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Original Article

Who Is Your Successful Aging Role Model?

Daniela S. Jopp,[1,2] Seojung Jung,[3] Amanda K. Damarin,[4] Sheena Mirpuri,[3] and Dario Spini[1,2]

[1]Institute of Psychology, University of Lausanne, Switzerland. [2]Swiss Centre of Competence in Research LIVES, Overcoming Vulnerability: Life Course Perspectives, Switzerland. [3]Fordham University, Bronx, New York. [4]Department of Cultural and Behavioral Sciences, Georgia State University, Dunwoody.

Seojung Jung is now at Department of Psychology, SUNY College at Old Westbury, New York.

Correspondence should be addressed to Daniela S. Jopp, PhD, Institute of Psychology, University of Lausanne, Géopolis 4243, CH-1015 Lausanne, Switzerland. E-mail: daniela.jopp@unil.ch

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Abstract

Objectives: Having a role model of successful aging may contribute to views on aging. This article investigated the nature and correlates of young, middle-aged, and older adults' successful aging role models.

Method: One hundred and fifty-one individuals aged 18–99 were asked whether they had a role model of successful aging and if so, the reasons for their choice. Open-ended answers were coded for recurring themes. Views on aging and attitudes toward own aging were assessed with questionnaires.

Results: Eighty-five percent of participants indicated at least one role model. Most mentioned role models from their family, including parents and grandparents. Role models were gender matched. Most frequent reasons for model choices were health, activities, and social resources. Participants with family role models had less negative views on aging. Mediation analyses confirmed that family role models were associated with more reasons for role model choice, which in turn was associated with less negative views on aging. Furthermore, the effect of reasons on attitudes toward own aging was mediated by negative views on aging.

Discussion: Young, middle-aged, and older adults have role models for successful aging. Links between role model features and views on aging suggest that role models may be useful in promoting successful aging.

Keywords: Attitudes toward own aging—Negative views on aging—Role models—Successful aging

With increases in life expectancy, questions about what it means to age successfully and how to do so are vital for both individuals and societies. However, individuals struggle to develop positive perspectives on aging, given the negative views that dominate modern Western societies (Kite, Stockdale, Whitley, & Johnson, 2005). These views are shaped by aging stereotypes or culturally shared beliefs about older adults in general (Hummert, Garstka, Shaner, & Strahm, 1995). The detrimental effects of such stereotypes and associated self-referent beliefs range from poorer cognitive performance and emotional disturbance to cardiovascular stress and premature death (e.g., Levy, 2003; Meisner, 2012, for review). The apparent self-fulfilling prophecy in which negative attitudes undermine the aging process itself (Wurm, Warner, Ziegelmann, Wolff, & Schüz, 2013) prompts questions about how individuals might adopt positive views on aging. However, compared to abundant research on effects of aging stereotypes, few studies address the sources of these views (e.g., Sargent-Cox, Anstey, & Luszcz, 2012). Investigating how they develop has theoretical and practical value. As people's views of successful aging are much more elaborate than broad

stereotypes suggest—including not only basic resources such as health but also psychological factors such as well-being and coping skills (Jopp et al., 2015)—identifying their sources will enrich theories of successful aging. From a practical perspective, such studies may suggest interventions to alter views on aging, which could enhance individuals' aging processes. This article helps close the gap by investigating one potential influence on individuals' views on aging: role models of successful aging.

Interest in role models of successful aging has been surprisingly limited, given that positive role models could promote critical questioning of negative aging stereotypes (Levy & Banaji, 2004). Role models represent exemplary persons to identify with and learn from, providing individuals with motivation and pathways to success. The role model concept has two main sources: theories of role identification and social learning theory. According to the former, individuals identify with others who seem to have similar motives or features (Kagan, 1958) and hold socially attractive positions or have attained desirable goals (Bell, 1970); this identification helps individuals define their self-concept and identity (Tajfel & Turner, 1979). According to social learning theory (Bandura, 1986), observation and imitation of others are central learning mechanisms that inspire and enable individuals to acquire new behaviors and skills and heighten their sense of self-efficacy.

