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## Youngism: The Content, Causes, and Consequences of Prejudices Toward Younger Adults

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Research on ageism has focused largely on perceptions of and biases targeting older adults, implicitly assuming that age-based stigma increases throughout the life span and that young adults benefit from favorable views relative to their older counterparts. In a series of eight studies (N = 2,323), we provide evidence to the contrary. We theorize that, in sharp contrast with ageism toward older adults, which revolves around fear and discomfort with the target's later life stage, youngism (i.e., ageism toward young adults) is primarily generationally focused, aiming at *contemporaneous* generations of young adults rather than young adults in *general*. Consistent with this theorizing, we find that today's young adults are ascribed a mixed stereotype content (Study 1a–1c), subject to harsher social judgments than both older age groups (Study 2) and recollections of former generations at the same age (Study 3a and 3b), and victim of discriminatory behaviors (Study 4 and 5). By comprehensively documenting cognitive, emotional, and behavioral evidence of youngism, the present work challenges the idea that ageism only reflects a plight of later-life aging. Instead, we show not only that ageism can target other age groups but also that the nature and content of ageism vary across the life span.

Keywords: age, anti-young ageism, generation, young adults, youngism

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Youth is a wonderful thing. What a crime to waste it on children.

-George Bernard Shaw

Along with race and gender, age fundamentally underlies social judgments and behaviors (Kite et al., 1991; Montepare & Zebrowitz, 1998). Yet, despite the primacy of age, the consequences of age-based categorization continue to be vastly understudied in social psychology (Nelson, 2005, 2017). One consequence of this

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blind spot is a surprising lack of mainstream social psychological theory unpacking the causes and consequences of stereotyping across the full age spectrum. Terror management theory links ageism to mortality salience (Greenberg et al., 2002), sociological theories to the advent of the printing press (Nelson, 2005), evolutionary theories to the fear of illness (Kurzban & Leary, 2001), and a recent social-psychological resource competition perspective to generational tensions (North & Fiske, 2013). However, in spite of purporting to explain the roots of ageism in general, these theories emphasize prejudices targeting older adults, tacitly assuming that older adults are the only targets of ageism and thereby overlooking potential plights faced by the younger side of the age spectrum.

Within a rapidly aging population, large cross-generational economic inequalities have emerged: Today's young are the first generation in modern history expected to do less well financially than their parents (Van Dam, 2020). Given the scolding of the young generation in the public sphere and mainstream media—exemplified by the bashing of Millennials (e.g., Bauerlein, 2008; Stein, 2013) or backlash toward young political activists defending the interest of their generation (e.g., Greta Thunberg, David Hogg, Alexandria Ocazio-Cortez)—the present is a particularly opportune time to address this gap in the literature.

The present article comprises multiple aims toward this end. We theorize that, contrary to ageism toward older adults, which largely results from one's anxiety regarding the target's late life stage, "youngism"—ageism toward younger adults—is generationally based, targeting *contemporaneous* generations of young adults

specifically, rather than young adults *in general*. In a series of eight lab studies, we examine the modern perceptions of young adults, show how they relate to unfavorable attitudes toward the target group relative to older age groups and former generations of young adults, and investigate how these generationally biased perceptions may lead to prejudice and discrimination against today's youth. We then discuss how the unique generational nature of this bias may help illuminate our understanding of age-based social cognition broadly, and we situate the current findings relative to the surprisingly long history of stereotyping younger generations.

#### Youthfulness: A Coveted Resource

Social psychological research offers little direct examinations of lay people's perceptions of young adults. Instead, scholars have typically incorporated younger adults into ageism research to introduce a comparison group against which to pit older adult targets of focal interest (e.g., North & Fiske, 2013). This research, looking at the effects of age on interpersonal judgments, suggests that young adults may enjoy a more positive image than do older ones (e.g., Drevenstedt, 1981; Lee & Clemons, 1985; Matyi & Drevenstedt, 1989; Schwab & Heneman, 1978). A meta-analysis (Kite et al., 2005) of 232 effect sizes from studies comparing younger and older adult targets found that younger adults were globally evaluated more positively, perceived as more attractive and more competent, the target of less negative age stereotypes, and subject to more favorable behaviors and behavioral intentions than their older counterparts.

These findings corroborate the general belief that young adults possess valued attributes, in particular those associated with youthfulness (i.e., being in the "prime" of one's life). At a physical level, youthfulness is synonymous with attractiveness, health, strength, and vitality (e.g., Cross & Cross, 1971; Franzoi & Koehler, 1998). At an intellectual level, youth evoke intellectual curiosity, cognitive alertness, mental flexibility, good memory, and peaks in "fluid intelligence" (Cattell, 1963; Craik & Salthouse, 2011; Crook et al., 1986; Horn, 1982; Horn & Cattell, 1967; Zelazo et al., 2004).

When contrasted with the negative images associated with aging (Cuddy et al., 2005; Cuddy & Fiske, 2002), the perks credited to youthfulness provide powerful incentives for people to attempt to maintain a youthful self-image. It may therefore come as no surprise that older adults routinely dis-identify as "old" (Weiss & Lang, 2009, 2012) and that adults in general want to perceive themselves as younger than they actually are, a discrepancy that increases with age, and spans people in the United States (Barak & Stern, 1986; Chopik et al., 2018; Goldsmith & Heiens, 1992; Montepare & Lachman, 1989), Europe (Öberg & Tornstam, 2001; Uotinen, 1998; Westerhof et al., 2003); and Asia (Ota et al., 2000). All in all, this desire for youthfulness across cultures supports the idea that it is universally perceived as a valued resource, a resource well embodied by young adults.

## A Darker Mainstream Portrait of Young Adults

Although social judgment and self-identity research on age suggests that young adults may enjoy a positive image—particularly relative to that of older adults—this conclusion seems at odds with the depiction of contemporary youth disseminated in the public

sphere. As illustrated by recent best-selling books, such as The Dumbest Generation (Bauerlein, 2008), What's Wrong with Millennials? (Brown, 2013), and Not Everyone Gets a Trophy: How To Manage Generation Y (Tulgan, 2009), a growing portrait paints modern young adults as clueless and burdensome. This image regularly emerges in the form of derogating Millennials as narcissistic, lazy, and entitled (e.g., Stein, 2013). In addition, Millennials face blame for "ruining" various societal standards, ranging from high-level foundations such as democracy, marriage, work ethic, and face-to-face interactions, to more trivial elements such as cereals, paper napkins, and wine corks (Agrawal, 2017; Bunnett, 2016; Gifford, 2016; Schlossberg, 2016; Severson, 2016; Steverman, 2017; Williams, 2016). Beyond the negative image propagated in the media, young adults report facing condescension in speech and unfair workplace treatment due to their age, suggesting that the social cognitions targeting this group may have deleterious, realworld implications for its members (Duncan & Loretto, 2004; Giles & Williams, 1994).

Although scant psychological research exists to speak to these negative views of the young, some evidence appears to be consistent with these anecdotal observations. For instance, a Q-sort task conducted on undergraduates revealed both positive and negative archetypes of young adults (Hummert, 1990). In a lexical-decision task comparing positive and negative stereotypes targeting younger and older adults, participants of all ages exhibited a positive bias toward older—but not younger—adults (Chasteen et al., 2002). A recent study also identified specific evaluator attributes (i.e., people high on authoritarianism, people with high intelligence, and well-read people) likely to lead to the disparagement of young adults (Protzko & Schooler, 2019). Finally, outside of the lab, a series of surveys and focus groups found that, across a wide range of demographics, Americans describe contemporary youth as undisciplined, disrespectful, unfriendly, irresponsible, and lacking moral values (Farkas et al., 1997).

## Life Stage-Versus Generational-Based Bias

Taken together, the combination of positive and negative perceptions of younger adults highlights an apparent contradiction, the young appearing both praised and disparaged. Reconciling these competing views might point to the need to understand them as complementary. Consistent with this reasoning, we propose that the duality of young adults' image results from two parallel processes of social categorizations: one based on young adults' *life stage* and another based on young adults' *generational affiliation*.

Age comprises theoretical underpinnings both universal and exclusionary—that is, categories that are either permeable or impermeable (Joshi et al., 2011; North, 2019). On the one hand,

Our definition of young adults was informed by people's lay beliefs about the target group. To determine who qualified as "young adults", we surveyed an age-diverse sample of 357 participants (189 women; 262 Caucasians; age: M = 40.2, SD = 13.31, Min. = 19, Max. = 78). Participants identified young adults as people between M = 18.0, SD = 3.85, 95% CI [17.6, 18.4], and M = 27.2, SD = 7.87, 95% CI [26.4, 28.1], a perceived age bracket unaffected by participant age: correlation between participant age and perceived lower age boundary of young adults: r = .008, p = .885; correlation between participant age and perceived upper age boundary of young adults: r = .071, p = .182. We used this bracket as our reference point for this article.

unlike race or gender, age is the only social category that comprises life stage subgroups that everyone eventually joins; provided sufficient life span, every living person will eventually experience what it is like to be young, middle-aged, and older (North & Fiske, 2012). On the other hand, age also comprises impermeable, socially constructed *generational clusters*: Boomers comprise only those born between 1946 and 1964, Generation X those between 1965 and 1980, Millennials those born between 1981 and 1996, and so on (Dimock, 2019). Thus, unlike the universal experience of life stages, generational affiliations foster divisions between age cohorts: today's younger adults will never know, for instance, what it was like to have come of age during the Civil Rights Era, whereas older adults will never fully understand growing up during the birth of smartphones.

Contrary to older-targeted ageism, which revolves around a fear or discomfort with older adults' late *life stage*, young-targeted ageism likely does not center around young adulthood itself, a universally experienced and largely envied life stage. Instead, we propose that youngism is generation-based, such that people purportedly take exception with *today's* young rather than young *in general*. That is, people attribute to contemporary youth negative characteristics that they believe didn't apply to previous generations at the same age. Simply put, when it comes to ageism, people complain about "old people" in general, but about "kids *these days*!."

This theorizing suggests an overall mixed stereotype content of young adults-that is, a combination of positive and negative stereotypes. Most social groups—disadvantaged ones in particular are subject to a mix of positive and negative generalizations about its members, including women (Eagly & Mladinic, 1989; Glick & Fiske, 1996; 2001; Spence et al., 1979), African Americans (Czopp, 2008; Czopp & Monteith, 2006; Gaertner, & McLaughlin, 1983; Kay et al., 2013), and older adults (Brewer et al., 1981; Chasteen et al., 2002; Hummert, 1990; Levy, 1996). With regard to young adults, we propose that the positive aspect of young adults' image likely mirrors people's praise and envy for attributes such as beauty and youthful energy, characteristics associated with young adults' life stage (i.e., young adulthood). On the other hand, the negative aspect of young adults' image speaks to a form of generational disparagement, by which people see contemporary youth as less worthy and deserving as former birth cohorts at the same age (i.e., a perceived generational decline; Protzko & Schooler, 2019).

