

Research Report

Pre-pandemic Ageism Toward Older Adults Predicts Behavioral Intentions During the COVID-19 Pandemic

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Abstract

Objectives: During the coronavirus disease 2019 (COVID-19) pandemic, older adults have been disproportionately affected by high rates of health complications and mortality. Reactions toward older adults included a mix of prosocial behaviors and ageist responses, consistent with the history of positive and negative views and treatment of older adults in the United States.

Methods: In a two-part study ($n = 113$, $M_{\text{age}} = 18.49$, $SD = 0.50$; range 18–19), we examined whether pre-pandemic ageism among undergraduates predicts prosocial behavioral intentions toward older adults both specific to COVID-19 and in general.

Results: Pre-pandemic ageism toward older adults predicted less intentions to help older adults generally and specific to COVID-19. Whereas viewing older adults as incompetent predicted greater intentions to help specific to COVID-19.

Discussion: These results reflect the complexity of predicting helping behaviors and suggest that even supportive behaviors toward older adults during the COVID-19 pandemic may be rooted in negative ageist stereotypes. Implications and directions for future research are discussed.

Keywords: Ageism, Prosocial behaviors, Stereotypes

The treatment of older adults in U.S. society is multifaceted with both positive views (warm, family-oriented) and behaviors (e.g., senior discounts, meals on wheels) as well as negative views (senile, helpless) and behaviors (e.g., neglect, physical and financial abuse; [Cherry & Palmore, 2008](#); [Levy & Macdonald, 2016](#)). Accordingly, theoretical approaches such as the stereotype content model (SCM; [Fiske et al., 2002](#)) highlight both a positive (warmth) and negative stereotype (incompetence) that predict behavior ([Levy et al., 2004](#); [Palmore, 1990](#)).

As incoming data coalesced around the increased risk coronavirus disease 2019 (COVID-19) posed to older adults (higher rates of health complications and

mortality; [Zhou et al., 2020](#)), there was a mix of positive (i.e., grocery deliveries for older adults, pen pal programs) and negative responses (i.e., #BoomerRemover, neglect in nursing homes; [Aronson, 2020](#); [Monahan et al., 2020](#)). Ageism, in part, may account for the sluggish and inadequate response to the COVID-19 pandemic, resulting in negative physical and mental health consequences for older adults ([Ayalon, 2020](#); [Ayalon et al., 2020](#); [Bergman et al., 2020](#); [Monahan et al., 2020](#)). Given the potential for the COVID-19 pandemic to affect future behavior toward older adults ([Apriceno et al., 2020](#)), this two-part study sought to examine whether pre-pandemic views of older adults predicted prosocial behavioral intentions

specific to the pandemic and more generally. This timely study examined undergraduates, a population that has reported ageism in prior studies (Apriceno et al., 2020; Bousfield & Hutchison, 2010; Kite et al., 2005; Lytle, Macdonald et al., 2020).

Ageism and Helping Behaviors

Past research with young adults shows that greater ageism is related to less willingness to help older adults (Bergman & Bodner, 2015; Bousfield & Hutchison, 2010; Sutter et al., 2017). For example, undergraduates who report higher levels of ageism (measured by a general measure, Fraboni et al., 1990) reported less willingness to care (physical and emotional support) for a family member with a chronic health condition (Sutter et al., 2017). Similarly, among undergraduates (aged 19–29) who watched videos of incapacitated older adults, higher levels of reported ageism (Fraboni measure) was related to reduced efficacy to help (Bergman & Bodner, 2015). In another study with undergraduates, greater reported negative attitudes toward older adults were significantly correlated with less endorsement of behavioral intentions to help older adults (Bousfield & Hutchison, 2010).

The SCM (Cuddy et al., 2005; Fiske et al., 2002) identified a key negative (incompetence) and positive (warmth) stereotype, which offered a more nuanced understanding of helping intentions toward older adults. For example, perceiving older adults as incompetent and warm was linked to the endorsement that Americans should help older adults, mediated by feelings of pity (Cuddy et al., 2007). As such, the COVID-19 pandemic offers a unique opportunity to examine whether ageism as well as particular stereotypes (incompetent, warm) predicts intentions to help older adults.

Hypotheses

We hypothesized that greater endorsement of ageism in Fall 2019 would predict less general prosocial behavioral intentions toward older adults (H1a; consistent with past research, Bousfield & Hutchison, 2010) and fewer COVID-19-specific prosocial behavioral intentions (H1b, extending past research), controlling for gender.

Extending past research (Cuddy et al., 2007), we hypothesized that perceiving older adults as incompetent and warm in Fall 2019 would predict greater general prosocial behavioral intentions toward older adults (H2a) and COVID-19-specific prosocial behavioral intentions (H2b), controlling for gender.

Method

Participants

A total of 113 undergraduate students (women = 39, men = 74) aged 18–19 ($M = 18.49$, $SD = 0.50$) completed

a two-part online survey in Fall 2019 (September 12–December 6, 2019) and Spring 2020 (April 16–May 12, 2020). Participants included 59.6% White, 30.7% Asian, 16.7% Latinx, 2.6% Black, and 3.5% Other or Mixed (participants could choose more than one racial/ethnic identity).