The importance of role models has been acknowledged in various contexts, including educational and occupational settings, and much research has focused on adolescents and young adults (e.g., Campbell & Wolbrecht, 2006; Hurd & Zimmerman, 2010). Here, findings suggest that role models positively influence academic motivation and performance (Zirkel, 2002), career choice and confidence (Chlosta, Patzelt, Klein, & Dormann, 2012), and health outcomes (Chen, Lee, Cavey, & Ho, 2013).

Little attention has been paid to how role models change across the life course. To understand this, it is useful to draw on the concept of possible selves (Markus & Nurius, 1986), which represent positive (hoped-for) and negative (feared) images of one's future self that motivate current behavior and guide individual development (Cross & Markus, 1991; Hooker & Kaus, 1992; Smith & Freund, 2002). Based on this background, Gibson (2004) has proposed that role models are active cognitive constructions reflecting changing needs and goals. Also, instead of selecting a "perfect" model, individuals tend to identify multiple role models (Ibarra, 1999) and combine their attributes to create composite visions of ideal "selves" which are adapted over time (Gibson, 2004).

Conceptualizing role models as cognitive constructions reflecting needs and goals is particularly useful for understanding how role models differ with age. For example, Lockwood, Chasteen, and Wong (2005) found that younger adults felt motivated to change their health behavior by positive role models, whereas older adults were motivated by both positive and negative role models. This suggests that in advanced age, health promotion orientations are joined by prevention orientations. Examining work role models, Gibson (2003) found that early-career employees were inspired by global "whole package" role models, whereas more established employees chose role models for particular attributes. This suggests that as individuals gain more differentiated concepts of their roles, they seek more precise motivations and thus construct more detailed role models. That detailed role models yield more nuanced guidance and better outcomes is supported by research on the influence of possible selves. For instance, older adults with hoped-for selves (e.g., regarding health and social relationships) were more likely to perform goal-related activities, to make progress on goals, and to have enhanced affect and survival (Hoppmann, Gerstorf, Smith, & Klumb, 2007; Ko, Mejía, & Hooker, 2014).

These findings suggest that investigating role models in the context of social gerontology may offer new insights into how individuals develop positive concepts and strategies regarding aging. Drawing on the works above and additional papers on the functions of role models in other domains (Bosma, Hessels, Schutjens, van Praag, & Verheul, 2012; Morgenroth, Ryan, & Peters, 2015), we suggest that role models of successful aging may show individuals that successful aging is possible and what it could look like, providing inspiration and motivation. Identification with successful aging role models could lead to acknowledging more positive aspects of aging, which could decrease negative aging views; this in turn could also lead to more positive attitudes toward one's own aging. Role models could also allow individuals to learn aging-relevant behaviors by observing real-life examples and provide direct communication and support, allowing access to more in-depth insight and concrete advice. In addition, role models may encourage individuals to set and pursue successful aging goals with increased confidence and self-efficacy.

To our knowledge, role models of successful aging have been investigated in just one study to date. As part of qualitative research on older adults' perceptions of aging, Horton, Baker, Côté, & Deakin (2008) asked 20 individuals aged 60–75 years whether they had role models of successful aging and about the role models' characteristics. The finding that most participants did have successful aging role models suggests that at least for older adults, they are salient enough to warrant further investigation. The most common role models were family members, followed by friends and, more rarely, famous figures; similar to other domains, familiarity seems to guide role model choice. Additionally, older adults' criteria of successful aging are suggested by participants' selection of role models who were 10–20 years older than themselves, leading an active and high-quality life.

Horton and colleagues' (2008) study provides valuable initial insights into role models of successful aging. However, given its rather small sample, replication in a larger study is needed to further establish role model characteristics. Also, the study focused on older adults, providing no information on whether younger adults have such

role models. As stereotypes develop early and are found in all age groups (Chasteen, Schwarz, & Park, 2002), this may also be true of successful aging role models, though their characteristics may vary with age. Further, Horton and colleagues (2008) focused on characteristics of successful aging role models and do not speak to their usefulness. Thus, the question of whether having successful aging role models is associated with views on aging, as assumed by Levy and Banaji (2004), remains unexamined.