## Youngism and Prior "Oldism" Findings

If perceptions of the young are mixed and people are biased against the young, as proposed above, then why did this phenomenon not clearly emerge in prior work? We propose that the specific comparative contextualization offered to participants in classic age paradigms may help explain why previous research singled out (older-focused) ageism but not youngism. To date, social cognition researchers interested in age have primarily conducted *life-stage*-based investigations, pitting attitudes toward young adults in general and older adults in general in an effort to maximize the generalizability of their findings. Although valuable, this approach may have overemphasized the life-stage categorization of age targets and minimized the impact of the generational categorization to which young adults are also subject.

In contrast, the present research focuses on a *cohort*-based approach to young-targeted ageism, examining perceptions of and

attitudes toward today's young rather than young in general (Trzesniewski & Donnellan, 2010). In so doing, we build upon former work in social categorization theory to highlight the importance of temporal contextualization in age-related social cognition. Social categorization theory has long established that categorization is comparative and context-dependent (Turner et al., 1994). In particular, introducing a comparison group or varying the nature of that comparison affects the basis for social categorization (Doosje et al., 1998; Haslam et al., 1992; Haslam & Turner, 1992). For instance, the basis for categorizing a young woman may differ based upon whether she is compared with a young man or an older woman; the process of social categorization, in turn, defines the characteristics one ascribes to the target, the attitudinal valence one feels toward it, and the set of behaviors one expects from it (Van Rijswijk & Ellemers, 2002). Expanding on this literature to inform our understanding of ageism, we theorize that temporally situated cohort labels (e.g., today's young adults) may conjure up generation-based social categorization more strongly, allowing evaluators to conciliate their negative attitudes toward contemporaneous youth and belief in a generational decline with the valued attributes of youthfulness that this social group historically epitomized.

# Who Is More Likely to Espouse Youngist Beliefs (and Why)?

Although familiar stereotypes about stigmatized groups pervade societal strata, outgroup members are generally more likely to uphold, express, and act on these stereotypes than are ingroup members (Hewstone et al., 2002). Thus, as the strongest outgroup members of the young, older adults constitute ideal candidates for the endorsement of youngist beliefs.

Nevertheless, because we theorize that youngism stems from a belief in generational decline over time, by which previous generations of young adults are perceived as having been better and more deserving than contemporaneous ones (Protzko & Schooler, 2019), we expect older adults' disparagement of younger generations to go beyond a simple outgroup effect and to represent more than just one side of a reciprocal cross-generational derogation. Instead, given our noted "generational decline" hypothesis, we expect older adults to be more prejudiced toward younger generations than younger generations toward older ones. Also consistent with a generational decline hypothesis (vs. mere ingroup-outgroup derogation, or mutual generational disparagement), we predict that older adults have unfavorable opinions of today's youth specifically, but not of the youth of previous eras-including the youth of eras anterior to their own, considered outgroups too. In turn, this negative stereotyping and derogatory generational comparison targeting today's young should increase the tendency to attribute young's predicaments to their own wrongdoing, thereby justifying generational inequalities and decreasing willingness to support policies aimed at alleviating intergenerational imbalances. We explore these predictions in a series of eight lab studies.

#### **Research Overview**

To explore lay perception of young adults, we first examined the stereotype content associated with today's young (Study 1a–1c); we then compared attitudes toward the young with those toward older contemporary age groups (Study 2), other prejudicially targeted social groups (Study 3a), and former generations of young adults (Study 3a and 3b); finally, turning to practical concerns, we documented the unique prejudicial and discriminatory consequences of youngism, highlighting the detrimental effect of endorsing certain stereotypes about younger generations on one's willingness to support a political candidate with a "future generation"—oriented speech (Study 4) and one's likelihood to fund a university's student debt relieve initiative (Study 5).

## Study 1a: Modern Stereotype Content of Young Adults – Inductive Approach

Combining inductive and deductive methods (Burisch, 1984; Hinkin, 1995; Tskhay et al., 2018), we first built a model of the stereotype content of young adults. This task served four purposes: to gain a deeper understanding of the perceptions of the target group, to confirm that they are subject to a mixed stereotype content, to obtain a validated stereotype measure for subsequent studies, and to provide a comprehensive model that can serve as a building block for future research on youngism.

Taking an inductive approach, we conducted a principal component analysis (PCA) to reduce a large, participant-generated pool of adjectives associated with young adults to a manageable set of the most representative items (Study 1a). Taking a deductive approach, we complemented this condensed set of participant-generated items with a list of author-generated ones, based on former research and common media descriptions of young adults. We then subjected the combined set of items to an Exploratory and Confirmatory Factor Analysis (EFA and CFA; Study 1b). The output—resulting from a total of 1,081 participants—forges a model of young adult stereotype content. We then tested the predictive power of the model (Study 1c) and conducted additional validation, robustness checks, and exploratory analyses, the details of which are reported in Supplemental Materials 1–8.

## Method

## Item Generation

Fifty-one Amazon Mechanical Turk workers (25 women; 44 Caucasians; age: M = 38.2, SD = 10.92, Min. = 22, Max. = 66)<sup>2</sup> each listed five adjectives they thought were most representative of today's young adults. This process generated 137 unique valid items—90 attributes appeared more than once—a pool size consistent with prior bottom-up scale development using a similar methodology (e.g., Lin et al., 2005).

This initial pool reflected a broad array of dimensions, from personality-based attributes (e.g., courageous, creative, arrogant, distracted) to cognitive abilities and knowledgeability (e.g., intelligent, smart, slow, uninformed), and comprised a mix of 45 positive items, 20 neutral ones, and 72 negative ones, as coded by two research assistants blind to the goal of this study, Cohen's  $\kappa = .704$ , p < .001 (see Supplemental Material 1 for a full list of generated items; see Supplemental Material 2 for a large replication of the item generation survey, providing support for the representativity of the items in this initial list, and confirming the accessibility of the items retained and relevance of the ensuing model).

## **Participants**

Six hundred forty-one responses were collected via Amazon Mechanical Turk. Fifty-eight responses (9.0%) were excluded for failing to complete at least one attention check and/or completing the study multiple times, leaving a sample of 583 participants (295 women; 465 Caucasian; age: M = 38.6, SD = 11.11, Min. = 19, Max. = 74).

Given the age-related nature of our research, we strived to obtain a broad age distribution for our sample. We applied an age quota, such that roughly a third of our respondents were between 18 and 35, another third between 36 and 55, and a last third 56 and above. The quotas were set based on respondents' age, a piece of information that the potential respondent provided in a short filter questionnaire completed prior to entering the study, or as part of preliminary questionnaires conducted by the crowdsourcing platform. When the quota was met for one of these three age categories, following respondents from that age category would be precluded from entering the study and invited to enroll in another study without an age restriction. Unless explicitly mentioned, similar age filters were used for subsequent studies.

#### Measure and Procedure

Participants stated the extent to which they believed that each of the 138 items previously generated applied to young adults using a 7-point scale (1 = Strongly Disagree, 7 = Strongly Agree). Two attention checks were included in this study. They were embedded among the items of a scale at the end of the survey and read "This is an attention check, please select [one/seven] and move to the next item." We included the same type of attention check across all studies included in this article.<sup>4</sup>

## Results

In line with recent recommendations (Osborne et al., 2014), we conducted a parallel analysis (PA) and minimum average partial criteria analysis (MAP) to determine a-priori factor solutions. The parallel analysis was conducted on FACTOR (Lorenzo-Seva & Ferrando, 2006) and suggested a six-factor solution. The MAP test was performed on SPSS using O'Connor's (2000) code. The original MAP test (Velicer, 1976) proposed a 13-factor solution, whereas the revised MAP test (Velicer et al., 2000) proposed a 12-factor solution. We first explored the data using the most liberal of these solutions (i.e., the 13-component solution proposed by the revised MAP test). We conducted a PCA using an oblimin

 $<sup>^2</sup>$  In all studies, respondents completed the study in exchange for money, at a price estimated pre-hoc based on expected average completion time, at a rate of \$0.10 to \$0.15 per minute.

<sup>&</sup>lt;sup>3</sup> In this study and the following ones, we took a conservative approach toward duplicate participants. Respondents were considered duplicates when their IP address was identical to that of another respondent. In such case, both responses were excluded from further analyses.

<sup>&</sup>lt;sup>4</sup> Study 1a and 1b and Study 4 were conducted under the following IRB approval (UCAIHS): IRB-FY2016-540, Age and Generation Diversity at Work. Study 1c, 2, 3a, 3b, and 5, as well as all online supplemental material, were conducted under the following IRB approval (UCAIHS): IRB-FY2018-1357, Youngism.

<sup>&</sup>lt;sup>5</sup> Twenty-one components possessed an Eigenvalue superior to 1. However, we discarded the Eigenvalue threshold as a viable solution, given the proven strength of PA and MAP over the Eigenvalue approach in selecting factors (Osborne et al., 2014).

rotation, an optimal rotation choice to effectively identify items associated with each factor as well as simple structures when present (Finch, 2006). We discarded items with strong double-loading and items loading below .40 on their respective primary component. We also discarded components with fewer than three items and components with no items loading above .50. In all, we retained 57 items.

## Study 1b: Modern Stereotype Content of Young Adults – Deductive Refinement

The 57 participant-generated items retained at the end of Study 1a were complemented with 36 items produced by the authors (Hinkin, 1995; see Tskhay et al., 2018 for a similar method). This complementary deductive process aimed at addressing certain limitations of the participant-generated list, such as adding common media depictions of young adults that were missing in the participant-generated pool (e.g., narcissistic, geeky), and including theoretically relevant items based on themes explored in former academic research on young adults. For instance, inspired by prior work on generational perceptions (e.g., Twenge, 2013), we added items such as "civic-minded" to assess whether young adults' social engagement represents a central theme in people's perception of the target group (see Supplemental Material 1 for full list of generated items).<sup>6</sup> We merged the two sets of items (93 items) and subjected them to a series of EFA and CFA using a new sample of participants.

#### Method

## **Participants**

Four hundred seventy-eight responses were collected via Amazon Mechanical Turk. Thirty-two responses (6.7%) were excluded because the respondents failed to complete one or several attention checks, or completed the study multiple times, leaving a sample of 447 participants (258 women; 379 Caucasians; age: M = 46.2, SD = 14.34, Min. = 19, Max. = 83).