Procedure

Participants registered through a university subject pool for a Qualtrics online study of attitudes (Fall 2019) and “attitudes, perceptions, and behaviors as a result of the COVID-19 pandemic” (Spring 2020). The university’s institutional review board approved this research.

Measures

Ageism measure

In Fall 2019, participants rated a 22-item measure of ageism (Fraboni et al., 1990; Rupp et al., 2005), on a scale of 1 (*strongly disagree*) to 6 (*strongly agree*): “Many old people just live in the past,” “Old people complain more than other people do”; “I personally would not want to spend much time with an old person,” “The company of most old people is quite enjoyable” (R); “I do not like it when old people try to make conversation with me,” “I sometimes avoid eye contact with old people when I see them”; $\alpha = 0.85$.

Incompetence and warmth stereotypes

In Fall 2019, participants rated nine positive and nine negative age stereotypes on a 0 (*not at all characteristic*) to 6 (*very characteristic*) scale (Levy et al., 2004). In light of COVID-19 and the relevance of examining prosocial intentions, we used four of the items, which were most relevant to create subscales for incompetence (averaging the items; senile, helpless; $r = 0.448$, $p = .000$) and warmth (averaging the items, family-oriented, positive; $r = 0.298$, $p = .001$).

COVID-19-specific prosocial behavioral intentions

In Spring 2020, participants were asked “do you plan on doing any of the following in the next month?,” which included five COVID-19-specific prosocial behavioral intentions toward older adults (Table 1), resulting in five categorical variables coded as 0 (no) and 1 (yes), which were summed.

General prosocial behavioral intentions

In Spring 2020, participants rated four general (unrelated to COVID-19) prosocial behavioral intentions toward older adults (Bousfield & Hutchison, 2010) on a 1 (*strongly disagree*) to 6 (*strongly agree*) scale ($\alpha = 0.62$; e.g., “I would offer help to an older adult if they were clearly in need of it”), which were averaged.

Demographics

Participants reported their age, gender, and race/ethnicity.

Results

To examine whether Fall 2019 ageism, incompetence, and warmth stereotypes predicted Spring 2020 general and COVID-19-specific behavioral intentions toward older adults, we conducted a series of linear regressions (see Table 2 for descriptive statistics). General and COVID-19-specific prosocial behavioral intentions (Spring 2020) were regressed on Fall 2019 ageism, incompetence stereotype, warmth stereotype, and gender (Table 3).

Fall 2019 ageism, incompetence, and warmth stereotypes predicted Spring 2020 general prosocial behavioral intentions (non-COVID-specific) toward older adults with gender entered as a covariate ($R^2 = 0.158$, $F(4, 109) = 5.108$, $p = .001$). Here ageism emerged as a significant predictor, $B = -0.720$, $p = .000$, such that reporting more negative pre-pandemic ageism predicted less intentions to help (supporting H1a). Incompetence and warmth stereotypes were not significant predictors of general behavioral intentions (inconsistent with H2a).

Fall 2019 ageism, incompetence, and warmth stereotypes predicted Spring 2020 COVID-19 behavioral intentions with gender entered as a covariate ($R^2 = 0.094$, $F(4, 109) = 2.821$, $p = .028$). Incompetence (but not warmth) stereotypes significantly predicted greater COVID-19-specific prosocial behavioral intentions, $B = 0.259$, $p = .039$ (partially supporting H2b). Fall 2019 ageism was a significant predictor of COVID-19 behavioral intentions, such that reporting more negative pre-pandemic ageism predicted less intentions to help, $B = -0.576$, $p = .025$ (supporting H1b).

Discussion

Older adults in the United States face more serious health consequences and mortality than other age groups due to COVID-19. Accordingly, supporting and helping older adults is a significant, timely issue. This two-part investigation examined ageism and specific age stereotypes (incompetence and warmth), to understand prosocial behavioral intentions toward older adults specific to COVID-19 and in general. Consistent with past research (Bergman & Bodner, 2015; Bousfield & Hutchison, 2010; Sutter et al., 2017), reporting more negative ageism in the Fall of 2019 significantly predicted fewer general and COVID-19-specific prosocial behavioral intentions (Spring 2020) to help older adults. This finding extends the literature since unlike past studies, ageism was measured months earlier.

Also extending the literature, reporting greater endorsement of older adults specifically as incompetent (senile and helpless) in Fall of 2019 significantly predicted more COVID-19-specific prosocial behavioral intentions toward older adults. Past theorizing by Cuddy et al. (2005, 2007, 2008) indeed points to the importance of situational context, which may explain why incompetence stereotyping did not relate to general behavioral intentions. The mix of incompetence and warmth stereotypes results in paternalistic prejudice, which can invoke pity (Fiske et al., 2002). It may be that COVID-19 triggered increased feelings of pity toward older adults in that context thereby increasing COVID-19-specific prosocial behavioral intentions. Interestingly these findings suggest that even supportive

