4-6) yielded support in the context of an expected interaction. When asked how much they preferred to interact further with targets (Studies 5 and 6), younger participants again were more negative than were older raters toward the older, prescription-violating targets (this pattern was significant for Study 5 and trended for Study 6; Table 1, column 1). Notably, this pattern did not emerge for any of the other five targets. Moreover, contrast analyses on the younger participants only—including Study 4’s young-only sample—found that the polarization in interaction ratings was greatest toward the older target as compared to the middle-aged target in all three cases. This polarization was greater than that toward the younger target in two out of three cases (Figure 3).

The Perpetrators: The Young as Most Endorsing of Prescriptive Ageism
As noted, extant ageism research focuses on common, descriptive stereotypes of older people—implicating people of all ages as upholding these beliefs. By contrast, a prescriptive focus finds consistent disparity in endorsement between age groups, with the young emerging as the greatest perpetrators of age-based “shoulds.” This asymmetry in descriptive-versus-prescriptive endorsement parallels findings on other social groups: consensus regarding stereotypic description, but ingroup/outgroup differences concerning the prescription.

The Targets: Novel Elder Subtypes and “Hostile Ageism”

A prescriptive ageism approach also presents novel subtypes of its older targets. Like ageism research in general, extant work on elder subtypes has derived primarily from descriptive stereotypes: the kindly “grandfather,” the dignified “elder statesman,” the lonely “senior citizen”—as well as the healthy “young-old” versus the less active “old-old” (Brewer, Dull, & Lui, 1981; Neugarten, 1974). By contrast, a prescriptive standpoint presents elder subtypes that derive from notions of where older people allegedly should belong. Adhering to these expectations fosters reward, but at the same time violations can foster backlash, or “hostile ageism,” which the ageism literature has seldom considered (North & Fiske, 2012).

The first subtype derives from the domain of Succession, and forms when older people either do or do not adhere to the notion that they should step aside to help younger generations (Studies 1 and 4). For better or for worse, this prescription applies primarily to older people, who are perhaps viewed as not entitled to enviable resources as much as younger generations. One potential explanation why younger people are Succession’s primary subscribers is that they are the ones who stand to benefit the most from the passing along of resources, as the age sequences progresses, and as young people are the lowest in resources.

The second elder subtype stems from Consumption: notions that older people should not
deplete a disproportionate amount of shared resources. In the scenario of a medical dilemma, younger participants were the most motivated to limit elder resource depletion, even with health at stake (Studies 2 and 5). Unfortunately, too often older people are in fact perceived as burdensome drains on society and families alike (e.g., Montgomery, Gonyea & Hooyman, 1985). More currently, debates over the best allocation of shared healthcare or social security resources become especially heated when generational equity issues are made salient (North & Fiske, 2012).

The final subtype derives from Identity. Identity prescriptions have the potential to affect people of any age group, but the current suggests that older people are particularly likely to face resistance from the young for unwelcome invading of ingroup territory (Studies 3 and 6). More spared from this backlash are the middle-aged, whose age-incongruent ways may be perceived as less threatening. Indeed, researchers suggested that younger people strive to maintain psychological distance from older people in particular, barring them from their own “youth culture” (Greenberg et al., 2002; Hagestad & Uhlenberg, 2005).

These prescriptive elder subtypes build upon established theory on stereotype content. As noted, default, descriptive perceptions of older people involve warmth but incompetence, or pity (Fiske et al., 2002). Nevertheless, the prescription-based findings here suggest that other emotions may be at play: When elders do not cede resources, they risk facing low-warmth/low-competence contempt or low-warmth/high-competence envy. In this sense, as is the case with sexism (Glick & Fiske, 1996), ageism’s typically benevolent nature can transform into a more hostile form when targets get “uppity.” On the other hand, when elder prescription adherence successfully aids younger generations, perceptions of high-warmth/high-competence pride may result.
Broader Contributions of a Prescriptive Ageism Approach

Classic social psychological research shows that outgroup members—possessing less complex representations for perceivers—are particularly likely to garner polarized perceptions (Linville & Jones, 1980). However, the current work suggests that the case of age is more nuanced, with one outgroup (elders) garnering far greater polarization than another outgroup (middle-agers) in the eyes of the young. This consistent pattern not only speaks to age’s inherent complexity (in that different outgroups may be perceived differently), but also suggests that—going beyond a mere cognitive basis—prescriptive ageism considers an intergroup motivational basis for age group stereotyping.

Also significant is the current approach’s relationship with classic theories of resource-driven prejudice, such as Realistic Group Conflict Theory (Sherif, Harvey, White, Hood, & Sherif, 1961). From an RGCT standpoint, one might expect the middle-aged to be most targeted by the young, as they have the most to give up and benefit the ingroup. But, as noted, the findings suggest the reverse pattern: older outgroup members are targeted more often than middle-aged outgroup members. In addition, RGCT doesn’t speak to the idea of rewarding outgroups for adhering to expectations (as the current results suggest), nor would it speak to the current findings’ emphasis on symbolic (Identity) resources. Thus, from this standpoint, too, prescriptive age-based prejudice presents considerable idiosyncrasies.

Limitations and Future Directions

Cross-cultural differences. This research centered on ageist attitudes of U.S. participants, limiting the ability to unpack potential cross-cultural differences. Although lay views believe collectivist cultures hold their elders in higher regard (e.g., valuing wisdom), recent evidence suggests some forms of ageism may be pan-cultural (Cuddy, Fiske, Kwan et al.,
A prescriptive ageism approach presents unique opportunities for cross-cultural investigations, focusing on beliefs about intergenerational resource allocation.

**Gender differences.** Another limitation is that experimental paradigms used only a male target. The potential moderating effect of target gender is a largely unresolved question, both here and in the broader literature: Younger people may view older women more positively than older men (Narayan, 2008), but other work suggests a grimmer situation for older women (Nuessel, 1982). More evidence is needed to make conclusive statements about the nature of any older-target gender effects, especially from a prescriptive standpoint.

**Elder subtype differences.** Potentially, different prescriptions might target different elder subcategories (North & Fiske, 2013-b). For instance, Succession may most often target the young-old, who are closer to traditional retirement age; meanwhile, Consumption may more frequently target the old-old (some might argue that resources should not be squandered on people without much longer to live). Moreover, depending on context, the definition of “old” may be quite young in lifespan terms—for instance, in professional sports, 40 may signify old age. Future research should more systematically test prescriptive ageism differences between ages and across contexts—including perceptions held by old-old participants, absent from this chapter’s online samples.

**Anti-young ageism.** Although here we focus mostly on older people’s plight, prescriptive ageism potentially targets people of all ages. Future research warrants exploring prejudice aimed at the young in particular, as evidenced by enduring comparable forms of discrimination (e.g., patronization). Prescriptively, perceptions of what the young deserve are equally important as what the old deserve, given rapidly shifting age dynamics and a constrained

**Positive prescriptive stereotypes.** This chapter’s prescriptive focus admittedly takes a slightly negative tone, stating that elder violations of prescriptive stereotypes will yield a degree of resentment. However, we acknowledge the possibility of positive prescriptive stereotypes targeting elders, perhaps concerning expectations for them to be happy, content, or wise. Much as consequences of “positive ageism” have been shown to benefit elders (e.g., practical benefits and discounts; North & Fiske, 2012), future work may similarly unearth beneficial outcomes of age-based expectations.

**Conclusion**

This chapter supports a prescriptive approach to ageism, implicating primarily younger perpetrators and older targets. We do not argue that Succession, Consumption and Identity compose the only potential prescriptive stereotypes held by the young toward the old (nor do they cover prescriptive stereotypes in the other direction). Nevertheless, going beyond descriptive ageism emphasizes how perceiver age shapes disparate ageist tendencies. This introduces distinct elder subtypes that result from older people’s violation or adherence to prescriptive stereotypes, and introduces novel approaches for future research on the understudied topic of ageism.
CHAPTER 4: ENOUGH TO GO AROUND: PERCEIVING RESOURCES ABUNDANCE REDUCES PRESCRIPTIVE AGEISM

The world’s older population is growing at an unprecedented rate, generating concerns about whether societies can manage (Nelson, 2004). In the United States, common fears center on the long-term sustainability of governmental programs, such as Social Security and Medicare (Carstensen, 2011). The graying population has already had a significant impact on labor trends: retirement has increasingly been delayed, age discrimination cases have risen by 66%, and unemployment rates have disproportionately affected the oldest potential workers (Kreamer, 2012). As dire as the situation may seem currently, many predict that things will get even worse for the younger generation if nothing changes; themselves facing even higher levels of unemployment (Bureau of Labor Statistics, 2013), and the possibility of not reaping the future-oriented social programs that they have helped sustain, some argue that they represent “Generation Screwed” (Kotkin, 2012).

Despite the urgency of the issue, the psychological sciences rarely cover intergenerational resource tensions (see North & Fiske, 2012, for a review)—much less how such tensions will play out in the future. Nevertheless, recent work does suggest that the young currently harbor prescriptive expectations to limit older people’s use of societal resources across three domains: active Succession of enviable assets (e.g., wealth, jobs), passive Consumption of shared assets (e.g., healthcare), and symbolic Identity activities (e.g., music). When presented with variously-aged targets, younger people exhibit the greatest polarization toward elders—punishing them the most when they violate prescriptive expectations, but rewarding them the most when they adhere
to them (North & Fiske, 2013-a; Chapter 3). Regardless, we do not know whether the perceived availability of resources shared between generations influences these prescriptive biases.