#### Measure and Procedure

The procedure was similar to that of Study 1a. Participants were asked to state the extent to which each of the 93 items applied or not to young adults, using a 7-point scale  $(1 = Strongly \, Disagree; 7 = Strongly \, Agree)$ .

## Results

The parallel analysis suggested a six-factor solution while the MAP analysis proposed an 11-factor solution. We conducted a Principal Axis Factor analysis with an oblimin rotation using the PA and MAP results as the lower and upper boundaries for our final factor solution. We screened factors and items using rules similar to those described in Study 1a.

Eight factors encompassed within two higher-order factors emerged. We used these exploratory analyses as a screening procedure to guide selection of a smaller set of items, both for the sake of parsimony, and to facilitate the subsequent use of more sophisticated analytic techniques (see Glick & Fiske, 1996; for a similar approach). In the final model, we retained 10 items for

each of the two higher-order factors, using the most representative items of each of the subfactors.

An initial CFA was performed to assess the degree of fit of the proposed model on the current dataset. We employed structural equation modeling techniques on AMOS Version 27.0 (Arbuckle, 2020). Because the model was developed using the same dataset, this preliminary CFA cannot be considered an independent test of fit (see Appendix A for CFA results of Study 1b and all subsequent studies). Nevertheless, the analysis still offered support for a solution with two higher-order factors each encompassing four primary factors. The first higher-order factor was largely positive (i.e., resourceful facet: smart, ambitious, hip, and techie) and the second one largely negative (i.e., ungrateful facet: coddled disrespectful, rookie, and radically progressive; see Figure 1). In line with comparative practices used in other SEM scale-development studies (e.g., Glick & Fiske, 1996; Luhtanen & Crocker, 1992), these same fit indices were considerably worse for a one-factor model. Our final model also outperformed a two-factor model (i.e., keeping only the two higher-order factors) and a four-factor model (i.e., isolating the radically progressive and techie factors, which displayed comparatively weaker loadings on their higherorder factors, and grouping the remaining 16 items under their respective higher-order factors). Furthermore, the Akaike Information Criterion (AIC) of the final model was within the vicinity of that of the saturated model with both small and moderate size samples. Finally, the reliability of the factors included in the final model was moderate to high, and Cronbach alphas within acceptable range (see additional tables in Supplemental Material 3 for detailed statistical properties). Similar analyses on following samples further supported these conclusions.

## Study 1c: Modern Stereotype Content of Young Adults – Initial Predictive Validity of the Model

In Study 1c, we assessed the predictive power of the model developed in Study 1a and 1b. The purpose of this assessment was threefold. First, we tested whether the endorsement of the cognitive content identified in Study 1a and 1b predicted attitudes toward the young. Second, we explored the complementarity of the eight subfactors retained in our final model. Third, we assessed whether our model predicted attitudes toward that target group above and beyond warmth and competence, universal—albeit nontarget specific—dimensions of social cognition (Fiske et al., 2002).

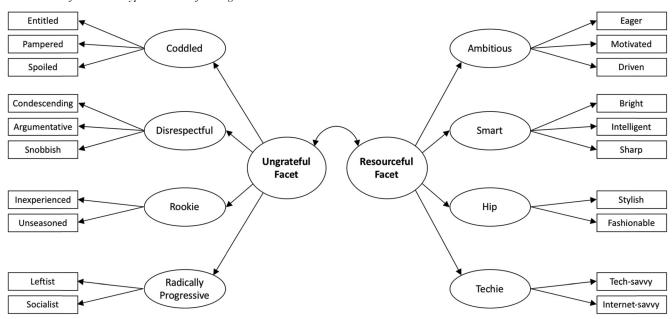
## Method

## **Participants**

We collected 375 responses from the crowdsource platform Prolific.co. We excluded incomplete and duplicate responses, as well as respondents who failed our attention checks. The final sample included 358 participants (176 women; 270 Caucasians; age: M = 44.08, SD = 15.90, Min. = 18, Max. = 80).

<sup>&</sup>lt;sup>6</sup>The items emerging in the replication survey available in Supplemental Material 2 corroborate the choice of our author-generated items.

Figure 1
Full Model of the Stereotype Content of Young Adults



*Note.* On the one hand, young adults are praised for their perceived resourcefulness, a mix of youthful energy (ambitious), high level of fluid intelligence (smart), and adaptability to the current time (hip and techie). On the other hand, they are depicted as ungrateful: an overly protected group (coddled) at the bottom of the totem pole (rookie) that inappropriately challenges older generations (disrespectful), cherished norms, and established authority (radically progressive).

#### **Procedure and Measures**

Participants first reported their attitudes toward twenty social groups using 11-point, single-item thermometers (-5 = Extremelycold feelings; +5 = Extremely warm feelings). The social groups included fifteen fillers (e.g., female professionals, the Asian American community, pro-life activists, politicians) and five targets (i. e., today's young adults, Millennials, people in their 20s, college students, and young professionals), presented in random order. Prior research suggests that the stereotype content associated with a target group may vary based on the label or subtarget category employed (Van Rijswijk & Ellemers, 2002). We measured attitudes toward five young target groups (a) to ensure that our final model was comprehensive enough to predict attitudes toward young adults independent of minor label variations and (b) to assess whether the predictive power of the eight subfactors unearthed in our final model varied across different young adult subpopulations.

After completing the attitude thermometers, participants were told that they would be randomly assigned to two of the twenty social groups they just evaluated and would provide a more indepth opinion of these two groups. In reality, all participants were assigned to "today's young adults" and "African Americans." Using a 7-point scale ( $1 = Strongly \, Disagree; 7 = Strongly \, Agree$ ), they reported the extent to which the 20 items of the stereotype content developed in Study 1a and 1b applied to young adults today (see Appendix B for an illustration of the scale) as well as the extent to which they felt that today's young were warm (warm, friendly, selfless, and empathetic;  $\alpha = .85$ ) and competent

(competent, confident, ambitious, and assertive;  $\alpha = .75$ ). The evaluation of African Americans—a filler group included to reduce risks of demand characteristic—mimicked the format employed for young adults, using positive and negative adjectives taken from Peabody (1967).

#### Results

We converted attitude measures on a 100-point scale, and standardized all continuous predictors, such that every regression coefficient represents the change in attitude toward the target group, in percentage points, for a participant scoring 1 *SD* above the mean on that given predictor. Results reported in Table 1 and 2 include a general measure of attitudes toward young adults (i.e., a single measure collapsing attitudes toward the five target groups). Table 3 provides a breakdown for each target groups. Detailed results at the subfactor- and facet-level are described below.

## Subfactors of the Stereotype Content and Attitudes Toward Young Adults

The eight subfactors predicted attitudes toward young adults in the expected direction, with the exception of the radically progressive subfactor (see Table 1), not pointing conclusively in any direction. A follow-up regression revealed that, although not significant on its own, the latter subfactor interacted with participants' political views, such that conservatives, who held more negative attitudes toward young adults to begin with, B = -4.36,

 Table 1

 Descriptive Statistics and Correlational Matrix, Study 1c

	Descr	iptives	Correlations				
Variable	M	SD	Attitudes	Warm	Competent		
Resourceful facet	5.10	0.80	.57	.65	.73		
Smart	4.96	1.07	.54	.60	.64		
Ambitious	4.57	1.16	.52	.68	.69		
Hip	4.87	1.20	.33	.33	.42		
Techie	6.34	0.77	.18	.12	.26		
Ungrateful facet	4.73	0.97	42	55	31		
Coddled	4.76	1.45	40	52	25		
Disrespectful	4.48	1.24	42	51	23		
Rookie	4.96	1.19	30	46	36		
Radically progressive	4.81	1.02	02	04	.05		
Warm	4.31	1.09	.59	_	_		
Competent	4.77	0.92	.48	.61	_		
Correlation between the resourceful and ungrateful facets					39		

Note. All correlations were significant at p < .001, except for Techie/Warm, and Radically Progressive/Competent, significant at p < .05, and Radically Progressive/Warm and Radically Progressive/Attitude, nonsignificant.

p < .001, 95% CI  $[-6.33, -2.39], \eta_p^2 = .051, 95\%$  CI [.015, .101], were even more likely to do so when they believed young adults were radically progressive, B = -1.89, p = .037, 95% CI  $[-3.66, -.12], \eta_p^2 = .012, 95\%$  CI [.000, .044]. In this sense, although the "radically progressive" label need not be negative in and of itself, the very people who interpret it as such (i.e., conservatives) are the ones upholding negative views of young adults in the first place.

We then assessed the complementary predictive power of the subfactors in two ways. First, we examined their ability to complementarily predict attitudes toward young adults in general (see Table 2). Multiple subfactors of our stereotype content remained significantly predictive when entered jointly in a single model (model 1, 3, and 5a), even when participant's demographics and general response to attitude thermometers were included in the model (model 5b).<sup>7, 8</sup> Second, we tested whether the eight subfactors varied in predictive power across our five target groups, finding evidence supporting the utility of incorporating all eight subfactors (see Table 3). For instance, *hip* was especially predictive of attitudes toward college students, but far less of those toward Millennials or today's young adults. In contrast, *techie* was particularly predictive of attitudes toward Millennials, and *coddled* of those toward people in their 20s.

## The Two Facets of the Stereotype Content and Attitudes Toward Young Adults

The resourceful and ungrateful facets—combining the 10 items of each facet—were associated with attitudes toward young adults in the expected direction when entered separately; B=10.76, -p < .001, 95% CI [9.15, 12.36],  $\eta_p^2 = .328$ , 95% CI [.253, .398] (resourceful facet, Table 2, model 2), and B=-7.83, p < .001, 95% CI [-9.61, -6.05],  $\eta_p^2 = .174$ , 95% CI [.108, .243] (ungrateful facet, model 4).

We also expected the two facets of our stereotype content to predict attitudes toward young adults above and beyond warmth and competence. Prior to testing this prediction however, we first examined the correlations between the two facets of our model on the one hand, and warmth and competence on the other, as a preliminary test of convergent/divergent validity (see Supplemental Material 6 for an in-depth test). Although the correlations were generally high, consistent with other recent work comparing different stereotype content subdimensions (e.g., Hentschel et al., 2019), it is worth noting that warmth and competence *both* showed large positive correlations with the resourceful facet and moderate negative correlations with the ungrateful facet. In this sense, because the resourceful facet of our model does not map neatly onto either warmth or competence any more than does the ungrateful facet, our overall model demonstrates divergent validity from SCM dimensions (Kervyn et al., 2015; see also correlation matrices in Supplemental Material 4a, 4b, and 5 for a general corroboration of these findings).