The Present Study

In order to create a basis for the investigation of successful aging role models, the present study examined (a) whether young, middle-aged, and older adults have role models of successful aging; (b) the characteristics of these role models (e.g., family member, age); (c) reasons for choosing the role models; and (d) associations between role model characteristics, negative general views on aging, and attitudes toward one's own aging. Based on Horton and colleagues (2008), we expected individuals to have role models of successful aging and that these would be personal contacts, mostly family members. Based on studies in other domains (e.g., Lockwood et al., 2005), we tested whether role models varied with participant characteristics, expecting that individuals would choose role models similar to themselves (e.g., same gender). To better understand the nature and conceptual richness of role models, we analyzed how many reasons for role model choice participants offered, and specific themes. We expected reasons for role model choice to reflect individuals' successful aging concepts, and that these would include health, activity engagement, social resources, well-being, and psychological aspects, as suggested by lay persons' perspectives on successful aging (Jopp et al., 2015). As our prior findings indicated that young, middle-aged, and older individuals' views on successful aging do not differ strongly, we did not expect age differences in specific reasons. Considering role models as cognitive constructions (Gibson, 2004), we used the number of reasons for role model choice to indicate the elaborateness of the model and the "possible self" it represents. We expected older participants and participants with family role models to mention more reasons due to their in-depth, proximate experience of aging processes.

Finally, we examined associations between role model characteristics (e.g., types, number of reasons) and views on aging. Consistent with Levy and Banaji's (2004) proposal, we expected individuals with role models to have less negative general views on aging and that this would be stronger for personally known role models (e.g., family), as face-to-face interactions reduce prejudice against outgroup members, including the elderly adult (Pettigrew & Tropp, 2006). Similarly, based on evidence that considering more information reduces age bias (Kite et al., 2005), we expected those who mentioned more reasons for role model choice to have less negative general views on aging. Finally, we tested the mediation hypotheses that family role models would lead to less negative general views on aging and that due to their influence on personal views (Levy, 2009), these would in turn result in more positive attitudes toward one's own aging.

Method

Sample

Participants were 151 adult U.S. residents (M_{age} = 43.77, *SD* = 22.89; young: M_{age} = 22.20 [18–30 years], *n* = 64; middle aged: M_{age} = 47.12 [31–60 years], *n* = 42; older: M_{age} = 74.00 [61–99 years], *n* = 41) recruited for a study of views on aging via flyers at universities and community centers in New York City and by word of mouth. Women comprised 58.0% of the sample. Sixty-three percent were White/Caucasian, 20.6% were Black/African American, 7.4% were Asian or Pacific Islander, and 8.8% were from other backgrounds. On average, participants had 15.13 (*SD* = 2.60) years of education and reported good subjective health (*M* = 2.73, *SD* = 0.95, based on a single item with answering options ranging from 1 [*poor*] to 5 [*excellent*]).

Measures

Role model assessment

Participants were asked in face-to-face interviews whether they had role models of successful aging ("When you think about successful aging, do you have a certain person in mind?") and why they had chosen them ("If yes, who is it and why?"). If participants had difficulty understanding the question, interviewers repeated it using standard supplementary phrasings (i.e., replacing "successful aging" with "aging well"). If necessary, standard prompts were used to clarify role models' ages and relationships to participants. Trained interviewers recorded the answers by taking detailed notes.

Coding

Open-ended answers were examined to identify common themes using standard qualitative procedures including open coding, clustering, and theme identification (Glaser & Strauss, 1967; Miles & Huberman, 1994). We created a preliminary set of codes based on 20 randomly chosen participants' answers, and then refined these using data from another 20 randomly chosen participants. Because no additional major categories of role model types or reasons were found, indicating saturation, we used the revised codes for the total data set. Coding was done by pairs of well-trained raters. Interrater reliability was high with kappa values (Cohen, 1960) of κ = .97 (types) and κ = .89 (reasons). Final coding systems are presented with examples in Table 1 (role model types) and Table 2 (reasons for model choice).