The impact of resource perceptions on ageism is also worth addressing from a prejudice reduction standpoint—an area in which researchers have called for more focused attention (Paluck & Green, 2009). Classic psychological theory—most notably Realistic Group Conflict Theory (Sherif et al., 1961)—characterizes prejudice in general as resulting from competition over resources. Although notions of zero-sum competition continue to be implicated in fostering prejudice (e.g., Norton & Sommers, 2011), scant work examines the potential of manipulating these perceptions to reduce it. The current explores this possibility in the domain of age-based prejudice, where as noted zero-sum narratives are becoming quite common.

**Research Overview**

Three experiments shift the salience of resources (either limited or abundant) as a means of shifting ageist bias among the young, concerning Succession, Consumption, and Identity, respectively.

**Study 1: Reducing Succession Bias**

**Method**

*Participants.* Younger participants \( N = 60; \) age = 18-30; mean age = 23.03, \( SD = 3.72, \) median = 22; 47 female) participated via Amazon Mechanical Turk and a university paid-experiments website. The ethnic distribution of the participants was 68.3% White/European American, 13.3% East Asian/East Asian American, 5.0% Latino/Hispanic American, 1.7% Black/African American, 1.7% South Asian/South Asian American, and 10.0% identified as “Other” or mixed ethnicity.

*Procedure.* Participants agreed to participate in a “current events and professional profile
Participants first read a brief newspaper article concerning the growing older population in the United States and resulting implications for available jobs and assets. One of two possible frames appeared (see Appendix C): In the *scarce* condition, the article emphasized how the enlarged older population signifies that “there simply won’t be as much to go around” between generations. In the *abundant* condition, the article put a more positive spin on shifting age dynamics, stating that “there should be plenty to go around” even with more older people. After reading the article, as a manipulation check, participants summarized the article in a few sentences to ensure that they understood it and read it carefully.

Afterward, participants completed an ostensibly separate part of the study, reading a “network member’s profile” from a professional database. The profile always concerned a 71-year-old man named “Max,” who acknowledges that his continued employment is preventing younger employees from getting hired, but two distinct conditions manipulated Max’s behavior concerning succession of enviable resources: in the *violating* condition, Max states that he’s “not retiring anytime soon” and is “not ready to step aside yet”; in the *adhering* condition, Max concedes that “it’s probably time to step aside.” Thus, the overall 2 x 2 design of the experiment manipulated resource salience via the newspaper article (scarce, abundant) and Succession-based behavior via the chat room (violating or adhering to Succession of enviable employment).

A 6-item behavioroid variable gauged participants’ desire to interact further with Max in the context of the professional profile task ($\alpha = .86$): “Would you be willing to interact further with Max after the study is over?”; “Would you be willing to write and send Max a supportive message?”; “Would you prefer to ignore Max altogether?” (reverse-scored); “If you were to interact further, how likely would you be to say mean things to Max?” (reverse scored); “Would you recommend other participants in this survey to interact with Max?”; “Would you suggest to
other participants in this survey that they ignore Max” (reverse-scored). Participants responded using a 5-point Likert scale (1 = very unlikely; 5 = very likely). Participants were thoroughly debriefed, informed that the article had been edited, and that no quiz would occur.

**Results**

Surprisingly, no significant main effect emerged for adhering/violating SIC-based behavior on the dependent variable of interaction appeal, $F < 1$ (this result persists across studies, so we address this in the Discussion). Additionally, no main effect of scarcity emerged, $F < 1$.

However, a significant 2 (scarcity) x 2 (behavior) interaction emerged, $F(1, 60) = 4.79, p = .033, \eta_p^2 = .08$ (see Figure 1). When resources appeared scarce, participants’ desire to interact with refusing-to-retire Max was considerably lower ($M = 2.61, SD = 0.67$), compared with planning-to-retire Max ($M = 3.33, SD = 0.52$), $t(32) = 3.43, p = .002$. By contrast, resource abundance appeared to mitigate this difference, such that non-retiring Max ($M = 3.64, SD = 1.04$) did not differ from retiring Max ($M = 3.49, SD = 0.81$) in interaction appeal, $t(24) < 1$.

**Study 2: Reducing Consumption Bias**

**Method**

**Participants.** Younger participants ($N = 62$; age = 18-31, mean age = 25.21, $SD = 3.85$, median = 25.50; 29 female) participated via either Amazon Mechanical Turk or an undergraduate participant pool. The ethnic distribution of the participants was 79.0% White/European American, 6.5% Black/African American, 3.2% East Asian/East Asian American, 3.2% Latino/Hispanic American, 3.2% Native American/American Indian, and 4.8% identified themselves as “Other” or of mixed ethnicity.

**Procedure.** The procedure was identical to the prior study, but concerning Consumption of shared resources. First, a brief newspaper article created a “scarce” versus an “abundant”
condition (see Appendix C). Then, as before, participants read a professional profile depicting Max—this time 74 years old, and having come down with a “pretty serious illness” requiring a resource-intensive treatment. In the Consumption-violating condition, Max decides to go through with the burdensome, resource-consuming procedure anyway; in the adhering version, he

Figure 1. Elder target interaction appeal as a function of SIC adherence and perceived resource scarcity. **p < .01, * p < .05, + p < .10.
decides it is best for everyone if he does not go through with the procedure.

Based upon this brief depiction, participants rated their interaction desire using the same 6-item variable ($\alpha = .90$ for this dataset) on a 5-point Likert scale as in Study 1.

**Results**

Like Study 1, no significant main effects emerged for SIC-based behavior or scarcity (both $F$s < 1) on the dependent variable of interaction appeal.

However, a significant 2 (scarcity) x 2 (behavior) interaction emerged, $F(1, 62) = 4.48$, $p = .039$, $\eta^2_p = .07$ (see Figure 1). Under resource scarcity, participants’ desire to interact with Consumption-violating Max ($M = 3.22$, $SD = 0.97$) was lower than their desire to interact with Consumption-adhering Max ($M = 3.85$, $SD = 0.70$), $t(34) = 2.27$, $p = .029$. However, under conditions of resource abundance, participants did not differ in their desire to interact with violating Max ($M = 3.68$, $SD = 1.04$) versus adhering Max ($M = 3.35$, $SD = 0.82$), $t(23) < 1$.

**Study 3: Reducing Identity Bias**

**Method**

*Participants.* As with Studies 1 and 2, younger participants ($N = 53$; age = 19-30, mean age = 23.19, $SD = 3.60$, median = 22; 33 female) were recruited from Amazon Mechanical Turk and a university experiments website. The ethnic distribution of the participants was 71.7% White/European American, 7.5% East Asian/East Asian American, 5.7% Black/African American, 3.8% Latino/Hispanic American, 3.8% Middle Eastern, and 7.5% identified as “Other” or mixed ethnicity.

*Procedure.* The procedure of Study 3 mirrored that of Studies 1 and 2, ostensibly asking participants to complete an online “current events and professional profile study,” which randomly assigned participants to a scarce resource versus abundant resource condition, via
newspaper article (see Appendix C).

The main difference was Max’s profile, which focused on symbolic, Identity resources (rather than enviable, Succession-based ones or shared Consumption ones). In the violating condition, Max conspicuously declared his affinity for the latest pop music—a threat to symbolic young territory. By contrast, the adhering version did much the same, but for oldies music. Thus, like Studies 1 and 2, Study 3 composed a 2 (scarce versus abundant availability of Resources) x 2 (target violation versus adherence to Identity) design.

Dependent measures were also the same as those in Studies 1 and 2. Participants rated their desire to interact with Max using the same 6-item variable (α = .86 for this dataset) on the same 5-point Likert scale.

**Results**

Like Studies 1 and 2, no significant main effects emerged for SIC-based behavior \([F(1, 53) = 1.32, p = .26]\) nor scarcity \((F < 1)\) on the dependent variable of interaction appeal.

However, a significant 2 (scarcity) x 2 (behavior) interaction again emerged, \(F(1, 53) = 4.88, p = .032\), partial \(\eta^2 = .09\) (see Figure 1). Facing resource scarcity, participants’ desire to interact with Identity-violating, pop-music Max \((M = 3.11, SD = 1.02)\) was marginally lower than that concerning Identity-adhering, oldies-music Max \((M = 3.90, SD = 0.84)\), \(t(19.99) = 1.99, p = .06\). In contrast, under conditions of resource abundance, participants did not differ in their desire to interact with pop-music Max \((M = 3.60, SD = 0.90)\) versus oldies-music Max \((M = 3.36, SD = 0.57)\), \(t(29) < 1\).

**General Discussion**

Three studies demonstrated the impact of perceived resource scarcity on simulated intergenerational interaction. The same general pattern emerged across studies: When resources
appeared scarce between generations, younger participants tended to be polarized toward older targets—viewing them favorably when they adhere to resource-based prescriptions, but negatively when they violate those expectations. This result replicates prior polarized findings (North & Fiske, 2013-a; Chapter 3), which also show that the prescriptions target the old, rather than the middle-aged or young. However, when circumstances suggested enough resources to benefit all generations, this prescriptive bias dissipated, with participants viewing elder SIC-violators and adherers equally. This pattern held for prescriptions concerning the enviable position of employment (retiring versus not retiring; Study 1), the shared resource of healthcare (undergoing versus not undergoing a resource-intensive medical procedure; Study 2), and the symbolic behavior of music appreciation (pop versus oldies music; Study 3). These findings mirror prior work showing that ageism arises under apparent intergenerational inequity (Garstka, Hummert, & Branscombe, 2005), albeit from a prescriptive standpoint.