To examine the predictive power of our model relative to the SCM, we then inputted these measures into a series of multiple regressions. The facets of our model were complementary predictive of attitudes toward young adults (Table 2, model 6a), even when controlling for participant's demographic characteristics and general response to attitude thermometers (model 6b). In contrast, although warmth and competence were complementary predictive (model 7a), the competence dimension became nonsignificant when control variables were added (model 7b). Finally, when included jointly with warmth and competence (model 8a & 8b), the two facets of our model remained significant and directionally consistent, suggesting that their predictive power extended beyond that of the two universal but non-target-specific dimensions of social perceptions. We replicated these results in three additional studies using different operationalizations of warmth (/communality) and competence (/agency; see Supplemental Material 4a, 4b, and 5), including one using 20

<sup>&</sup>lt;sup>7</sup> General response to attitude thermometers was measured by collapsing responses to attitude thermometers of the 15 filler targets. The measure was included in an effort to control for risks of systematic error variance (Podsakoff et al., 2003).

<sup>&</sup>lt;sup>8</sup> Importantly, despite the large number of variables entered in the models, the variance inflation factors (VIFs) were all below 3, mitigating concerns over potential multicollinearity among variables (Hair et al., 2006; Menard, 1995; Kutner et al., 2004).

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Predictive Properties of the Two Facets of the Stereotype Content of Young Adults on Attitudes Toward the Target Group

Variable	Model 1	Model 2	Model 3	Model 4	Model 5a	Model 5b	Model 6a	Model 6b	Model 7a	Model 7b	Model 8a	Model 8b
Smart Ambitious Hip Techie	5.90*** 4.80*** 1.73 <sup>†</sup> 0.79				4.55*** 3.38** 2.64**	2.75** 2.33* 1.27* -0.61						
Coddled Disrespectful Rookie Radically progressive			-2.95* -4.93*** -1.88* 1.34		-2.01 -3.44** 0.61 0.80	-2.81** -2.88** 0.29 0.71						
Resourceful facet Ungrateful facet		10.76***		-7.83***			9.09***	4.95*** -5.13***			5.53*** -2.22*	3.16** -3.50***
Warmth Competence									8.90***	7.19** 0.96	5.80*** 0.79	4.46***
Age Female Education						-1.80* -1.47 -0.39		$-1.78**$ $-2.28^{\dagger}$ $-0.22$		-1.33 <sup>†</sup> -0.79 -0.63		-1.08 $-1.38$ $-0.59$
Control groups						-1.78* $10.51***$		-1.91* $10.44$ **		-3.51*** 9.94***		-1.98** 9.94***
$R^2$	.34***	.33***	.20***	.17***	.39***	***59.	.37***	***89.	.37***	.62***	.42***	.65***
Highest VIF	2.04	1.00	2.86	1.00	2.90	2.95	1.18	1.48	1.58	1.84	2.53	2.69

Note. VIF = variance inflation factor. Continuous predictors are all standardized. Attitude thermometer (dependent variable) converted to a 0 to 100 scale, with 0 = Extremely Cold and 100 Extremely Warm.  $^{\dagger}p = .1. *p = .05. **p = .01. ***p = .001.$ 

**Table 3**Predictive Properties of the Stereotype Content of Young Adults on Attitudes Toward Each Young Target Group

Variable	Today's YA	Millennials	People 20s	College stud.	Young pro.
Smart	4.91***	4.47**	3.97**	5.20***	4.18**
Ambitious	3.73*	4.07**	$2.48^{\dagger}$	2.36	4.28**
Hip	1.65	$1.93^{\dagger}$	2.42*	4.48***	2.73*
Techie	0.02	3.12**	-0.64	$1.85^{\dagger}$	1.12
Coddled	$-3.08^{\dagger}$	-2.48	-4.42**	$-2.95^{\dagger}$	$2.88^{\dagger}$
Disrespectful	-4.65**	-4.44**	-1.92	-2.61	-3.59*
Rookie	0.46	1.12	0.14	$2.28^{\dagger}$	-0.93
Radically progressive	0.48	0.05	$1.66^{\dagger}$	-0.48	2.28*
$R^2$	.35***	.34***	.28***	.29***	.27***
Highest VIF	2.90	2.90	2.90	2.90	2.90

*Note.* All predictors are standardized. Attitude thermometers (dependent variables) converted to a 0 to 100 scale, with  $0 = Extremely\ Cold$  and  $100 = Extremely\ Warm$ .

Today's YA = today's young adults; People 20s = people in their 20s; College stud. = college students; Young pro. = young professionals; VIF = variance inflation factor.

items, to match the stereotype content of our final model (see Supplemental Material 5).

## Additional Analyses and Scale Validation

We further tested the properties and structural validity of the model developed in Study 1a-b using a metasample compiling 4,812 unique participants from various studies conducted over the course of this research program (see Supplemental Material 6), confirmed the convergent validity of the model via a correlational study with a set of common prejudice measures (see Supplemental Material 7), and conducted additional assessments of the utility of the model by comparing its predictive power against social dominance orientation, a more generic antecedent of prejudice (Ho et al., 2015; Pratto et al., 1994; see Supplemental Material 4a and 8). Taken together, these additional analyses support the usefulness of the factors and subfactors retained as well as the overall robustness of the model.

#### Discussion

Responding to a call for a more granular descriptive understanding of the phenomena studied in psychology (Cooper, 2016), the model emerging from Study 1b presents a detailed account of the key dimensions of the stereotype content of young adults, offering a general mixed image of the target group. On the one hand, perceptions of young adults include the advantageous attributes of their youth (i.e., resourceful facet): Participants associate younger adults with a peak in cognitive skills (i.e., intelligence) and energy (i.e., ambition), as well as with being keenly in tune with the time (i.e., hip and tech-savvy). On the other hand, people also ascribe negative stereotypes to younger adults (i.e., ungrateful facet), perceiving the target group as naïve (i.e., rookie), overly reliant on previous generations (i.e., coddled), and inappropriately challenging toward current norms and authority (i.e., disrespectful

and radically progressive). Whereas the resourceful facet reflects envied attributes of youthfulness such as vigor, cognitive abilities and adaptability, the ungrateful facet, depicting young adults as dependent and rebellious, speaks to noted power imbalances relative to older generations.

As per findings of Study 1c, these two overarching facets were distinct from-and predicted attitudes toward young adults above and beyond-perceptions of warmth and competence, two universal, albeit nontarget-specific, dimensions of social cognition (Fiske et al., 2002). In addition, although the resourceful and ungrateful facets of our model constitute a statistically parsimonious way of capturing participants' endorsement of the stereotype content of young adults, the eight subdimensions of the model displayed complementary predictive power and helped account for the nuances in stereotype content associated with some specific subpopulations of that broader target group. These more granular eight subdimensions may therefore reveal useful to researchers aiming at studying perceptions of specific subpopulations of young adults (e.g., college students vs. young professionals, Millennials vs. Gen Z). That said, additional work is needed to further clarify the function of each of these subdimensions, particularly with regard to the distinct attitudes and behaviors they may predict. Acknowledging this opportunity for future investigations, we focus the remainder of this article on the two higher-order dimensions of the model to better understand the causes and consequences of these mixed perception of young adults.

## Study 2: Perceptions of Different Age Groups

The mixed stereotype content unearthed in Study 1 suggests that evaluators may be subject to a form of cognitive bias against young adults. However, given prior findings that older adults also face mixed stereotype content (Cuddy et al., 2005; Fiske et al., 2002), it remains uncertain how perceptions of today's young map onto those of other age groups. Indeed, people may still harbor favorable attitudes toward today's young *relative* to older counterparts. In Study 2,

p = .1. \* p = .05. \*\* p = .01. \*\*\* p = .001.

**Table 4**Attitudes Toward Various Age Cohorts, Study 2

		Mod	del 1		Mod	lel 2
Variable	В	SE	95% CI	В	SE	95% CI
Constant	69.58	0.95	[67.72, 71.44]	69.58	0.92	[67.78, 71.39]
Age cohort (c)	0.13	0.03	[0.08, 0.18]	0.13	0.03	[0.08, 0.18]
Participant age (s)				3.98	0.91	[2.19, 5.77]
Participant Age (s) $\times$ Age Cohort (c)				0.13	0.02	[0.09, 0.18]
$R^2$	.02			.07		

*Note.* Age cohorts are centered, and participant age is standardized. Attitude thermometers converted to a 0 to 100 scale, with  $0 = Extremely\ Cold$  and  $100 = Extremely\ Warm$ . All predictors significant at p < .001.

we tested for this possibility by comparing attitudes toward different adult age cohorts.

#### Method

## **Participants**

We collected 300 responses via Amazon Mechanical Turk, a sample size estimated based on previous developmental psychology work using a similar type of paradigm (e.g., Heckhausen et al., 1989). We excluded duplicate responses and respondents who failed our attention check. The final sample included 293 participants (169 women; 233 Caucasians; age: M = 45.29, SD = 15.04, Min. = 18, Max. = 82).

#### **Procedure and Measures**

Participants shared their attitudes toward various age cohorts. To reflect the inherently continuous nature of age and best capture potential curvilinear relationships, we asked participants to evaluate virtually all age cohorts composing the adult population, presenting target age groups in 10-year increments (i.e., people currently in their 20s, 30s, 40s, and so on, up to people

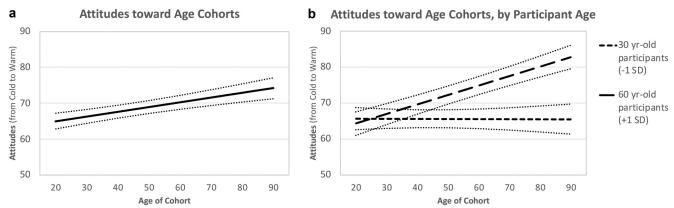
in their 90s). Participants reported their attitudes toward each target age group using attitude thermometers (1 = Extremely cold feelings; 11 = Extremely warm feelings).

## Results

We compared participants' attitudes toward different age cohorts by regressing attitudes toward target group on age of the cohort (i.e., people in their 20s, 30s, etc.). Standard errors were clustered at the participant level to accommodate the within-participant design of our analysis. We centered the independent variable (i.e., target cohort's age) and, as per Study 1c, transformed the dependent variable (attitude thermometers) into a 100-point scale, to obtain more easily interpretable size effects.