Demographic characteristics

Participants were asked about their age, gender, and highest level of education, which was recoded as years of education.

Table 1. Frequency (Percentage) of Specific Types of Role Models (Total Sample: *N* = 151)

Category	Subcategory	Examples
Parents (25.8%)	Mother (20.5%)	
	Father (13.2%)	
Grandparents (24.5%)	Grandmother (18.5%)	
	Grandfather (10.6%)	
	Great grandmother (1.3%)	
	Great grandfather (0.7%)	
Other relatives (15.2%)	Aunt (6.0%)	
	Spouse (2.6%)	
	Uncle (2.0%)	
	In-law (2.0%)	
	Sibling (2.0%)	
Nonfamily acquaintances (14.6%)	Friend (7.3%)	
	Mentor/boss (4.6%)	
	Friend's/partner's parent (3.3%)	
Public figures (13.2%)	Movie star (6.6%)	Clint Eastwood, Susan Sarandon
	Politician (3.3%)	Benjamin Franklin, Barack Obama
	Musician (2.6%)	Tina Turner, Benny Goodman
	Sports player (0.7%)	Derek Jeter
	Journalist (0.7%)	Walter Cronkite
Nonspecific (general; 6.6%)		A woman I read about, a person in his 80s

Note: No model mentioned: 14.6%. As multiple role models were mentioned, percentages do not add to 100.

Table 2. Reasons for Model Choice: Categories, Frequency of Mentions, and Examples (*n* = 129; Excluding Individuals Without Role Models)

Category	Examples
Health (53.5%)	Still is in a good physical health; cognitively intact; eats healthy; no bad habits, no smoking and drinking
Activities (34.9%)	Made sure to stimulate herself with puzzles and kept herself busy; continues to work at a job; she is still busy, still involved
Social (33.3%)	Have great kids, great families; gives back to the community; has a lot of friends; very connected to other people
Attitudes toward life/virtues (26.4%)	Maintained a positive attitude; good self-esteem; sense of humor, open minded
Quality of life (24.0%)	Happy with their lives; enjoying life; laugh and fool around
Independence (19.4%)	Lived independently, self-sufficient; can still do her own things
Aging as a topic (17.1%)	Never lied about her age, has embraced age; young at heart; not afraid of death
Life management (16.3%)	She made plans for what she wanted; did what was necessary to achieve goals; overcame obstacles and adapted
Knowledge/education (8.5%)	Went to college, got good degrees
Success/respect (8.5%)	Has a successful career
Finances (7.0%)	Financially stable; saved money; resources to go where they want
Meaning in life (5.4%)	Lives meaningful life; spiritual, strong faith
Microenvironment (3.1%)	Family (rural) upbringing
Growth (1.6%)	Continues to grow

Note: As multiple reasons were mentioned, percentages do not add to 100.

Negative general views on aging

We used three items to assess negative views on aging ("Age is difficult to cope with"; "Aging is a burden"; "Aging is not for sissies"). Response options were 1 (*strongly disagree*) to 6 (*strongly agree*). Higher values indicated more negative views. Cronbach's alpha was acceptable: $\alpha = .68$.

Attitudes toward own aging

Attitudes toward one's own aging were assessed with the five-item subscale from the Philadelphia Geriatric Center Morale Scale (PGCMS; Lawton, 1975). An example item is "As I get older, things are better than I thought they would be." Response options were 1 (*strongly disagree*) to

7 (*strongly agree*). Higher values indicate a more positive attitude. Cronbach's alpha was good: α = .72.

Procedure

After obtaining informed consent, interviewers administered open-ended questions to each participant individually. Participants then completed questionnaires by themselves (questions were read to very old participants). Participants did not receive compensation.