Surprisingly, main effects did not emerge for prescription violations versus adherences, in contrast with prior findings. However, prior research may differ because—in the absence of newspaper articles about resources—default prescriptions direct older people to step aside. By contrast, in the current context of exaggerating resource scarcity or abundance, perhaps resource availability became the more salient factor in shaping perceptions. Moreover, prior work shows the greatest polarization toward older SIC violators and adherers, thereby capturing default background perceptions of resource scarcity, whereas the current work pertains to more extreme contexts in both directions.

Regardless, the current findings suggest that intergenerational resource reframing is a potentially effective method for reducing ageism. Considering the relative regularity of intergenerational interaction, age-based prejudice reduction strategies are comparatively rare in
the literature. The exceptions tend to fall into two overall strategies: (1) contact and (2) education. Contact approaches—such as the shared-site intergenerational program (IG), which pairs after-school-care and nursing-home settings—aim to foster positive young-old interactions (Jarrott, Gigliotti, & Smock, 2006). Educational methods often include introducing gerontology into the school curriculum to enhance knowledge of the aging process. However, the overall results of both methods have been mixed, failing to increase positivity toward cross-generational interaction (Dorfman, Murty, Ingram, & Li, 2007) and failing to assuage feelings of mortality salience (Griff, Lambert, Dellman-Jenkins, & Fruit, 1996).

By contrast, the current findings suggest that broader, constructive generational messages, which are less threatening, may encourage greater intergenerational harmony. Although doomsayers believe that a graying population will present numerous challenges in realms of generational equity, optimists counter that constructive approaches and creative reform can beget positive intergenerational outcomes (North & Fiske, 2012; Whitbourne & Willis, 2006). Moreover, recent findings indicate that zero-sum narratives are greatly overblown—such as in the realm of labor, where employment rates between young and old are actually positively correlated (Pew Charitable Trust, 2012). If society is to accommodate a historically large and influential older population, constructive solutions based on valid information will be the most beneficial—especially given the positive outcomes associated with intergenerational connectedness (Hershfield et al., 2011, 2012).
CHAPTER 5: EASTERN AND WESTERN ATTITUDES TOWARD ELDERS: A CROSS-CULTURAL META-ANALYSIS

As indicated throughout this dissertation, the older population is growing rapidly around the world. By the year 2050, estimates predict that the global over-65 population will nearly triple (U.S. Census Bureau, 2009-b). Given these near-universal demographic trends, the issue of how societies across the globe will view, treat, and accommodate their elders is gaining worldwide attention (e.g., Olshansky, Biggs, Achenbaum, et al., 2011).

This global nature of the issue also speaks to prevailing research themes in psychology. Since the 1970s, cross-cultural comparisons of human thought have proliferated, spawning new journals and prominent psychological sub-fields (Heine, 2010; Nisbett, 2003). More recently, in a smaller but growing subfield, psychologists have issued a call for greater focus on forthcoming elder-related topics, including age-based prejudice and potential intergenerational tensions (North & Fiske, 2012, 2013-a).

Combining these two topics has already attracted some interest (Park, Nisbett, & Hedden, 1999). Most relevant here, many believe that societies differ in their levels of elder appreciation—specifically, that Eastern cultures, many of which boast a Confucian tradition of expectations to respect one’s elders, hold higher regard (e.g. Ng, 1998, 2002). However, some argue that such expectations are eroding in modernized societies (Schoenberg & Lewis, 2005). With industrialization a likely factor in fostering perceptions of elder uselessness (Nelson, 2005), older people may risk negative images in any industrialized society, regardless of geography. Empirically speaking, whether Eastern and Western cultures differ in their respect for elders remains surprisingly unclear.
In this chapter, a meta-analysis addresses this unresolved question. We first review the literature on elder attitudes, presenting evidence both for and against the likely presence of cross-cultural differences. We then conduct a meta-analysis, comparing effect sizes of empirical studies that quantitatively compare Eastern and Western attitudes toward elders. Next, we explore potential moderator variables, pertaining to both participant and measurement characteristics of the obtained studies. Finally, we discuss the implications of our findings and suggest directions for future research, as researchers worldwide focus increasingly on aging-related issues.

**Attitudes Toward Elders and Age-Based Prejudices**

Age-based prejudice—or “ageism”—is a subtle and complex phenomenon, yet one that uniquely puts everyone at risk, given that every living person eventually joins each age group (see North & Fiske, 2012, and current Chapter 1, for a review). In fact, age-based prejudices potentially target people of any age, but empirical investigations most predominately tend to focus on attitudes toward elders, given their salience as the targets of such prejudice.

Generally, the literature portrays age-based stereotypes as deriving from perceptions of illness, invisibility, and incompetence (North & Fiske, 2012). People are motivated to maintain both physical and psychological distance from living, breathing reminders of mortality (Burnstein, Crandall, & Kitayama, 1994; Greenberg, Schimel, & Mertens, 2004). They are also motivated to maintain psychological difference so as to maintain group-based esteem (Kite & Wagner, 2004); this includes older people themselves, who may dissociate with being old even when outsiders might perceive them that way (Weiss & Lang, 2011). Although people are generally willing to grant elders the positive stereotype of warmth (good intentions), they are particularly prone to view them as incompetent—even when their behavior contradicts such
perceptions (Cuddy, Norton, & Fiske, 2005). The persistence and pervasiveness of this latter stereotype generally relegates older people to a low-status, non-competitive social position (Fiske, Cuddy, Glick, & Xu, 2002). In short, age-based biases have traditionally cast elders as largely irrelevant to the rest of society.

However, descriptions of elder invisibility are becoming less suitable, given current realities of population aging. Although traditional age progressions have prescribed age-based turn-taking—with older people stepping aside and making way for younger generations—longer lifespans, delayed retirement, and identity politics indicate that elders may not be going as quietly as in the past. One recent perspective on ageism speaks to the potential consequences of these trends, emphasizing “should”-based prescriptive beliefs concerning elders’ practical and figurative use of societal resources (North & Fiske, 2013-a; Chapter 3). From this standpoint, if older people do not step aside and cede concrete and symbolic resources, they face disproportionate backlash from an aspiring younger generation—but could enjoy social rewards if they adhere to such step-aside expectations.

Further complicating the issue, age-based biases can take positive forms. As implied by the term “positive ageism” (Palmore, 1999), being older presents benefits both practical (tax breaks, discounts, housing programs) and experiential (wisdom, happiness). In the United States, the older population also enjoys a substantial degree of political power—a sharp contrast to past circumstances of poverty and relative powerlessness (Binstock, 1985; Minkler, 2006). Moreover, growing empirical support indicates the benefits of getting older in various domains, including reasoning, language complexity, and emotional health (Carstensen, Pasupathi, Mayr, & Nesselroade, 2000; Grossmann et al., 2010; Pennebaker & Stone, 2003; Tentori, Osherson,
Still, default stereotypes of the aged tend to adopt a more negative valence—or at best, the noted, mixed perception of warmth-but-incompetence.

But how universal are these perceptions of elders? Are negative stereotypes in fact more common within Western cultures than in Eastern cultures, which traditionally value respect for one’s elders? The following two sections discuss reasons both supporting and refuting an expectation for cross-cultural differences.

**Evidence for Cross-cultural Differences**

As briefly noted, cross-cultural investigations have a significant history in psychological research. Initially, psychological theory assumed relative universality in thought—as evidenced by the field’s disproportionate reliance on WEIRD samples (i.e., Western, Educated, Individualist, Rational, and Democratic participants; Henrich, Heine, & Norenzayan, 2010). However, the past few decades have unearthed a variety of ways in which culture shapes disparate patterns of thinking. Arguably the most prevalent such distinction has been that between people from Eastern cultures (predominantly East and South Asia) and those of Western cultures (mainly North America and Europe; e.g., Nisbett, 2003).

Among the most notable differences, Westerners tend to be more individualistic, focusing on individuals over the context that surrounds them. By contrast, Easterners are generally more interdependent, tending to view each person more as part of a collective whole; thus, they tend holistically to integrate entire contexts, and emphasize relationships among the elements within them (Chua, Boland, & Nisbett, 2005; Nisbett, 2003; Nisbett & Miyamoto, 2005). Indeed, various studies have demonstrated that Easterners have difficulty separating contexts from perceptual targets—that is, are highly field-dependent in their processing, in contrast to Western field-independence (Ji, Peng & Nisbett, 2000; Kitayama, Duffy, Kawamura, & Larsen, 2003).
Theoretically—as many believe—these fundamental differences in thought might yield differences in how elders are perceived. The Eastern focus on interdependence means that social groups are often held responsible for the behaviors and outcomes of individuals (Menon, Morris, Chiu, & Hong, 1999; Morling & Fiske, 1999). From this, the assumption follows that Easterners should attempt to maximize relational success more often than Westerners do (Nisbett, 2003). Given greater cultural focus on relational harmony, Easterners theoretically should place greater importance on maintaining effective relationships with and taking care of all societal members—including the oldest.