We regressed attitudes on target age cohorts and calculated estimates for different target age cohorts using Stata's margin function. Overall, attitudes toward the target cohort became gradually more positive as cohorts' age increased, such that the cohort in its 90s (M = 74.18, SE = 1.49) earned 14% more positive regard than the cohort in its 20s (M = 64.98, SE = 1.12; see also Table 4 model 1, and Figure 2a). We tested for alternative models in which we included the quadratic

Figure 2
Attitudes Toward Various Age Cohort on a 0 to 100-Point Scale, Study 2



Note. (a) Attitudes toward various age cohorts. (b) Attitudes toward various age cohorts as a function of participant age (-1 SD = 30)-year-old participants; +1 SD = 60-year-old participants).

term of target age cohorts to allow for nonlinear relationships: The quadratic term was not significant. Of note, and consistent with our prediction that older adults would be more biased toward younger ones than the other way around, this increase in favorable attitudes for older target cohorts was moderated by participant age, such that younger participants tended to show more homogenous evaluations across target age groups, and older participants displayed higher attitudinal divides between younger and older target cohorts, with marked preference for older targets (see also Table 4 model 2, and Figure 2b). Notably, however, the biggest evaluative difference between younger and older participants was crystalized in their attitudes toward older target groups, not younger ones, toward whom attitudes seemed more consensual—and on the lower end relative to other target age groups.

#### **Discussion**

Using a repeated measure design devised to assess attitudes to-ward different age cohorts, Study 2 offers evidence that people harbor colder feelings toward today's young adults than toward any contemporary older age group, including old-old adults. Furthermore, although older participants show a form of ingroup-outgroup bias, we find less evidence of an ingroup preference or strong outgroup derogation from younger participants, who evaluated all age cohorts relatively similarly. In Study 3a and 3b, we clarified the nature of this youngism bias, testing our prediction that the effect is generational, applying to contemporary youth specifically.

## Study 3a: The Generational Dimension of Youngism

Study 3a sought to achieve five goals. First, we compared attitudes toward current and former generations of young adults, expecting participants to exhibit colder feelings toward young adults today specifically, rather than toward all generations of young over time. Second, we compared attitudes from younger participants (i.e., adults age 18 to 35) and older participants (i.e., adults 56 and older), expecting unfavorable attitudes toward contemporary youth to be driven by the evaluations of older participants. Third, we also compared attitudes toward current versus former generations of older adults, expecting the negative generational bias against contemporary young not to apply to contemporary older targets. Fourth, we compared attitudes toward current versus former generations of women, African Americans, and Asian Americans, to confirm that generational bias against contemporary targets did not apply to other stereotyped social groups. Finally, we examined the role of participants' endorsement of the stereotype content of today's young developed in Study 1, expecting the ungrateful facet -associated with generational rather than life stage characteristics of today's young-to explain the differential in attitudes toward current versus former generations of young adults.

#### Method

#### **Participants**

Two hundred nineteen responses were collected via Amazon Mechanical Turk. Thirty-two responses were excluded because the respondents failed to complete one or several attention checks, or

completed the study multiple times, leaving a sample of 99 younger participants (49 women; 74 Caucasians; age: M = 27.5, SD = 4.56, Min. = 18, Max. = 35) and 88 older participants (62 women; 74 Caucasians; age: M = 62.2, SD = 4.93, Min. = 56, Max. = 80).

#### **Procedure and Measures**

Participants assessed their attitudes toward five target groups (people in their 20s, people in their 60s, African Americans, Asian Americans, and women) using 11-point feeling thermometers as in Study 2. For each target group, participants assessed current generations (e.g., people currently in their 20s) immediately followed by a similar assessment for previous generations (e.g., previous generations in their 20s), resulting in a total of ten evaluations. Participants then completed the 20 items of the stereotype content developed in Study 1, followed by a basic demographic questionnaire. <sup>10</sup>

## **Results**

For each target, we conducted on G\*Power 3.1 conducted a two-way mixed ANOVA comparing attitudes of younger versus older participants (between-subjects factor) toward current versus former generations of the target group (within-subject factor). We followed with post-hoc LSD tests to analyze interactions. As in prior studies, we converted the thermometer to a 100-point scale to ease effect size interpretation. Results are summarized in Table 5.

A sensitivity analysis conducted on G\*Power 3.1 suggested that, with our sample size, two participant groups, two repeated measurements, a measurement correlation of r = -.50, a power of .80, and an  $\alpha = .05$ , we could capture an effect size as small as  $\eta^2 = .022$  (Faul et al., 2007; Faul et al., 2009). Younger participants did not differ significantly in their attitudes toward people currently in their 20s (M = 54.14, SD = 13.47) and former generations in their 20s (M = 54.85, SD = 12.01), p = .814, but older participants did, reporting lower attitudes toward people currently in their 20s (M = 54.20, SD = 10.94) relative to previous generations at the same age (M = 61.82, SD = 6.92), p = .017 (see interaction, F[1, 185] = 5.02, p = .026,  $\eta_p^2 = .026$ , 95% CI [.000, .087], no interaction in other models were significant). These results contrast with attitudes toward the older age group target: Despite a notable in-group out-group difference, F(1, 185) = 27.62, p < .001,  $\eta_p^2 = .130$ , 95% CI [.052, .221], both younger and older participants expressed more favorable feelings toward people in their 60s today (M = 63.85, SD = 10.00) than toward previous generations at the same age (M = 60.80, SD = 10.18), F(1, 185) = 6.31, p = .013, $\eta_p^2 = .033, 95\%$  CI [.001, .097]. As predicted, no difference in current versus former generations emerged for Asian American and women targets. Contrary to our expectations, participants

<sup>&</sup>lt;sup>9</sup> More complex models appear in Supplemental Material 9. The supplementary analyses provide additional nuances but support the general conclusions reported in the main Results and Discussion sections.

<sup>&</sup>lt;sup>10</sup> Participants also completed three items ( $\alpha$  = .79) pertaining to the clarity of the items in the study, to ensure that the current versus previous generation items were not confusing. Participants overwhelmingly stated that the questions were clear: M = 4.36 (of 5), SD = 0.72.

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Attitudes Toward Current Versus Former Generations of Various Social Groups as a Function of Participant's Age Group

		Delfa	Sig.	*				
	ıts	ions	SD	6.92	6.62	9.15	8.49	3.71
	Older participants	Previous generations	M	61.82	67.95	62.16	64.32	72.73
	Older	ınt tion	SD	10.94	2.67	11.2	9.12	4.83
		Current generation	M	54.2	70.68	58.86	62.39	70.91
Interaction		Delta	Sig.					
Int		ous ions	QS	12.01	11.01	12.98	10.32	8.45
	rticipants	Previous generations	М	54.85	54.44	60.61	61.21	90.99
	Younger participants	ınt tion	QS	13.47	11.5	13.24	9.61	10.51
	Yo	Current generation	M	54.14	57.78	58.38	61.82	99:59
			F	5.02*	90.0	0.15	1.4	0.39
		ous	SD	10.03	10.18	11.22	9.49	89.9
generation		Previous generations	M	58.13	8.09	61.34	62.67	69.2
previous g		ent	QS	12.26	10	12.24	9.33	8.21
Current versus previous generations		Current	M	54.17	63.85	58.61	65.09	68.13
Cun			F	7.29**	6.31*	3.96*	0.38	96.0
		er oants	QS	9:36	6.16	10.21	8.78	4.27
Participant age group		Older participants	M	58.01	69.32	60.51	63.35	71.82
		ger	SD	12.7	11.27	13.08	9.92	9.46
		Younger	М	54.49	56.11	59.49	61.52	65.86
			F	1.72	27.62***	0.12	0.4	6.97
		Model	F	3.06***	4.95***	4.26***	5.96***	4.04***
			Target group	People in their 20s 3.06***	People in their 60s	African American	Asian American	Women

with 0 = Extremely Cold and 100 = Extremely WarmDelta Sig. = post-hoc tests examining differences in attitude scores between current and previous generation targets *Note.* Attitude thermometers (dependent variables) converted to a 0 to 100 scale. \*\* p = .01. showed warmer feelings toward former generations of African Americans (M = 61.34, SD = 11.22) than toward current ones (M = 58.61, SD = 12.24), although this difference was much smaller than that for the young adult target, F(1, 185) = 3.96, p = .048,  $\eta_p^2 = .021$ , 95% CI [.000, .026]. 11

Turning to endorsement of the stereotype content of today's young adults, we regressed attitudes toward people in their 20s endorsement on the two facets of the stereotype content developed in Study 1b (standardized), target generation (current generation = 1, former generation = 0), and the interactions of each facet with target generation, clustering data at the participant level to account for our within-subject design. The current generation of young adults was evaluated significantly less favorably than former generations at the same age, B = -.40, p = .009, 95% CI [-.69, -.10]. The resourceful facet was a significant predictor of attitudes toward the young age group target, B = .38, p = .023, 95% CI [.05, .71], and was not moderated by target generation, B = .23, p = .232, 95% CI [-.15, .61]. In contrast, the ungrateful facet was not a significant predictor on its own, B = .23, p = .147, 95% CI [-.08, .54], but was strongly moderated by target generation, B = -.52, p = .002, 95% CI [-.84, -.20], such that the gap between current and former generations increased with endorsement of the ungrateful facet. 12

#### Discussion

Older participants reported colder feelings toward people currently in their 20s than toward former generations at the same age. In contrast, younger and older participants alike reported warmer feelings toward people currently in their 60s than toward former generations at the same age. This stark difference (i.e., relative unfavorable attitudes toward current young adults but relative favorable attitudes toward current older adults) highlights the generational, cohort-based (vs. life-stage-based) nature of ageism targeting young adults.<sup>13</sup> In addition, the preference for former relative to current generations identified for the young age group target seems much more pronounced for this social group than for any other commonly discriminated group we tested, suggesting that these generational differences may be more characteristic of prejudice toward the young.

Finally, the resourceful facet of the stereotype content of young adults predicted attitudes toward young adults, regardless of their generational belonging. This finding tends to indicate that the favorable attributes associated with young adults are largely perceived as applying to all generations. That is, they are universal characteristics inherent to young adulthood. In contrast, the ungrateful facet of the stereotype content was specifically predictive of contemporary young adults, indicating that the unpleasant attributes associated with young adults are perceived as unique to the current younger generation rather than to people in the younger life stage in general.

<sup>&</sup>lt;sup>11</sup> More favorable attitudes toward former generations of African Americans possibly reflect a form of particular respect and admiration for older Black citizens, who in some ways epitomize the Civil Rights movement.

<sup>&</sup>lt;sup>12</sup> Supplemental Material 10 provides an extended model including 3-way interactions with younger versus older participants. The results are consistent with the ones provided in the main text

<sup>13</sup> See Supplemental Material 11 for a replication of these findings using an alternative paradigm.