Table 1. COVID-19-Specific Prosocial Behavioral Intentions

| | Frequency | Percent |
|---|-----------|---------|
| Calling a vulnerable person (e.g., older adult, immunocompromised individual) | 48 | 42% |
| Shopping for groceries for a vulnerable person (e.g., older adult, immunocompromised individual) | 37 | 33% |
| Helping a vulnerable person (e.g., older adult, immunocompromised individual) complete an errand or chore other than grocery shopping | 33 | 29% |
| Emailing a vulnerable person (e.g., older adult, immunocompromised individual) | 16 | 14% |
| Writing a letter to a vulnerable person (e.g., older adult, immunocompromised individual) | 11 | 10% |

Table 2. Bivariate Correlations and Descriptive Statistics

| Variable | 1 | 2 | 3 | 4 | 5 | 6 |
|---|----------|--------|--------|-------|----------|------|
| 1 Ageism | — | | | | | |
| 2. Incompetence | 0.501** | — | | | | |
| 3. Warmth | -0.399** | -0.116 | — | | | |
| 4. Gender | -0.217* | -0.068 | -0.074 | — | | |
| 5. COVID-19 prosocial behavioral intentions | -0.176 | 0.08 | 0.03 | 0.171 | — | |
| 6. General prosocial behavioral intentions | -0.384** | -0.165 | 0.083 | 0.142 | -0.340** | — |
| Mean | 2.55 | 3.06 | 5.06 | 0.34 | 1.27 | 3.28 |
| SD | 0.61 | 1.12 | 0.93 | 0.48 | 1.31 | 1.04 |

Note: Gender is coded as man = 0, woman = 1.

* $p < .05$, ** $p < .01$.

Table 3. Linear Regression Analysis Predicting Prosocial Behavioral Intentions

| Predictor | COVID-19 prosocial behavioral intentions | | | General prosocial behavioral intentions | | |
|--------------|--|-------|----------|---|-------|----------|
| | β | SE | <i>p</i> | β | SE | <i>p</i> |
| Gender | 0.41 | 0.259 | .116 | 0.125 | 0.111 | .449 |
| Ageism | -0.576 | 0.254 | .025* | -0.72 | 0.195 | .000*** |
| Incompetence | 0.259 | 0.124 | .039* | 0.39 | 0.095 | .681 |
| Warmth | -0.05 | 0.144 | .728 | -0.085 | 0.111 | .449 |

Note: Gender is coded as man = 0, woman = 1.

* $p < .05$, ** $p < .01$, *** $p < .001$.

behaviors toward older adults during the COVID-19 pandemic may be rooted in negative ageist stereotypes.

It is unclear why greater endorsement of the warmth stereotype did not predict behavioral intentions. Perhaps, younger adults were preoccupied with their own mortality, which reduced intentions to help older adults seen as warm. At the time of the study, scientific consensus reported young adults were low risk, and indeed participants reported low death anxiety ($M = 2.19$, $SD = 0.57$, range 1–6; Carmel & Mutran, 1997), moderate concern of COVID-19 infection ($M = 2.94$, $SD = 1.02$, range 1–5), and only four were tested for COVID-19 (all negative). A more likely explanation is that our post hoc measure of warmth included family-oriented and positive rather than warm and friendly (as defined by Cuddy et al.). In contrast, our measure of incompetence more closely aligns with past research (Cuddy et al., 2007) that demonstrated senile is one of the most persistent incompetence stereotypes.

Given the global nature of the COVID-19 pandemic, future research should examine the generalizability of these findings with other samples and in other countries and cultures. Future research should also investigate how prosocial behaviors are perceived by older adults during the pandemic as past research demonstrates that unsolicited helping behaviors can be perceived as patronizing (Cary et al., 2017; Monahan et al., 2020). Lastly, because the COVID-19 pandemic was unanticipated, some measures were not included in both time points. To extend these findings, future research should examine prosocial behavioral intentions coupled with measures of ageism over time.

Ageism is, in part, fueled by stereotypes and misinformation about aging as well as a lack of positive intergenerational contact (Levy, 2018; Lytle, 2018). The PEACE (Positive Education about Aging and Contact Experiences) model (Levy, 2018) suggests that providing education about aging and facilitating positive intergenerational contact can reduce ageism (Lytle & Levy, 2018; Lytle, Macdonald et al., 2020; Lytle, Nowacek et al., 2020) including incompetence stereotypes (Cadieux et al., 2019). Future research should explore how intergenerational contact and aging education influence incompetence stereotypes, which may in turn affect behavioral intentions.

The COVID-19 pandemic offers a unique opportunity to examine how a salient global event may influence prosocial behaviors toward older adults. This investigation used

a novel approach, incorporating pre-COVID-19 ageism, to show that both pre-pandemic ageism and endorsement of incompetence stereotypes can be used to predict intentions to help older adults during a pandemic.

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The study was not preregistered. Data and study materials are available from the first author upon request.

Conflict of Interest

None declared.

Author Contributions

All authors helped design the study. A. Lytle programmed the survey, collected and analyzed the data, and wrote the first draft. M. Apriceno consulted on data analysis and contributed to writing the article. J. Macdonald and C. Monahan contributed to writing the article. S. Levy contributed to writing the article and fine-tuning the data analysis.

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