Further evidence for preferential valuation of elders stems from a history of Confucian principles, as noted. For East Asian cultures, the tradition of xiao, or filial piety, impels younger people to respect, obey, care for, and maintain contact with their elders (Ng, 1998, 2000). For South Asian cultures, the Hindu conception of the joint family system (Sing, 2005) and Muslim emphasis on service to elders (Sung & Kim, 2009) both emphasize elder respect. Given the contrast between this type of communal ideology and the Western tradition of individualism, researchers often theorize that age-based prejudices are likely not as prevalent in Eastern cultures (e.g., Nelson, 2009).

Indirect empirical evidence further supports beliefs of Eastern elder reverence. For example, the rate of older parents and their adult children living together is higher in Japan than the U.S. (Levy, Ashman, & Slade, 2009). Moreover, attitudes toward aging and memory performance tend to be positively correlated, and Chinese elders outperform American elders on a memory task—purportedly due to greater positive, cultural attitudes toward aging (Levy & Langer, 1994). Indeed, studies do find that filial piety expectations are still common among elders in China (Cheng & Chan, 1996) and Japan (Usita & Du Bois, 2005), among others. Thus a
great deal of indirect evidence suggests that, theoretically, Easterners should demonstrate the
greatest reverence for older people. But whether cultural traditions and expectations translate to
more quantifiably positive attitudes is less clear—especially considering evidence for cross-
cultural equivalence in elder attitudes, as discussed next.

**Evidence for Cross-cultural Similarities**

A primary reason to doubt East-West differences in perceptions of elders is
industrialization. Indeed, various sociocultural explanations for age-based prejudice connect
ageism with modernization (Butler, 2009; Cuddy & Fiske, 2004; Nelson, 2005; North & Fiske,
2012): Increased literacy among the young limits elders’ role as prime knowledge sources;
improved record-keeping (e.g., the advent of the printing press) has rendered obsolete elders’
storytelling roles; improved medical care has created an oversized older population not
traditionally accommodated by society; and industrialized labor generally emphasizes speed over
mere experience. All this tends to so support the idea that modernization itself is eroding
traditions of filial piety (Cheung & Kwan, 2009; Lee & Hong-Kin, 2005).

Corroborating the ageism-modernization link, anthropological perspectives have
suggested that rural, pre-industrialized societies do not foster the same sorts of age-related social
distance that industrialized ones do—regardless of their Eastern or Western location. With
constant contact between young and old in all phases of everyday life, aging is presumably a
more positive experience, and age-based biases less frequent (Schoenberg & Lewis, 2005). With
the East comprising societies that are largely modernized, perhaps these elements are no more
common there than they are in the West.

A final, more alarming reason to doubt elder reverence in the East are reports of rising
elder abuse and abandonment in multiple Asian countries—including Japan (Fackler, 2010),
India (Ray, 2008), and Singapore (Nagalingam, 2005). In Malaysia, nearly one out of three citizens age 60 and above have been abandoned by their children (Borneo Post, 2011). Similar estimations concern the rate of elder abuse in China (Dong, Simon, Odwazny, & Gorbien, 2008). With population aging similarly affecting the East—particularly Japan, believed to have the fastest growing older population in the world (Statistics Bureau of Japan, 2012)—the potential for hostility toward elders seems equally high as in the West.

The Current Meta-Analysis

To shed light on cross-cultural attitudes toward elders, a meta-analysis on studies compares elder attitudes in studies that include at least one Eastern and one Western sample. Meta-analysis allows the comparison of effect sizes across studies that may utilize disparate methods (e.g., Cooper, 2010).

Method

Literature Search

Articles derived from a search of common electronic databases: PsycINFO, PsycARTICLES, PubMed, and Google Scholar. Article searches comprised relevant terms concerning ageism (ageism, age-based prejudice, perceptions of the elderly) combined with terms concerning investigations across cultures (East-West, Eastern-Western, cross-cultural). We also used the references cited in the obtained articles to seek further for relevant articles.

When articles were not available via databases, we made multiple attempts to obtain articles or data by emailing authors directly. A request for studies posted on the list-server for the Society for Personality and Social Psychology (SPSP) sought additional eligible studies.

Inclusion Criteria
In line with standard meta-analytic methods, we devised study eligibility criteria to maximize the precision of an Eastern-versus-Western analysis on elder attitudes.

**East-West comparison.** Eligible studies required the comparison of at least one Eastern and one Western sample, using some quantitative measure of attitudes toward older people. The inclusion of both Eastern and Western participants in the same study was necessary in order to conduct standardized mean differences, comparing for East-West differences in elder attitudes.\(^{20}\)

Nearly all studies included more than one measure of elder-based attitudes. In order of make use of all available information, we did not exclude any of these measures. However, to maximize both assumptions of independence and the utility of available data, we employed a *shifting unit of analysis* approach to effect size computation (Cooper, 2010; see “Meta-Analytics Strategy” section).

**Native participants.** In order to maintain the most objectively cross-cultural comparisons possible, we required that participants be born, raised, and living in the home country. In the case of two studies (Lin & Bryant, 2009; Lin, Bryant, & Boldero, 2010), the Eastern participants had lived in the Western country for less than five years, thus could be considered culturally Eastern.\(^{21}\)

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\(^{20}\) Certainly there exist studies—unreported in this chapter—that gauge elder attitudes within an Eastern or Western population only. However, given the necessity of computing effect sizes measuring East-West differences, we felt it would be too arbitrary to pair studies on different populations with one another. Thus, as noted here, we opted to include only studies that directly compare the two. As additional support for this approach, the chances are virtually nonexistent of enough missing studies existing to reduce effect sizes to a trivial amount (as we note later).

\(^{21}\) Two of the studies included in this meta-analysis (Giles et al., 2001, Laidlaw et al., 2010) reported data for three groups, one of which comprised Eastern immigrants living in a Western country. For these cases, we excluded this ambiguous third group and computed effect sizes between the more clear-cut Eastern and Western groups.
Publication year. Although we did initially not restrict our research to a specific time period, all papers that we found were published in the last 30 years. As it turned out, this fits the time frame of the noted cross-cultural psychology research boom, and also fits our general aim of gauging contemporary views of elders across cultures.

General attitudes toward default elders. The current analysis includes only studies gauging general attitudes toward older people in the default sense. For instance, workplace-based attitudes were not included, because that definition of “old” is typically younger than it is in the general population—including even middle age, in many cases (North & Fiske, 2013-b). Moreover, if a study gathered attitude ratings of elder targets as well as other-aged targets (middle-aged, younger), we included the older targets only, not seeking to make cross-aged target comparisons in this chapter. 22

Quantitative measures and relevant data. Studies needed to use quantitative assessments of elder attitudes, so as to allow for effect size calculation (see “Meta-Analytic Strategy” section). To this end, studies needed to report (a) means, standard deviations, and relevant N for each Eastern and Western sample, (b) pairwise East-West test statistics— independent samples t- or F-statistics—with relevant degrees of freedom, or (c) standardized mean effect size differences between Eastern and Western samples (e.g., Cohen’s d) and sample sizes. When these statistics were not available, requests to authors asked for either the missing information or for original data sets. When this information was still not available, where possible we estimated effect sizes using less precise methods (such as reported p-values for East-

22 We note that some of the studies in this meta-analysis do report attitudes toward other age groups. Although Easterners demonstrating greater negativity than Westerners in perceptions of middle-aged targets ($g = -0.40, CI_{95} = [-0.62, -0.17], Q(4) = 36.98, p < .001$), the difference was nonsignificant toward young targets ($g = -0.05, CI_{95} = [-0.30, 0.19], Q(6) = 85.57, p = .67$). This suggests that the elder attitude findings we report are not merely due to a general negativity bias in the East.
West differences, which can be used to estimate effect sizes when total sample size was available). For un-numerated tests described merely as “nonsignificant,” we coded the effect size as zero; this approach is overly conservative but a common assumption when specific results are not reported or obtainable (e.g., Meyer & Mark, 1995).  

**Meta-Analytic Strategy**

For all analyses, we used the software Comprehensive Meta-analysis Version 2 (CMA; Borenstein, Hedges, Higgins, & Rothstein, 2005).

**Strategy for overall effects.** The current methodological approach derived from standard techniques of testing group-based differences on continuous outcomes (Lipsey & Wilson, 2001). The general approach calculated standardized mean difference scores between Eastern and Western samples on quantitative measures of elder perceptions. Also per common strategies (e.g., Hagger, Wood, Stiff, & Chatzisarantis, 2010), and as noted, effect sizes were computed via means and standard deviations, or else reported test statistics comparing Eastern and Western participants in this domain.

Although any of the “Cohen’s $d$ family” of effect sizes is appropriate when judging the magnitude of difference between two means (Rosenthal, 1994), we used Hedges’ $g$ effect sizes to gauge the standardized difference between Easterners and Westerners in their ratings of elders. Unlike $d$, which is susceptible to overestimating effects within small sample sizes, $g$ adjusts for potential small sample biases (Cooper, 2010; Hedges & Olkin, 1985).

We operationalized a positive $g$ to reflect the lay assumption that Easterners view their elders more positively than Westerners; by contrast, a negative $g$ for a given comparison.