Although the paradigm of Study 3a allowed us to test a large range of predictions, it left open the possibility that older adults may have thought of themselves when assessing "former generations of young adults," such that the effect reflects a simple outgroup bias, rather than a broader set of ageist beliefs and perception of generational decline. Study 3b focused on older adults only and was designed with the specific goal of ruling out this alternative outgroup hypothesis.

## Study 3b: Evidence of Perceived Generational Decline

In Study 3b, older adults shared their opinion of young adults from different eras, including older outgroup cohorts at this earlier life stage (e.g., young adults from the 1940s). This design allowed us to compare two competing hypotheses: The outgroup bias hypothesis, which predicts that older adults will show a marked preference toward their generation when they were young than toward young adults from generations both anterior and posterior to theirs; and a cohort-based youngism hypothesis, focused on a sense of perceived generational decline, which predicts that older adults will display more favorable attitudes toward young adults of past eras—including young from their own generation and other past generations—than toward today's younger adults.

#### Method

## **Participants**

We collected 101 responses from U.S.-based participants age 50 and above, via Prolific's crowdsourcing platform. One participant was excluded because their age did not meet our initial recruitment screening (i.e., age = 38). None of the participants failed our attention check, yielding a final sample of 100 participants (56 women; 85 Caucasians; Age: M = 60.45, SD = 7.04, Min. = 50, Max = 78).

#### **Procedure and Measures**

Using a series of single-item thermometers with endpoints -5 = Extremely unfavorable opinion, and +5 = Extremely favorable opinion, participants reported their attitude toward young adults—defined as people age 18 to 28—from five different eras: young adults from the 1940s, 1960s, 1980s, early 2000s, and young adults today. Note that our oldest participant was born in 1942; and most were born in the 1950s through 1960s, such that no participants would be considered an in-group member of our oldest target cohort (i.e., young adults in the 1940s). Order of cohort eras was counterbalanced across participants.

## Results

We ran a one-way, repeated-measure ANOVA to examine older adults' attitudes toward younger adults of our six eras (i.e., 1940s, 1960s, 1980s, 2000s and nowadays). Attitude thermometers were converted to a 100-point scale. A sensitivity analysis conducted using G\*Power 3.1 indicated that, with our sample size, six repeated measurements, a measurement correlation of r=.43, a power of .80, and an  $\alpha=.05$ , we could capture an effect size as small as  $\eta^2=.011$ . As predicted, the era factor was strongly significant, F(4, 396)=35.79, p<.001,  $\eta_p^2=.113$ , 95% CI [.055,

.166]. A post hoc analysis revealed that young adults from the 1940s (M=77.3, SD=18.19) were rated—tentatively—more favorably than those from the 1960s (M=73.5, SD=21.53,  $\Delta=-3.8$ , p=.111), and young adults from the 1960s were rated similarly as those from the 1980s (M=72.6, SD=18.51,  $\Delta=-.9$ , p=.706). The latter were rated more favorably than young adults from the early 2000s (M=65.9, SD=21.51,  $\Delta=-6.7$ , p=.005), who were rated barely more favorably than today's young adults (M=62.6, SD=28.06,  $\Delta=-3.3$ , p=.166). Taken together, a contrast between former and recent generations of young adults offers perhaps a better fit to the data, whereby attitudes toward young adults pre-2000 (i.e., 1940s to 1980s; M=74.5, SD=19.51) were higher than those toward young adults post-2000 (i.e., 2000s and 2020s; M=64.3, SD=24.99),  $\Delta=-9.8$ , F(1, 396)=44.22,  $p<.001.^{14}$ 

## Discussion

In a within-subject design assessing older adults' attitudes to-ward young adults from different eras, participants showed marked preferences for young adults of earlier eras, even rating the oldest cohort (i.e., young adults from the 1940s) similarly or higher than their own cohort at this same life stage. These results contradict the notion that youngism from older adults represents a mere ingroup-outgroup bias, suggesting instead preference for former generations and a derogation of contemporary young adults specifically.

In our last two studies, we go beyond cognitive and attitudinal bias to examine potential real-world implications of youngism. Specifically, we propose that stereotype endorsement about young adults desensitizes people to the struggles faced by today's younger generations and reduces people's willingness or likelihood to address contemporary generational inequalities.

## Study 4: Youngism and Willingness to Address Growing Generational Inequalities

In light of growing intergenerational inequalities and concerns over the lack of solvency of federal programs geared toward older adults, some have argued for a renegotiation of the generational contract to better the prospects of future generations (e.g., Intergenerational Commission, 2018). In this regard, political officials may take a powerful role by advocating for economic and social policies geared toward reducing inequalities between younger and older adults; on the other hand, politicians are often constrained in their decisions, votes, and public views by the opinion of the electorate they are bound to represent. In Study 4, we expected that endorsement of the stereotype of young adults would be associated with voting intentions toward a politician promoting policies aimed at improving the younger generation's prospects. In this sense, we sought not to just gauge attitudes but instead to capture behavioral intentions that would affect real-world outcomes aimed at rectifying generational imbalances.

<sup>&</sup>lt;sup>14</sup> Complementary analyses (see Supplemental Material 12), including the treatment of independent variables as a single continuous measure, the use of an ingroup bias variable, and the inclusion of demographic controls, all provide results consistent with those reported here.

#### Method

## **Participants**

Two hundred twenty responses were collected via Amazon Mechanical Turk. Given the Study's focus on American politics, only U.S. citizens were allowed to participate. Duplicate responses and respondents who failed the attention check were excluded. The final sample included 178 participants (91 women; 152 Caucasians; age: M = 41.1, SD = 12.39, Min. = 18, Max. = 73). <sup>15</sup>

#### **Procedure and Measures**

Participants first shared their endorsement of the stereotype content of young adults. They then completed a habituation task in which they successively evaluated four anonymized, brief quotations taken from recent U.S. political speeches, paraphrased from candidates in the 2016 Presidential Election. For each quotation, participants shared the extent to which the statement made them want to vote for the (anonymous) candidate, and the extent to which it made them want to vote against the candidate. The quotes covered broad social and economic issues and were meant both to habituate participants to sharing their opinion about anonymous political candidates based on their speech, and to reduce risks of demand characteristics by confounding the purpose of the study and increasing time between predictors and dependent variable.

The main task followed the short habituation activity. Participants read a 275-word statement, ostensibly excerpted from a longer speech pronounced by an anonymous political candidate running for national office. The statement emphasized the need to address youth unemployment, reduce student debt and act proactively to increase the engagement of young Americans in the societal and political life of their country (see Appendix C). The speeches from the habituation task and the main task were crafted in large part by paraphrasing speeches from political candidates during the 2016 U.S. Presidential campaign, in an effort to increase the external validity of the paradigm.

After reading the excerpt, participants completed a series of behavioral intention items designed to capture their hypothetical engagement for or against the candidate, followed by a brief demographic survey.

**Stereotyping of Young Adults.** Participants completed the 20 items of the stereotype content developed in Study 1. As in previous studies, the 10 items of the resourceful facet and the 10 items of the ungrateful facet were averaged into two composites.

**Behavioral Intentions.** The behavioral intention measure comprised 12 items appraising participants' level of support for the candidate. Six items captured participants' support (e.g., "[this speech] would make me more likely to vote for this candidate," "[this speech] would make me more likely to give money to this candidate's campaign"). Six other items measured participants' degree of opposition (e.g., "[this speech] would make me more likely to vote against this candidate," "[this speech] would make me more likely to give money to the campaign of an opponent to this candidate"; full scale items available in Appendix C). Participants responded to these items using a 5-point scale (1 = *Not at all true*, 5 = *Completely true*). <sup>16</sup> We reverse-coded the six items measuring

the engagement against the candidate and combined them with the six items measuring the engagement in favor of the candidate to form a scale of candidate support ( $\alpha = .87$ ).

#### Results

We regressed general support for the candidate on the two facets of the stereotype content and the demographic variables (i.e., age, gender, and education). A sensitivity analysis conducted on G\*Power 3.1 indicated that, with our sample size, a power of .80 and an  $\alpha=.05$ , and a total of five predictors, we could capture an effect size as small as  $\eta^2=.052$ . The model was significant, F(5, 172)=12.79, p<.001,  $R^2=.271$ , 95% CI [.147, .355]. The demographic variables did not emerge as statistically significant predictors. The resourceful facet positively predicted participants' engagement for the candidate, B=.30, p<.001, 95% CI [.21, .40],  $\eta_p^2=.191$ , 95% CI [.096, .291], and the ungrateful facet negatively predicted it, B=-.10, p=.004, 95% CI [-.17, -.03],  $\eta_p^2=.048$ , 95% CI [.005, .122].

#### Discussion

Above and beyond the predictive power of participant age, endorsement of the stereotype content of today's young affected behavioral intentions, such that participants strongly endorsing the ungrateful but only weakly endorsing the resourceful stereotypes were less likely to support a political candidate offering a future-generation-oriented speech. These results confirm that bias against young adults may have important real-world consequences vis-à-vis rectifying generational imbalances. That said, this study did not directly measure behavior. Furthermore, despite the presence of an interim habituation task, the study's purpose may have still been identifiable by participants. Study 5 addresses these limitations and explored youngism outside of the political context by using a direct behavioral measure in a charity allocation paradigm.

## Study 5: Youngism and Funding of a Student Debt Relief Charity

In our last study, we examined the effect of stereotype endorsement on behaviors by looking at people's financial support for a student debt relief initiative. Between 2003 and 2017; student debt has increased by 385% (Federal Reserve Bank of New York, 2018), becoming a major financial burden for today's younger generations. It has also gained prominence in the national U.S. political debate in recent years (Berman, 2019). We predicted that endorsement of the stereotype content of today's young would predict the likelihood to fund a university-based charity helping students deep in debt.

<sup>&</sup>lt;sup>15</sup> A non-negligible percentage of respondents failed the attention check in this study (15%). However, additional analyses reincluding these participants suggest that the results presented in this article are not significantly affected by this filtering procedure.

<sup>&</sup>lt;sup>16</sup> Because a technical error, three items capturing the engagement in favor of the candidate and three items capturing the engagement against the candidate were measured on a 7-point scale instead of a 5-point scale. The responses to these 6 items were converted into a 5-point scale post hoc to match the scale of the other items.

#### Method

## **Participants**

Two hundred twenty-eight U.S.-based respondents participated via Prolific Academic. Two respondents who failed the attention check and one respondent who failed to appropriately disclose her age were excluded. The final sample included 226 participants (119 women; 177 Caucasians; age: M = 42.7, SD = 14.96, Min. = 18, Max. = 78).