Analysis

Coded data were transformed into categorical variables (e.g., grandparent role model: yes = 1, no = 0; health as reason: yes = 1, no = 0). We also computed a variable representing the sum of reasons mentioned. We used χ^2 tests, analyses of variance (ANOVAs), and *t* tests to examine associations between role model features (e.g., types, reasons) and participant characteristics. Some participants mentioned more than one role model; most analyses include all role models but some (indicated) use only the first mentioned. Correlation and regression analyses were conducted to determine relationships between role model types (dummy coded; e.g., using 1 for family role model, 0 for no family role model), number of reasons, views on aging, and attitudes toward own aging. Mediation analyses were conducted using bootstrapping by applying the SPSS PROCESS macro by Hayes (2013), with 1,000 bootstrap resamplings. Indirect effects were considered significant if the bootstrapped 95% confidence interval (CI) did not include zero. Age, gender, and subjective health were controlled in the mediation analyses.

Results

Role Models Types

Of 151 participants, 129 (85.4%) mentioned at least one successful aging role model. Ninety-four participants (62.3%) mentioned one role model, 25 (16.6%) mentioned two, and 10 (6.6%) mentioned three or more.

Six types of role models were mentioned (Table 1). Parents were mentioned most often (25.8%), mothers (20.5%) more often than fathers (13.2%). Grandparents were mentioned slightly less often (24.5%), and grandmothers (18.5%) more than grandfathers (10.6%). Other relatives, such as aunts or siblings, were mentioned by 15.2% of participants. Overall, 89 (58.9%) mentioned at least one family role model. Nonfamily acquaintances (e.g., friends, mentors/bosses) were mentioned by 14.6% and public figures (e.g., celebrities, politicians) were mentioned by 13.2%. A total of 6.6% of participants mentioned nonspecific role models (e.g., "woman I read about"), whereas 14.6% mentioned none.

Young participants were more likely to mention a grandparent than middle-aged or older adults (Supplementary Figure 1; $\chi^2(2, n = 147) = 17.65$, $p < .01$). Older adults were the most likely to mention other relatives ($\chi^2(2, n = 147) = 8.80$, $p < .05$). Non-White participants were more likely than Whites to report other relatives ($\chi^2(1, n = 136) = 5.63$, $p < .05$).

Basic Role Model Characteristics

Most participants described positive models; only one indicated a negative role model and three mentioned positive and negative role models.

Considering the first model mentioned, the average age of role models was 75.69 years. Parent role models (M_{age} = 73.02, *SD* = 17.15) were similar in age to nonfamily acquaintances (M_{age} = 69.60, *SD* = 22.07) and somewhat younger than grandparents (M_{age} = 84.21, *SD* = 10.01) and other relatives (M_{age} = 79.28, *SD* = 14.91). Public figures (M_{age} = 65.27, *SD* = 24.67) were the youngest of all role models. An ANOVA confirmed age differences across role model types ($F(4,96) = 3.66$, $p < .01$). Specifically, Scheffé post hoc tests revealed that public figures were significantly younger than grandparent role models ($p < .05$).

Role model age varied with participants' age. Young participants' role models averaged 68.74 years old (*SD* = 16.63), being younger than those of middle-aged (M_{age} = 80.45, *SD* = 13.20) or older participants (M_{age} = 85.63; *SD* = 10.94; $F(2,96) = 12.43$, $p < .01$).

Chi-square analysis showed that of participants who reported their role model's gender, both men and women tended to choose same-gender role models (men: $\chi^2(1, n = 118) = 6.58$, $p < .01$; women: $\chi^2(1, n = 118) = 13.65$, $p < .01$).

Reasons for Role Model Choice

Participants with at least one role model mentioned an average of 2.59 (*SD* = 1.15; range 0–6) reasons for their role model choice. Number of reasons did not differ across age groups (young vs middle aged vs older; $F(2,122) = 1.68$, ns), gender (male vs female; $t(126) = -1.55$, ns), health (high vs low; $t(113) = -0.47$, ns), or ethnicity (White/Caucasian vs non-white; $t(114) = 0.44$, ns). Better-educated participants mentioned more reasons than those with less education (high: *M* = 2.80, *SD* = 1.10 vs low: *M* = 2.35, *SD* = 1.14, $t(112) = -2.12$, $p < .05$).