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23 Due to insufficient data, the current analysis does not include five potentially eligible papers (Ryan et al., 2004; Giles et al., 1998; Harwood et al., 1994; Levy & Langer, 1994; Sharps, Price-Sharps, & Hanson, 1998).
indicated that Easterners were more negative. As indicated, a $g$ of zero was assigned to unspecified effects that were reported as null.

Though the CMA software computing effect sizes offers both fixed-effects and random-effects models, in this chapter we report only the latter. The more conservative random-effects approach accounts for variance at both the study level as well as participant sampling error, rather than the latter only (Cooper, 2010). The assumption of uniform effects across studies was not appropriate for the current analysis, given the particular diversity in countries and methodologies.

Each study contributed its own independent effect size to the overall East-versus-West meta-analysis. When a study yielded multiple effect sizes (due to using multiple measures), these effect sizes were combined to form one overall effect size for that study. The aggregated study-level effect sizes then formed the meta-analysis’ omnibus East-West effect size (see “Overall Effect of East versus West” section). However, moderator analyses utilized a different approach, as discussed next.

**Strategy for moderators.** As with the overall effect size approach, moderator analyses computed study-level effect sizes where possible, so as to not violate assumptions of independence. However, in some cases this was not possible, such as testing the moderator of geographical region (given that many papers used samples from multiple countries in the same region). In such cases, we used a shifting unit of analysis technique (see Cooper, 2010)—incorporating all individual effect sizes, even if they came from the same study. In combining these two techniques (averaging effect sizes within one study for overall effects and including multiple effect sizes from the same study for certain moderator effects), the shifting unit of analysis approach is an accepted compromise between maximizing available information from
Results

The literature search found 22 papers that satisfied the inclusion criteria; these studies comprised 69 different measures of attitudes toward the elderly, and included 13,214 total participants. Three papers (North & Fiske, in press; North & Fiske, n.d.; Yun & Lachman, 2006) included separate statistics for different age groups of participants. With access to data from these separate samples, we treated each as a separate study, per common meta-analytic strategies (e.g. Kite et al., 2005). This technique also allowed for more precise moderator analyses, such as exploring the effect of participant age on attitudes toward elders (see “Moderator Analyses”).

Overall Effect of East versus West

Overall meta-analytic results appear numerically in Table 1, with a visual representation (forest plot) appearing in Figure 1. The averaged corrected, standard mean East-West difference for all studies was $g = -0.41$, CI$_{95} = [-0.54, -0.28]$, $Q(21) = 231.72$, $p < .001$. This indicates a moderate cultural effect on attitudes toward elders—but with Easterners holding more negative views than Westerners, contradicting conventional wisdom.

The significant $Q$ statistic indicates heterogeneity in the effect size across studies: In addition to random error within studies, at least some of the error is likely due to differences in effect sizes between studies. Corroborating this, analyses computed an $I^2$ statistic of 90.94, which indicates the percentage of total observed variance that is due to between-study variation in effect size (rather than random error). Any $I^2$ statistic above 75% is considered high, so this indicates a high likelihood of variables moderating the overall effect, warranting further

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24 We note that findings were virtually equivalent when we did not separate the different-aged samples within these papers.
exploration (Higgins & Thompson, 2002; Higgins et al., 2003). A third measure of between-study effect size variance, $T^2$, was fairly low (0.08); nevertheless, in light of the $Q$ and $I^2$ results, we explore potential moderators in a later section (“Moderator Analyses”).

Table 1: Overall meta-analysis of attitudes toward elders as a function of East-West culture

<table>
<thead>
<tr>
<th>Authors</th>
<th>Publication Year</th>
<th>Eastern Countries</th>
<th>Western Countries</th>
<th>$g$</th>
<th>95% CI</th>
<th>Z</th>
<th>N East</th>
<th>N West</th>
<th>Sample Age Range</th>
<th>Sample % Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boduroglu et al.</td>
<td>2006</td>
<td>China</td>
<td>USA</td>
<td>0.24</td>
<td>-0.19, 0.68</td>
<td>1.09</td>
<td>0.27</td>
<td>43</td>
<td>37</td>
<td>younger &amp; older-aged</td>
</tr>
<tr>
<td>Chang, Chang, &amp; Shen</td>
<td>1984</td>
<td>Taiwan</td>
<td>USA</td>
<td>0.11</td>
<td>-0.07, 0.28</td>
<td>1.21</td>
<td>0.23</td>
<td>200</td>
<td>400</td>
<td>college-aged &amp; adult</td>
</tr>
<tr>
<td>Cuddy, Fiske, Kwan, et al.; Fiske et al.</td>
<td>2009, 2002</td>
<td>HK, Japan, Malaysia, SK</td>
<td>USA</td>
<td>-0.17</td>
<td>-0.40, 0.07</td>
<td>-1.39</td>
<td>0.16</td>
<td>193</td>
<td>111</td>
<td></td>
</tr>
<tr>
<td>Gattuso &amp; Shadbolt</td>
<td>2002</td>
<td>Pacific Islander</td>
<td>Australia</td>
<td>-0.21</td>
<td>-0.44, 0.02</td>
<td>-1.78</td>
<td>0.08</td>
<td>167</td>
<td>131</td>
<td>18-50</td>
</tr>
<tr>
<td>Giles, Liang, Noels, &amp; McCann</td>
<td>2001</td>
<td>Taiwan</td>
<td>China, India, Japan, Philippines, Singapore, SK, Taiwan</td>
<td>USA</td>
<td>-0.33</td>
<td>-0.69, 0.02</td>
<td>-1.83</td>
<td>0.07</td>
<td>98</td>
<td>46</td>
</tr>
<tr>
<td>Giles, Noels, Ota, et al.</td>
<td>2000</td>
<td>China, India, Japan, Philippines, Singapore, SK</td>
<td>Australia, Canada, NZ</td>
<td>USA</td>
<td>-0.30</td>
<td>-0.41, -0.19</td>
<td>-5.39</td>
<td>0.00</td>
<td>917</td>
<td>492</td>
</tr>
<tr>
<td>Giles, Noels, Williams, Ota, et al.</td>
<td>2003</td>
<td>Japan, Philippines, SK</td>
<td>Canada, NZ, USA</td>
<td>USA</td>
<td>-0.42</td>
<td>-0.56, -0.27</td>
<td>-5.46</td>
<td>0.00</td>
<td>376</td>
<td>337</td>
</tr>
<tr>
<td>Harwood, Giles, McCann, et al.</td>
<td>2001</td>
<td>Hong Kong, Philippines, Thailand</td>
<td>Australia</td>
<td>USA</td>
<td>-0.22</td>
<td>-0.44, 0.00</td>
<td>-1.99</td>
<td>0.05</td>
<td>510</td>
<td>96</td>
</tr>
<tr>
<td>Harwood, Giles, Ota, et al.</td>
<td>1996</td>
<td>Hong Kong, Philippines, SK</td>
<td>Australia, NZ, USA</td>
<td>USA</td>
<td>-0.34</td>
<td>-0.46, -0.22</td>
<td>-5.38</td>
<td>0.00</td>
<td>606</td>
<td>448</td>
</tr>
<tr>
<td>Ladlaw et al.</td>
<td>2010</td>
<td>China</td>
<td>UK</td>
<td>-1.22</td>
<td>-1.73, -0.70</td>
<td>-4.62</td>
<td>0.00</td>
<td>98</td>
<td>20</td>
<td>60-92</td>
</tr>
<tr>
<td>Lin &amp; Bryant; Lin, Bryant, &amp; Boldero</td>
<td>2010</td>
<td>China, Malaysia, Singapore</td>
<td>Australia</td>
<td>USA</td>
<td>-0.55</td>
<td>-1.04, -0.06</td>
<td>-2.18</td>
<td>0.03</td>
<td>34</td>
<td>31</td>
</tr>
<tr>
<td>Lückenhoff et al.</td>
<td>2009</td>
<td>China, HK, Japan, SK</td>
<td>Australia, NZ, UK</td>
<td>USA</td>
<td>-0.23</td>
<td>-0.34, -0.12</td>
<td>-4.09</td>
<td>0.00</td>
<td>693</td>
<td>602</td>
</tr>
<tr>
<td>North &amp; Fiske (Young)</td>
<td>in press</td>
<td>India</td>
<td>USA</td>
<td>-0.80</td>
<td>-0.92, -0.69</td>
<td>-13.76</td>
<td>0.00</td>
<td>477</td>
<td>1089</td>
<td>17-30</td>
</tr>
<tr>
<td>North &amp; Fiske (Middle-Aged)</td>
<td>in press</td>
<td>India</td>
<td>USA</td>
<td>-1.00</td>
<td>-1.13, -0.87</td>
<td>-14.94</td>
<td>0.00</td>
<td>314</td>
<td>921</td>
<td>31-81</td>
</tr>
<tr>
<td>Ota, Giles, &amp; Gallois</td>
<td>2002</td>
<td>Japan</td>
<td>Australia</td>
<td>USA</td>
<td>-0.91</td>
<td>-1.14, -0.68</td>
<td>-7.80</td>
<td>0.00</td>
<td>155</td>
<td>171</td>
</tr>
<tr>
<td>Ryan et al.</td>
<td>2009</td>
<td>SK</td>
<td>Canada</td>
<td>USA</td>
<td>-0.44</td>
<td>-0.68, -0.22</td>
<td>-3.87</td>
<td>0.00</td>
<td>165</td>
<td>161</td>
</tr>
<tr>
<td>Sung</td>
<td>2004</td>
<td>SK</td>
<td>Australia, Canada, NZ</td>
<td>USA</td>
<td>-0.30</td>
<td>-0.44, -0.17</td>
<td>-4.52</td>
<td>0.00</td>
<td>401</td>
<td>501</td>
</tr>
<tr>
<td>Williams, Ota, Giles, et al.</td>
<td>1997</td>
<td>China, HK, Japan, Philippines, SK</td>
<td>USA</td>
<td>-0.28</td>
<td>-0.38, -0.18</td>
<td>-5.38</td>
<td>0.00</td>
<td>1030</td>
<td>601</td>
<td>18-29</td>
</tr>
<tr>
<td>Yun &amp; Lachman (Young)</td>
<td>2006</td>
<td>SK</td>
<td>USA</td>
<td>-0.43</td>
<td>-0.80, -0.06</td>
<td>-2.26</td>
<td>0.02</td>
<td>61</td>
<td>51</td>
<td>19-39</td>
</tr>
<tr>
<td>Yun &amp; Lachman (Middle-Aged)</td>
<td>2006</td>
<td>SK</td>
<td>USA</td>
<td>-0.69</td>
<td>-1.08, -0.30</td>
<td>-3.47</td>
<td>0.00</td>
<td>56</td>
<td>51</td>
<td>41-59</td>
</tr>
<tr>
<td>Yun &amp; Lachman (Older)</td>
<td>2006</td>
<td>SK</td>
<td>USA</td>
<td>-0.48</td>
<td>-0.89, -0.08</td>
<td>-2.35</td>
<td>0.02</td>
<td>45</td>
<td>51</td>
<td>61-78</td>
</tr>
<tr>
<td>Zhou</td>
<td>2007</td>
<td>China</td>
<td>USA</td>
<td>-0.28</td>
<td>-0.54, -0.02</td>
<td>-2.11</td>
<td>0.03</td>
<td>119</td>
<td>108</td>
<td>college-aged</td>
</tr>
</tbody>
</table>