#### **Procedure and Measures**

Participants completed a two-part study, as in Study 2. The first part of the study was similar to our alleged opinion survey on contemporary American society. Participants shared their opinion about a filler group, followed by young adults, followed by a second filler group, all supposedly "randomly selected" from a pool of 24 target groups. Christian Americans and African Americans were used as filler groups and displayed in random order—either before or after young adults target. Participants then completed a few additional filler items about modern U.S. society—to reinforce our cover story of a social survey on contemporary American society—as well as basic demographic items.

Upon completing the demographics, participants were redirected to a new survey (i.e., the second part of our study), presented as an ostensibly unrelated online questionnaire about a universitybased charity initiative taking place at the researchers' institution. To increase realism, this second questionnaire used a different layout, including the font, color code, and logo of a notable east coast U.S. university. The prompt informed participants that the researchers pledged to give \$0.25 to two on-campus charities for each participant who takes part in their study. Participants were then invited to select two out of four mock charities to which their donation would be sent on their behalf. One of the charities focused on student debt (i.e., "New York University's Student Debt Fund. Help New York University students who incur particularly high level of debt to fund their study"). The other three were unrelated to the target group (e.g., "New York University's Historic Preservation Fund. Help the University finance the preservation and restoration of its historical buildings."). The charity selection concluded the study.

**Stereotyping of Young Adults.** As part of the opinion survey, participants completed the same 20-item young adult stereotype content measure as prior studies in this paper, using a 7-point scale (1 = Strongly Disagree, 7 = Strongly Agree).

Funding of the Student Debt's Charity. Participants' selection of the student debt relief charity in part two of the study served as our binary dependent variable (i.e., 0 = no funding; 1 = funding).

## Results

We conducted a binomial logistic regression to assess the predictability of participants' endorsement of the stereotype content of today's young adults on their choice to fund the on-campus student debt charity, controlling for participant age, gender, and years of education,  $\chi^2(5) = 25.88$ , p < .001, Pseudo  $R^2 = .095$ . A sensitivity analysis conducted on G\*Power 3.1 suggests that, with our sample size, a power of .80 and an  $\alpha = .05$ , we could capture an effect size equal to or larger than OR = 1.49 for the resourceful facet and equal to or smaller than

OR = .67 for the ungrateful facet. Continuous variables were standardized to interpret the constant. The constant, B = .71, p = .001, indicates that a majority of people opted to give money to the student debt relieve initiative, perhaps a reflection of the perceived primary goal of a university (i.e., to offer students the possibility of an education). Women were marginally more likely to finance the charity, B = .59, p = .061, OR = 1.81, 95% CI [.97, 3.38], and older participants were marginally less likely to do so, B = -.31, p = .054, OR = .73, 95% CI [.54, 1.01]. Participants who scored +1 SD above the mean on endorsement of the resourceful facet were approximately 50% more likely to fund the charity, B = .42, p = .015, OR = 1.52, 95% CI [1.09, 2.14], and participants who scored +1 SD above the mean on endorsement of the ungrateful facet were approximately 25% less likely to fund the charity, B = -.33, p = .057, OR = .72, 95% CI [.52, 1.01].

#### Discussion

As expected, controlling for participant age, gender, and years of education, young-targeted ageism predicted the likelihood that participants direct their donation to a student-debt charity rather than to charities unrelated to helping the target group. These findings offer direct behavioral evidence of the detrimental effect of youngism, complementing the attitude and behavioral intention evidence of the preceding studies.

#### **General Discussion**

Theoretical and empirical work examining the role of age in social perception has focused almost exclusively on the plight of older adults, implicitly assuming that age stigma increases throughout the life span, such that one faces growing age-based stigmatization as one progressively loses valued attributes associated with youthfulness. The present work challenges this assumption, offering a first comprehensive set of empirical evidence that ageism also affects adults on the early side of the age spectrum.

In addition, these studies show that the nature and content of ageism vary across the life span. Contrary to social biases against older adults, which center around people's discomfort with aging —be it symbolic (terror management theory, Greenberg et al., 2002) or tangible (resource tensions, North & Fiske, 2013)—per the current findings, biases against the young entails a strong generational dimension, an ascription that facilitates comparative bias and disparagement of current youth. We discuss the implications of these findings in the following sections.

## Youngism: A Missing Piece of the Ageism Puzzle

By comprehensively documenting cognitive, emotional, and behavioral evidence of ageism against young adults, the present work offers support that youngism is a real, consequential, yet understudied phenomenon. It is of particular theoretical importance: Just like our understanding of gender perception would be incomplete without a solid grasp of underlying attitudes toward men (Glick et al., 2004; Glick & Fiske, 1999), our comprehension of age in social cognition is limited by a lack of knowledge of young-targeted ageism. It is also of practical importance: In rapidly aging nations, young adults—who represent the future of these societies—are progressively becoming a minority whose life outcomes may not be at par with those of previous generations and

whose interests may be less well represented. For these reasons, the present work addresses the apparent one-sidedness in the study of age perceptions.

Per our examination of the nature of youngism, the distinct form of age bias targeting the young seems to respond partly to lay concerns over perceived birth cohort differences and generational decline. We identify two key implications of these findings for the study of ageism. First, the birth cohort distinction uncovered in these studies may help explain why young-targeted ageism did not emerge as strongly in prior age research (e.g., Kite et al., 2005), the way it does in the present work. Given evidence provided in our analyses (particularly Study 3a and 3b) that people purport to derogate the *present* youth specifically, it stands to reason that attention to temporal contextualization (*present* youth vs. *former* youth) may play an important role in bringing to light anti-young ageism. This consideration is worth noting for researchers interested in studying young-targeted social perception in the future.

Second, these results also highlight the need to better discriminate between distinct yet intertwined components of age. Other scholars have previously alluded to this issue, arguing that "age" comprises a variety of elements, including chronological age, subjective age, social age, generational affiliation, and life stage, to name but a few (Joshi et al., 2011; Kooij et al., 2008; North, 2019; Weiss & Lang, 2009, 2012). Nevertheless, social psychological research, scant on the subject of age perception to begin with, generally lacks this nuanced perspective. This oversight renders it difficult to pinpoint precisely which aspect(s) of age contributes to shape social perception. The current article begins to fill this void by demonstrating that both life stage and generational affiliation shape target age perception. In doing so, we stress the importance of temporal contextualization in age-based social cognitions. Differentiating current from former members of a given group allows for a switch in social categorization, with a focal on generational rather than life stage comparison, the former offering more latitude to disparage a group one may have formerly been a proud member of but does not identify with anymore. In this regard, the effects of temporal contextualization are likely to be particularly salient in age research; contrary to gender and race, every living person navigates from one age group to the next over time.

Of note, the fact that young are partly disparaged for their generational affiliation rather than life stage contrasts with prior work elucidating the older side of the age spectrum, in which older adults view their own generational affiliation more positively than their own life stage (Weiss & Lang, 2009). The reverse pattern between younger and older age groups emphasizes how disentangling the effects of various age-related constructs may allow future researchers to better identify what age-based constructs matter the most in driving social perception and related prejudices (North, 2019). Distinguishing between cohort and life-stage differences more broadly is a growing scholarly subfield (e.g., Yang, 2008), to which the current findings also contribute.

## Youngism: An Old Prejudice?

The present set of studies focused primarily on *contemporary* views of age groups and birth cohorts; that is, our experiments speak to current perceptions of today's young and how these perceptions are unflattering relative to *contemporary* perceptions of today's older age groups and *contemporary* perceptions of former generations of young adults (see Study 2, 3a and 3b). One may therefore wonder whether

youngism is a new phenomenon uniquely targeting today's young, or whether former generations were subject to similarly harsh social judgments in their 20s and 30s. That is, is each generation under the illusive impression that the generation succeeding them is not as worthy as their own, or are Millennials the first generation to be subject to such a perception of generational decline?

Although our empirical work does not offer a direct answer to this question, historical evidence of the consistency of criticisms toward younger generations may hint at an answer. Indeed, disparagements of the younger generation trace all the way back to Ancient Greece: In the words of the poet Esiode (800 BC), "I see no hope for the future of our people if they are dependent on the frivolous youth of today, for certainly all youth are reckless beyond words" (as cited by Seder, 2013). Similar derogatory comments can be found throughout history (Ruggeri, 2017; Seder, 2013; Standage, 2006). Anecdotally, this derogatory generational comparison is well illustrated by the proverbial statement "Kids these days...," a complaint generally attributed to older adults implying that previous generations were "better" than the new one.

Recent empirical findings backup this claim. In five studies, Protzko and Schooler (2019) found that someone who objectively exceled in a domain was more likely to both notice others' failings on that domain—including the young—and to incorrectly assume that all members of her generation used to do better on that domain when they were young than do current young, giving the illusion of a generational decline. The universality and atemporality of these mechanisms further bolster the argument that generational disparagement likely occurred for millennia.

The stereotype content of young adults unveiled in our own work provides further indirect support and offers additional nuances. As the epigraph of this article implies, perceptions of the young have most likely always contained positive and ungrateful elements. However, in spite of this persistence throughout history, there is reason to believe that certain aspects of the stereotype content associated with this group have likely evolved over time. For instance, the presence of a factor such as tech-savviness in the resourceful facet of our model-which responds optimistically to the regularly broadcasted, admonished impact of technology and social media on contemporary youth—would have likely not been part of the stereotype content of young adults a few decades ago. Instead, it may have been replaced by a factor referring to young adults' early adoption of technology—or habits—from that time. Therefore, the stereotype content ascribed to the younger generation at a given time likely reflects the societal hopes and fears of the social changes taking place at this time. In support of this argument, historical accounts offer examples of 18th century intellectuals admonishing the growing interest of youth for novels and plays, a hobby seen as corrupting moral character and preventing the youth from developing useful knowledge; comparable thinkers, a century later, castigated younger adults for their passion for chess, a form of "mental gladiatorship" keeping the youth away from outdoor exercises (see Reverend Enos Hitchcock, 1790, & Scientific American, 1859; as cited by Seder, 2013). Most parents today might encourage these two activities, chastising the use of social media and video games.

Yet, some components of the stereotype content of young adults might also be relatively stable, reflective of biological attributes specific to youthfulness (e.g., energy and physical fitness) as well as enduring structural relations between younger and older adults across civilizations (e.g., perceived disrespect due to young adults' adoption of new social norms). In this regard, the radically progressive subdimension that emerged in our model maps onto left-radicalism critiques of former young generations; for instance, the now conservative-leaning Baby Boomers were criticized for similar supposedly naïve political behaviors as pioneers of the counterculture and New Left in the 1960s and 1970s (Richardson, 2012).