**Notes.** *includes Asian-Americans. $g$ = Hedges’ standardized East-West mean difference in elder views; negative effect sizes signify East as more negative. HK = Hong Kong, SK = South Korea, NZ = New Zealand, UK = United Kingdom, USA = United States of America. Unspecified age ranges indicate unreported values. Two papers (Lin & Bryant, 2004; Lin, Bryant & Boldero, 2010) use the same sample with different outcome measures. Two other sets of papers (Cuddy et al., 2009 & Fiske et al., 2002; North & Fiske, n.d. & North & Fiske, in press) use identical outcome measures on an Eastern and Western sample, respectively.

**Publication Bias**

Analyses found a fail-safe $N$ of 2195, signifying the number of missing studies needed to push the overall effect size to a barely significant value. This number is well above Rosenberg’s (2005) suggested critical value of $5N + 10$, indicating high unlikelihood that enough studies with
null findings exist to reduce the culture effect to nonsignificance. Moreover, the total number of studies with the keyword “ageism” in the first place is considerably less than this value (North & Fiske, 2012).

A trim-and-fill funnel plot depicting study-level effect sizes corroborates the lack of publication bias (see Figure 2). The approximately symmetrical distribution of the plot around the mean suggests that effect sizes are unlikely to be missing from the analysis (Cooper, 2010). Egger’s regression test of plot asymmetry was nonsignificant \([t(20) = 0.04, \text{one-tailed } p = .49]\), further indicating a symmetrical plot and a lack of publication bias.

![Forest plot of overall East-West effect sizes by study. Effect size markers are proportional to weights. “Old” = older participant results only, “Mid” = middle-aged participant results only, “Young” = younger participant results only.](image)

**Figure 1.** Forest plot of overall East-West effect sizes by study. Effect size markers are proportional to weights. “Old” = older participant results only, “Mid” = middle-aged participant results only, “Young” = younger participant results only.

**Moderator Analyses**

For categorical variables, subgroup analyses separated total effect size variance into variance within and between groups (resembling traditional ANOVA). For each moderator, after removing within-study variance from the total variance, the remaining between-group variance
(\(Q_h\)) tested whether effect sizes differed at different categorical levels (Borenstein, Hedges, Higgins, & Rothstein, 2009; Masi, Chen, Hawkley, & Cacioppo, 2011).

For continuous moderator variables, a meta-regression procedure tested whether the moderator X effect size slope was significant, using a similar \(Q_h\) statistic.

![Figure 2. Funnel plot of overall East-West effect sizes.](image)

**Sample characteristics. Geographical region (East).** Starting with samples in the East, we first explored whether the East-West effect might be more pronounced in certain regions of Asia. Where possible, we separated each study’s data by Eastern country (maintaining Western data as a whole for each comparison); then we classified each country as East Asian (China, Hong Kong, Japan, Korea, Taiwan) or Southeast/South Asian (India, Malaysia, Pacific Islands, Philippines, Singapore, Thailand). These distinctions reflect global geoscheme classifications (United Nations Statistics Division, 2013).
Studies in which data were not at all separable into Eastern versus Southern Asian regions were excluded from this particular moderator analysis. Fortunately, only three papers (Lin & Bryant, 2009; Lin et al., 2010; Williams et al., 1997) did not allow for any such grouping, so the vast majority of the East-West data obtained factored into this analysis.

A significant regional difference emerged, $Q_b = 5.23, p = .02$. The East-West difference was moderate among effect sizes comprising East Asian samples ($g = -0.36, k = 104, 95\% \text{ CI} = -0.45, -0.28; p < .001$), but nonsignificant among those including South Asian samples ($g = -0.13, k = 24, 95\% \text{ CI} = -0.31, 0.04; p = .13$); see Table 2.

More specifically, we also explored whether country itself could result in significant moderation. Indeed, the resulting analysis found country to be significant moderator, $Q_b = 28.60, p = .001$. Individual Eastern country (versus West) effect sizes appear in Table 2.

**Geographical region (West).** Using the same techniques as Eastern region moderator analyses, we also explored whether the East-West disparity in elder views varied by Western region. Where possible, we separated data by Western country (versus all of the East). Then we classified each country as either North American (USA and Canada) or non-North American (United Kingdom and related former colonies Australia and New Zealand). One study (Williams et al., 1997) did not provide sufficient data for this grouping, and was thus excluded from this analysis.

Unlike with the East, a significant effect of geographical region did not emerge within the West, $Q_b = 0.03, p = .85$. The East-West disparity was virtually equal in North American samples ($g = -0.34, k = 61, 95\% \text{ CI} = -0.44, -0.25; p < .001$) as it was in non-North American samples ($g = -0.33, k = 54, 95\% \text{ CI} = -0.43, -0.23; p < .001$); see Table 2.
As we did with Eastern countries, we also investigated the possible moderating effect of individual Western country on the East-West effect. However, as with geographical region, country was not a significant moderator in the West, $Q_b = 1.36, p = .85$. (see Table 2).

**Other sample characteristics.** We explored various other participant characteristics, exploring their potential moderating impact (see Figure 2). However, no significant moderation emerged with respect to sample age (classified as college student-aged versus adults), gender distribution (proportion female), or sample size. We consider these null results in the Discussion.

**Measurement characteristics.** In addition to investigating the moderating impact of sample characteristics, we also explored whether differences in measurement would have an impact.

**Year of publication or data collection.** We explored the potential moderating impact of publication year. Some effect sizes were based upon multiple papers published in different years (Cuddy et al., 2009; Fiske et al. 2002; Lin & Bryant, 2009; Lin et al., 2010); in such cases, we used the most recent (and thus relevant) year of publication. One effect size comprised one published paper (North & Fiske, in press; also current Chapter 2) and one unpublished (North & Fiske, n.d.), so we incorporated the year in which the data were collected.

A mixed effect (method of moments) meta-regression found that publication year was a significant inverse moderator of the East-West difference, $Q(1, 21) = 10.83, p = .001$. Thus, the more recent the publication date, the greater the East-West difference. We elaborate on this
Table 2: Moderator analyses

<table>
<thead>
<tr>
<th>Moderator</th>
<th>Category</th>
<th>k</th>
<th>g</th>
<th>95% CI</th>
<th>Q between</th>
<th>p between</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement</td>
<td>Year of Publication or Data Collection^</td>
<td>22</td>
<td>10.83***</td>
<td>0.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Measure Type</td>
<td>Trait Rating</td>
<td>52</td>
<td>-0.35</td>
<td>-0.44, -0.25</td>
<td>0.23</td>
<td>0.64</td>
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<tr>
<td></td>
<td>Behavior Rating</td>
<td>17</td>
<td>-0.39</td>
<td>-0.55, -0.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kite &amp; Stockdale (2005) Measure Type</td>
<td>Age Stereotype</td>
<td>20</td>
<td>-0.41</td>
<td>-0.57, -0.25</td>
<td>3.53</td>
<td>0.47</td>
</tr>
<tr>
<td></td>
<td>Attractiveness</td>
<td>1</td>
<td>-0.06</td>
<td>-0.73, 0.61</td>
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<tr>
<td></td>
<td>Competence</td>
<td>27</td>
<td>-0.28</td>
<td>-0.41, -0.15</td>
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<td></td>
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<td></td>
<td>Behavior/Behavioral intent</td>
<td>13</td>
<td>-0.40</td>
<td>-0.59, -0.20</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Evaluation/Warmth</td>
<td>8</td>
<td>-0.47</td>
<td>-0.71, -0.23</td>
<td></td>
<td></td>
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<tr>
<td>Measurement Length</td>
<td>Number of Items in DV^</td>
<td></td>
<td>3.45*</td>
<td>0.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastern Region (vs. All West)</td>
<td>East Asia</td>
<td>47</td>
<td>-0.34</td>
<td>-0.46, -0.22</td>
<td>3.75*</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>South Asia</td>
<td>19</td>
<td>-0.13</td>
<td>-0.31, 0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastern Country (vs. All West)</td>
<td>India</td>
<td>3</td>
<td>-0.66</td>
<td>-1.10, -0.21</td>
<td>28.60***</td>
<td>0.001</td>
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Notes. k = number of effect sizes in analysis; g = Hedges’ g. ^Continuous variable, tested for significant moderation using meta-regression. *p < .05, +p < .10.
Number of items composing DVs. A mixed effects meta-regression found that DV item length was a marginal inverse predictor of effect size, $Q(1, 61) = 3.45, p = .06$. We also speculate about this trend in the Discussion.

Type of measure. We first explored whether the simple distinction of trait ratings versus behavioral ratings would matter. However, East-West effect sizes were quite consistent between the two types of measurement, $Q_b = 0.07, p = .79$ (see Table 2).

Despite this nonsignificant result, we considered the possibility that a binary categorization was too basic. Using a prior meta-analysis categorizing domains of attitudes toward elders (see Kite et al., 2005), we categorized measures as pertaining to one of five categories: (1) age stereotype, (2) attractiveness, (3) competence, (4) behavior/behavioral intention, and (5) evaluation (see Table 3). However, even with these more sensitive distinctions, still no differences emerged, $Q_b = 3.53, p = .47$ (see Table 2).

Discussion

Contrary to prevailing beliefs that Easterners revere their elders more than Westerners do, a meta-analysis on studies directly comparing the two geographical regions found Eastern cultures to view their older population significantly more negatively. Although Eastern cultures may continue to hold high expectations for respecting one’s elders (Ng, 1998, 2002), the current findings suggest that they do not necessarily translate into greater positive regard—perhaps suggesting a form of backlash against cultural norms.

Subgroup analyses found geographical location to be a significant moderator. Although Easterners were more negative than Westerners in both cases, the East-West disparity was more pronounced when incorporating only East Asian samples than it was for using only South Asian
<table>
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<tr>
<th>Study</th>
<th>Reported Outcome Variable</th>
<th>Measure Type (per Kite et al., 2005)</th>
<th>Measure Type (Trait/Behavior)</th>
<th>N Items in Measure</th>
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<td>Positive Indicators</td>
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<td>Age Stereotype</td>
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*Note. NA = not applicable; NR = not reported.*
samples. In the latter case, the East-West difference was actually nonsignificant, albeit still in the direction of Western positivity.

Meta-regressions testing for significant continuous moderator variables found two important moderators. First, year of publication was a significant moderator, such that more recent papers found a stronger East-West disparity. Second, measures with more items tended to find weaker effects. We discuss the former finding in the next sections; the latter finding might be an artifact of inconsistent measurement reliabilities (largely unreported in the current studies), which would cloud the otherwise consistent East-West effect.

**Potential Explanations for Negative Perceptions in the East**

To some the current results may seem surprising, but other studies have similarly found that cultures widely believed to be more elder-reverent are not actually so. For instance, some speculate that Latin American cultures exhibit low levels of ageism, due to high rates of intergenerational cohabitation (Burr & Mutchler, 1999). Nevertheless, the noted stereotype of warmth-but-incompetence permeates such cultures too, including Brazil (de Paula Couto & Koller, 2012), Mexico, and Bolivia (Durante et al., 2012). In addition, one of the papers in the current meta-analysis (Löckenhoff et al., 2009) finds comparably negative elder attitudes among Peruvian and Chilean samples as in other countries. We do not mean to make strong claims about this issue from the few studies listed here; nevertheless, such results demonstrate that popular perceptions of cultural elder respect do not always reflect realities.

However, explanations for these discrepancies remain unclear. Concerning the current East-West findings, we offer some possible explanations; undoubtedly each warrants more in-depth empirical investigation to draw stronger conclusions.
Modernization. As noted, real-world trends also suggest why Easterners might not hold their elders in as great reverence as they once might have. A confluence of modern factors—social and economic trends that have made caring for elder family members burdensome, increased labor migration that breaks up families, and the influence of Western individualism—all risk attenuating elder reverence in the East (Schoenberg & Lewis, 2005). In fact, researchers offer similar explanations for the risk of age-based prejudices in Latin America (de Paula Couto & Koller, 2012).

But as to why Easterners might be even more ageist presents another dilemma altogether, one the literature has not often considered. One possible explanation is one to which we have already alluded: traditional expectations to revere elders might actually backfire in modernized societies, where the utility of elders is perhaps less apparent than in other societies. The risk for rebellion is perhaps only greater in the up-and-coming nations that characterize much of the modern East (China and India in particular), in which urbanization and new technologies are equated with social progress and economic success.

Demographic realities. As noted, population aging impacts countries worldwide. This has resulted in the prospect of younger generations facing increased burden of taking care of their elders—in parts of the East especially (e.g., Japan, whose population is aging at a rate faster than any other country). With the older population growing steadily and perceptions of societal burden possibly growing along with it, the current risk for resentment may be particularly high (North & Fiske, 2012). This is especially the case in light of the recent recession, whose global impact has hit countries in the East just as hard as those in the West—including the recently upper-echelon economies of China, Japan, and South Korea.
Sadly, the East in particular has faced mounting evidence of hostility toward the aged. As noted, elder abuse and abandonment rates are reaching unprecedented levels in various Eastern countries as industrialization also expands. Likely as a consequence, elder suicide rates are similarly rising, presumably due to the gap between elders’ expectations and their increased neglect and perceived uselessness in an increasingly developed nation. Indeed, the world’s three highest elder suicide rates belong to South Korea, Taiwan, and China (LaFraniere, 2011). The problem seems only worsening; for instance, the rate of elder suicides has almost quadrupled in South Korea, which now has the highest such rate in the developed world (Sang-Hun, 2013). Japan has faced similar increases (Shah et al., 2007). In all cases, theorists’ posited explanations are similar: societies that are simultaneously aging and industrializing are coming to significantly devalue their elders. (The current meta-analysis’ finding that more recent studies portray a stronger East-West difference might be indirect evidence of this.) Future research should address this issue empirically, in order to provide eventual interventions for this frightening epidemic.

**Non-generalized respect.** A third possible explanation is the nature of Confucian obligation, which requires reverence only within one’s own family or academic circle toward specific older people who have benefitted oneself. Generally speaking, reputation and responsibility demand that one show gratitude and respect specific elders, but not the group as a whole. Given the increasing difficulties of caring for elders in developing and developed societies, East Asian younger people might well feel even more resource tension than Western ones do. With smaller families and fewer siblings to share the burdens, younger people might experience more resource tension and resent older people as a whole.

**Geographical Sub-group Differences: East Asia versus South Asia**
Another finding in the current meta-analysis is that the East-West difference is greater among East Asians—implying elders are apparently more respected in South Asia (albeit somewhat less so than in the West). One potential explanation is that the East Asian countries in the current analysis tend to enjoy stronger economies than those classified as South Asian; as measured by national GDP, China, Japan, South Korea, and Taiwan all rank in the top 27, whereas India—at number 10—is the only South Asian country in this analysis that shares that distinction (IMF, 2013). However, as Table 2 indicates, India’s disparity from Western elder views appears to be the highest of any Asian country. Thus, assuming that economic strength is closely related to industrialization, there does appear to be some basis for an industrialization-ageism link, as theorists have often discussed (e.g., Nelson, 2005) but rarely tested. Future research should empirically test the underpinnings of ageism in South vs. East Asian samples—or perhaps samples from even more polarized societies, in terms of economic development—to better speak to this question, which has been largely ignored in the cross-cultural ageism literature.\(^{25}\)

**Non-moderating Variables**

Rater age did not have an impact the East-West effect; in other words, the effect was similar for both younger and middle-aged raters. Perhaps this is unsurprising, given indications that people of all ages—even older people themselves—generally exhibit negative attitudes toward the concepts of aging and the aged (North & Fiske, 2012).

Perhaps slightly more unexpected was the finding that sample gender distribution did not moderate the effect of culture on elder stereotypes. Because males tend to exhibit greater levels

\(^{25}\) Though we identify preliminary evidence that an industrialization-ageism relationship may be important, we acknowledge that country GDP did not predict effect size in the current meta-analysis. However, other measures may better gauge a country’s industrialization, so this speculation may yet have merit.
of prejudice than females in various domains—including ageism (Fraboni, Saltstone, & Hughes, 1990; North & Fiske, in press; Rupp, Vodanovich, & Credé, 2005)—one might expect samples with a greater proportion of males to demonstrate a more pronounced East-West effect of attitudes toward elders. However, this pattern did not emerge. Perhaps women’s greater involvement in elder care, where this is culturally mandated, explains female negativity equivalent to males’ in this case.