Future research might therefore consider delving into archival data sets or news articles depicting the younger generation, in search of whether the "ambivalent alliance" ascribed to young adults has indeed persisted for centuries, and whether and how its content has morphed over time to blend with the societal changes of each particular time. Regardless of how temporally constrained youngism may be, the phenomenon is undoubtedly of growing importance in a rapidly aging world, fraught with rising generational tensions over scarce economic, political, and environmental resources. As a rapidly aging society grapples with record-high levels of generational coexistence, the potential for unpacking the extent of youngism over time also increases.

## **Opportunities for Future Research**

The present work opens multiple opportunities for future research. First, extending on the above comment, exploring how the content of the stereotypes and intensity of the biases toward the young evolved over time may help determine whether such a phenomenon as worsen as the population is aging. It may also help identify other potential exacerbating factors, such as rapid social and technological changes, that may increase intergenerational tensions.

Results of Study 1c also revealed variations across different young target groups along the eight subfactors of our model. These variations suggest that people may not see the broad and diverse population of young adults as a monolith, but rather, distinguish subgroups (e.g., Millennials, Gen Z, College students, university-educated entry-level professionals, young workers with low education background) toward whom they harbor distinct attitudes and opinions. Additional research may help better understand how this large social group is further delineated by laypeople, and how distinct views of these subgroups may reflect divergent societal ideals and inform different policy-support aimed at shaping the trajectory of younger generations and the future of the societies they will one day lead.

Complementarily, researchers may be interested in examining how the stereotype content identified in Study 1 and attitudes toward different age groups and generations reported in Study 2 and 3 hold up cross-culturally. Contradicting prevailing beliefs that Eastern cultures hold older adults in higher esteem than do Western cultures, a meta-analysis by North and Fiske (2015) found a higher level of disparagement toward older adults in Eastern culture. In light of these findings, three competitive predictions may apply to attitudes toward young adults across cultures. One may surmise that biases targeting young and old are positively correlated, reflective of a broad general age-based stigmatization, such that youngism may be more prevalent in cultures already high on "oldism." Alternatively, ageism targeting older and younger adults may be negatively related, reflective of intergroup tensions among generations, leading one to conclude that societies holding higher biases against older adults may be less likely to disparage the young. Finally, the distinct mechanisms underpinning youngism and oldism may lead one to conclude that the two forms of ageism are unrelated, rendering any educated guess harder with regard to estimating level of youngism cross-culturally. As noted, as generational dynamics rapidly change around the world, the opportunities for psychological research on attitudes toward younger adults will become all the more salient.

#### Conclusion

The current article offers a systematic investigation of young-targeted ageism: its unique causes as well as its deleterious behavioral consequences. The findings provide both an enhanced understanding of modern attitudes toward the young as well as an explanation for the plight of young adults, in which derogatory comparison relative to former birth cohorts at the same age reinforces their disadvantaged standing. From a theoretical standpoint, the current work illustrates how young-targeted ageism is driven primarily by cohort-based beliefs that the current younger generation is lacking relative to prior ones, in contrast with older-adult-targeted ageism, which is driven primarily by life-stage (rather than cohort-based) beliefs. By providing a detailed descriptive stereotype content, documenting cognitive, emotional, and behavioral biases against younger adults, and highlighting the unique generational dimension of these biases, the current work hopes to inspire formative lines of work on young-targeted ageism. Such is necessary in an increasingly multigenerational and aging world—one that is ever dependent on the solvency and viability of its youngest members.

#### Context of the Research

This project emerged as an extension of a growing body of research on stigmatization of older adults, which is formative but overlooks the full potential age spectrum of these biases. In an aging society in which young adults are progressively becoming a minority, the way in which younger generations are perceived and treated by society is increasingly important. We wrote this article with the dual purpose of offering a practical impetus and theoretical basis to pursue more work on the stigmatization of younger adults. We hope that it will contribute to broaden our understanding of ageism and age-related social cognition and help contextualize age stigmatization from a real group conflict perspective, in which the role of stereotyping of younger and older adults is interpreted in the context of scarce economic and political resources that must be shared by an increasingly larger and more age- and generationally diverse population. The solvency of contemporary society depends on our ability to maintain a delicate balance among various generations' needs and desires. In the future, we hope to extend this line of work by illuminating the link between ageism targeting young and old, as well as by building a stronger understanding of youngism across cultures and throughout history, in an effort to further identify exacerbating and inhibitory factors.

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Appendix A

Goodness of Fit for the Final Model, Study 1b-5

Study	N	Model	CMIN/DF	GFI	CFI	RMSEA	AIC
Study 1b	447	Final model 4-factor model 2-factor model 1-factor model Independence model	2.3 6.3 8.2 13.5 23.2	.922 .799 .747 .415 .346	.952 .794 .712 .494 .000	.053 .109 .127 .168 .223	462 1,122 1,460 2,378 4,440
Study 1c	358	Final model 4-factor model 2-factor model 1-factor model Independence model	2.2 5.9 7.6 15.3 23.3	.909 .797 .754 .518 .296	.956 .811 .736 .424 .000	.057 .117 .136 .200 .250	447 1,055 1,370 2,689 4,465
Supplementary Material 4a	280	Final model 4-factor model 2-factor model 1-factor model Independence model	3.0 4.6 6.3 11.0 15.3	.850 .793 .728 .532 .374	.882 .785 .673 .368 .000	.084 .113 .137 .190 .226	577 840 1,140 1,967 2,948
Supplementary Material 4b	228	Final model 4-factor model 2-factor model 1-factor model Independence model	2.6 4.5 6.3 12.4 17.0	.842 .736 .681 .427 .286	.914 .810 .705 .357 .000	.084 .124 .153 .224 .265	518 831 1,145 2,198 3,261
Supplementary Material 5	359	Final model 4-factor model 2-factor model 1-factor model Independence model	2.2 5.0 6.8 14.4 22.4	.909 .821 .762 .522 .306	.952 .839 .760 .438 .000	.058 .106 .127 .193 .245	455 912 1,226 2,537 4,299
Supplementary Material 6 (Meta-analysis)	4,812	Final model 4-factor model 2-factor model 1-factor model Independence model	18.7 72.0 96.5 195.9 286.4	.937 .801 .742 .511 .319	.947 .785 .702 .386 .000	.061 .121 .141 .201 .244	3,109 11,893 16,395 33,571 54,465
Supplementary Material 7	169	Final model 4-factor model 2-factor model 1-factor model Independence model	1.7 2.9 3.9 8.0 12.1	.863 .784 .722 .463 .282	.946 .850 .769 .490 .000	.065 .107 .131 .204 .257	372 572 737 1,447 2,338
Study 2 (& Supplementary Material 8 & 9)	293	Final model 4-factor model 2-factor model 1-factor model Independence model	2.2 5.2 6.3 10.7 19.0	.892 .768 .728 .502 .290	.945 .798 .673 .518 .000	.063 .120 .137 .182 .248	448 946 1,140 1,894 3,644
Study 3a	187	Final model 4-factor model 2-factor model 1-factor model Independence model	1.8 3.7 4.3 8.1 11.5	.867 .747 .718 .515 .326	.935 .775 .716 .394 .000	.066 .121 .134 .195 .237	389 703 816 1,458 2,223
Study 4	178	Final model 4-factor model 2-factor model 1-factor model Independence model	2.5 4.1 5.0 11.3 15.9	.796 .735 .684 .398 .236	.911 .819 .764 .375 .000	.092 .133 .149 .242 .290	504 768 919 2,015 3,054
Study 5	226	Final model 4-factor model 2-factor model 1-factor model Independence model	2.1 5.2 6.1 9.8 13.9	.871 .733 .695 .525 .565	.929 .721 .649 .382 .000	.068 .136 .150 .198 .239	632 939 1,110 1,760 2,675

Note. AIC = Akaike information criterion. All confirmatory factor analyses were conducted on AMOS, Version 27.0 (Arbuckle, 2020). Models were estimated using Maximum likelihood. AIC for the saturated model = 420. The final model, the 4-factor models, and the 2-factor model are all described in details in the Results section of Study 1b. The 1-factor model included the 20 items of the final model under a single factor. Heywood cases emerged in the initial estimation of the final model in Supplementary Material 4a, Study 4, and Study 5, and the estimation of the 4-factor model in Study 3a. These cases were likely a reflection of the small size of these samples (i.e., N < 300; Chen et al., 2001; Joreskog & Sorbom, 1984) and were resolved using recommendations from Gaskin (2016).

## Appendix B

## Young Adults' Stereotype Content Scale

To what extent do you agree or disagree with the below statements about young adults?

Today's young adults are...

Eager Motivated Driven Bright Intelligent Sharp Stylish Fashionable Internet-savvy Tech-savvy Entitled Spoiled Pampered Condescending Argumentative Snobbish Inexperienced Unseasoned Leftists Socialists

## Appendix C

## Material, Study 4

"[...] We need to do more to fight youth unemployment, because what we are doing now is turning our backs on an entire generation of young people who want to get a job. They want to earn some income, they want to get out of their homes, they want to become independent, and we are not allowing them to do that. We are not giving them the chance they deserve. This election is about understanding that if we do not transform our economy, our younger generation will likely have a lower standard of living than their parents.

And talking about the standard of living of our youth, I want to say this to all the young people out there. I know what you're up against if you left college with a ton of loans; it's not enough just to make college more affordable. You need help right now with the debt you already have. We'll work on that, from day one.

Your generation is the most tolerant and connected our country has ever seen. It is our job to make sure that you have the space, resources, and freedom to contribute to the future of this nation. In the days ahead, we will propose new ways for more young people to get involved in national service. We also need political parties to be more welcoming to your generation. We need more bright young minds at the leadership of these parties or running for office. [...] That is

the energy and engagement we need to guarantee the prosperity of the United-States, so this country remains the best in the world, for the many years to come."

This short excerpt of a political speech would make me more likely to...

(1 = Not at all true and 5 = Completely true)

- 1...advocate for this candidate.
- 2. . . . vote for this candidate.
- 3. ...talk to my friends, neighbors, family, and colleagues in favor of this candidate.
- 4. . . . give money to this candidate's campaign.
- 5. . . . join this candidate's campaign.
- 6. . . . do everything I can to get this candidate elected.
- 7. . . . advocate *against* this candidate (r).
- 8. . . . vote *against* this candidate (r).
- 9. ...talk to my friends, neighbors, family, and colleagues *against* this candidate (r).
- 10. . . . give money to the campaign of an *opponent* to this candidate (r).
- 11....join the campaign of an *opponent* to this candidate (r).
- 12....do my best to ensure that this candidate *does not* get elected (r).