Also of note is the finding that measure type did not moderate the effect. Trait and behavioral ratings were virtually equivalent, and a more focused subdivision of measure types (per Kite & Stockdale, 2005) also yielded no differences. The latter result is particularly surprising, given the important distinction between warmth (in which elders are generally viewed positively) and competence (in which elders are generally viewed negatively; Cuddy et al., 2005). Nevertheless, this distinction did not make a difference in the current cross-cultural comparison, indicating that elders are viewed more negatively on both domains in the East, relative to the West.

**Limitations**

As indicated, the current meta-analysis included only studies that directly compared Western participants with Eastern participants in their attitudes toward older people; admittedly, it did not take into account studies that focused on only one population or the other. However, this was necessary in order to determine interpretable effect sizes; otherwise, we would have had to pair studies arbitrarily, and compute effect sizes that would not have made much sense.

Moreover, though in the preceding section we speculate about potential explanations for East-West differences, the mechanism underlying the pattern is not immediately clear. With unprecedented access to research participants across the globe, future investigations might
experimentally test for the roots of East-West elder perception differences. For instance, researchers might recruit Eastern and Western participants, manipulate the salience of filial piety norms, and potentially gauge a backlash effect. Another direction might be to explore the role of industrialization or resource scarcity, both of which we suggested earlier in this chapter.

Finally, although we did explore potential moderating impact of rater age, we note that the majority of participants forming the studies in the current analysis are college-aged. Given the topic at hand, of particular note is the lack of elder samples—not just in the current analysis, but also in psychology more generally, which has only begun to unearth important age-based differences in social cognition (for one notable exception, see Grossmann et al., 2010). It is certainly possible that elders in the East and elders in the West do not differ much in their attitudes toward the aged, given comparable circumstances in a modernized world.

**Conclusion**

This meta-analysis represents the first wide-scale synthesis of studies that compare cross-cultural attitudes toward older people. Despite lay and researcher beliefs that Eastern cultures hold their elders in greater esteem than do Western cultures, the current analysis found the reverse to be the case. This medium-sized effect was moderated most notably by geographic region, with East Asians most notably exhibiting greater negativity than South Asians. This is perhaps a consequence of industrialization, as others have speculated but rarely tested empirically. Future empirical studies should investigate this and other potential mechanisms in more focused manner. Nevertheless, the current findings indicate that long-held beliefs of Eastern elder reverence do not hold true in the modern world.
SUMMARY AND FUTURE DIRECTIONS

In its emphasis on prescriptive age-based biases, this dissertation elucidates important gaps in the literature on stereotyping, prejudice, and ageism. Focusing on intergenerational tensions over practical and figurative resources, Chapters 1-4 go beyond existing perspectives, which tend to cast older people as generally ill, invisible, and irrelevant “elderly.” Although such approaches have yielded some degree of understanding of the roots of age-based bias, Chapter 1 argues that this view is limiting, in that a more noticeable older age presents significant consequences, both positive and negative. Chapters 2’s scale and Chapter 3’s empirical studies explain how prescriptive biases target older people who are perceived as overstepping boundaries, and how younger people particularly endorse these expectations. Chapter 4 offers an encouraging message, in that this effect can be mitigated by perceived resource abundance. Taken together, these four chapters offer both caution and optimism concerning how elders will be viewed in a graying society.

Moreover, Chapter 5 addresses another important gap in the literature: cross-cultural perspectives of elders. Although conventional wisdom believes that Eastern cultures respect their elders more than Western cultures, this chapter’s meta-analysis finds the reverse pattern to emerge. Though the precise mechanism underlying this effect remains unclear, one possibility offered is that industrialization has eroded traditional beliefs of Eastern filial piety. Either way, like Chapters 1-4, Chapter 5 presents further warning for how contemporary perceptions of the aged might differ from what many believe.

Despite this dissertation’s noted contributions, it is only a starting point, and indeed opportunities for future research abound. As noted in various chapters, this work does not begin to address age-based prejudices against the young, nor potential intersectionalities between age
and other demographic categories (most notably race and gender). It also does not address the important question of, “How old is old?”—the answer to which is clearly context-dependent (for one discussion on this topic not included in this dissertation, see North & Fiske, *Social Issues and Policy Review*, 2013). Future work should also carefully explore mechanisms underlying prescriptive bias, building upon Chapter 4’s focus on scarcity as well as other potential mechanisms, such as one’s perceived distance from older age.

Whatever the direction of future age-based bias investigations, the current work represents an important first step toward comprehending an era of older age that will be inevitably more noticeable than in recent years. Given demographic realities, the quality of intergenerational perceptions and contact may very well dictate society’s ability to thrive. Understanding the consequences of a more impactful older generation is a major step toward this aim, and one that is imperative for a rapidly aging society.


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Appendix A: Sample Vignettes (Chapter 3)

Study 1: Succession Vignette

Herbert is a 71 / 48 / 24-year-old (retired) history teacher from upstate New York. Along with seeing his family on holidays, Herbert goes out sometimes. While at home, he often listens to his favorite radio station. Herbert has enough insurance and savings to comfortably handle his own expenses. But, despite his younger relatives' needs, he is reluctant to lend or share his money. Thus, to help out with his younger/older relatives’ needs, he is generally willing to lend or share his money.

Study 2: Consumption Vignette

Max is a/an 81/48/24-year-old from upstate New York, who used to work / works at a hardware store. He enjoys listening to his favorite radio station and going out sometimes. Recently, Max was diagnosed with a grave illness. His best chance of recovery requires an extraordinary intervention, one that would consume multiple doctors’ and nursing staff time at the local hospital, raise health insurance costs for the other subscribers in his insurance pool, as well as tax his family’s bank account. However, despite the inconvenience it is likely to cause, Max stubbornly wants to go through with the procedure, / Because of the inconvenience it is likely to cause, Max decides it is best not to go through with the procedure.

Study 3: Identity Vignette

Max is a 74 / 44 / 24-year-old from upstate New York, who used to work / works at a hardware store. He enjoys listening to his favorite radio station and going out sometimes. When in public, Max makes a point of showing an affinity for the latest pop / oldies music—artists such as the Black Eyed Peas, Rihanna, Justin Timberlake, and Lady Gaga / Frank Sinatra, Bing Crosby, and Sammy Davis, Jr. He is often seen wearing a Black Eyed Peas / Frank Sinatra t-shirt, playing the latest pop / oldies music loudly on his headphones, and swaying his head along with the rhythm.
Appendix B: Sample Expected Interaction Paradigms (Chapter 3)

S4: Succession Expected (Webcam) Interaction

**Interviewer:** Would you mind saying a little bit about yourself?

**Actor:** “Sure. Well, my name is Max. I’m 75/45/24 years old, I’m from Hamilton, NJ. I used to work/work at a hardware store. When I’m at home, I like to listen to my favorite radio stations, do things around the house, and go out sometimes.”

**Interviewer:** Would you mind saying something about your financial situation?

**Actor:** “Well, I have enough insurance and savings to comfortably handle my expenses. But that doesn’t mean I necessarily want to lend or share my money with younger/older relatives, no matter what they tell me about their needs. So, I’m perfectly willing to lend or share my money with younger/older relatives when they tell me they need it.”

S5: Consumption Expected (Chat Room) Interaction

**Max:** My name is Max. I'm 81/44/24 years old, from Hamilton NJ. I used to work/work at a hardware store. I like listening to my favorite radio station and going out sometimes. I probably shouldn't tell you this but it's on my mind. I just found out I have a bad illness (nevermind what it is), and the doc tells me my best chance means some pretty pricey treatments. Lots of doctors and nurses. It'll probably raise health costs for other people's insurance in the pool. It'll also tax my family's bank account for sure. **Despite the problems I still want to go through with the procedures. No matter what anyone says.** / **Because of all the problems, I think it's probably best to not go through with the procedures.**

S6: Identity Expected (Email) Interaction

**To:** 'Hamilton Community Service Initiative'
**From:** 'Max [last name withheld]'
**Subject:** 'for the Hamilton community service project'

My name is Max. I'm 74/44/24 years old, from Hamilton NJ. I used to work/work at a hardware store. I like listening to my favorite radio station and going out sometimes. I actually really like music, like what's on the radio, the latest pop music like the Black Eyed Peas, Rianna, Justin Timberlake, Lady Gaga / Frank Sinatra, Bing Crosby, Sammy Davis Jr. And I'm not shy about it. When I go out I'll have my Black Eyed Peas / Sinatra shirt on, play the music pretty loud on my headphones, and move around a little bit.
WASHINGTON, DC (AP) -- The proportion of people age 65 and up is steadily increasing in the United States, the U.S. Census Bureau said Wednesday.

There are now 40.3 million people 65 and older in the U.S., the bureau reported.

The figure accounts for 13 percent of the population and is larger than in any other decennial census, up from 31.2 million in 1990 and 35 million in 2000.

By 2030, the same age group is predicted to form a full 25 percent of the population. Projections also predict 88.5 million older Americans by 2050.

Though some experts are optimistic / pessimistic that a graying society will work smoothly, far more believe that there won't / will be enough resources to accommodate all generations.

"Unfortunately / fortunately, younger people should suffer the most / shouldn't suffer much from these demographic trends," said Dr. Kenneth Fields, a research professor at Georgetown University’s Center for Population and Health. "With more assets going to older Americans, there simply won't be as much to go around." / “Even with more assets going to older Americans, there should be plenty to go around.”