Of specific reasons for role model choice, Health was mentioned most often (53.5%; see Table 2 for examples), followed by Activities (34.9%), Social aspects (33.3%), Attitudes toward life/virtues (26.4%), Quality of life (24.0%), Independence (19.4%), Aging as a topic (e.g., how role models dealt with aging; 17.1%), and Life management/coping (16.3%). Less frequently mentioned reasons included Knowledge/education (8.5%), Success/respect (8.5%), Finances (7.0%), and Meaning in life (5.4%).

Specific reasons for role model choice did not differ significantly by age, with three marginal exceptions: Health ($\chi^2(2, n = 125) = 5.35$, $p = .07$) and Aging as a topic ($\chi^2(2, n = 125) = 5.76$, $p = .06$) were mentioned somewhat more often by the middle-aged group than others, and Quality

of life was mentioned somewhat less often by older adults ($\chi^2(2, n = 125) = 5.23$, $p = .07$). Women mentioned Life management/coping somewhat more than men ($\chi^2(1, n = 128) = 2.95$, $p = .09$). Healthy participants also mentioned Life management/coping more often than those with poorer health ($\chi^2(1, n = 115) = 6.25$, $p < .05$). Education and ethnicity were not associated with specific reasons for role model choice.

Links Between Role Models and Views on Aging

Correlations (Table 3) between parent role models and negative views on aging were negative ($r = -.17$, $p < .05$), whereas Public figures had a marginal positive correlation with negative views ($r = .16$, $p = .05$). Number of reasons for model choice was negatively correlated to negative views on aging ($r = -.19$, $p < .05$) and marginally positively correlated to attitudes toward own aging ($r = .15$, $p = .08$). Negative views on aging were marginally ($r = -.15$, $p = .08$) and attitudes toward own aging were significantly negatively ($r = -.32$, $p < .01$) associated with age.

Regression analyses examined associations between role models and views on aging (Table 4). After controlling for age, gender, and subjective health status, having at least one role model had a weak, but nonsignificant association with negative views on aging (β = .14, $p = .12$, Model 1, left side) and the overall regression model was not significant. Having at least one family role model (Model 2) was linked to less negative views on aging (β = –.19, $p < .05$). A regression (not shown) including both having any role model and having a family role model as concurrent predictors was not significant.

Having a role model and a family role model were not associated with attitudes toward own aging, either individually (Models 1–2, right side) or as concurrent predictors (not shown). However, more reasons for role model choice (Model 3) were significantly associated with less negative views on aging (β = –.23, $p < .01$) and more positive attitudes toward own aging (β = .16, $p < .05$).

To conclude, two mediation analyses were conducted (Figure 1). The first examined whether the association between having a family role model and negative views on aging was mediated by number of reasons for role model choice. The direct effect of having a family role model on negative views on aging (unstandardized $B = -0.46$) became nonsignificant when considering number of reasons. The bootstrapped estimates supported the expected indirect effect ($B = -0.18$, $SE = 0.09$, bias-corrected bootstrapped 95% CI [–0.42, –0.03]). The second model tested whether number of reasons had an effect on attitudes toward own aging, mediated by negative views on aging. The direct effect of numbers of reasons on attitudes toward own aging ($B = 0.13$) lost its significance once negative views on aging were introduced. The results of bootstrap sampling verified a significant indirect effect of total numbers of reasons on attitudes toward own aging through negative views on aging ($B = 0.06$, $SE = 0.02$, bias-corrected 95% CI [0.02, 0.13]).

Discussion

This study examined whether young, middle-aged, and older individuals have role models for successful aging, determined the role models' characteristics, and examined potential correlates. It is the first study to use a larger lifespan sample to systematically investigate role models in the context of successful aging and the first to show not only that individuals have successful aging role models but also that holding such role models is associated with less negative general and more positive self-related views on aging.

Prevalence and Characteristics of Successful Aging Role Models

An overwhelming majority of study participants were able to name a role model, suggesting that they could envision successful aging. Almost all role models were positive, indicating that participants perceived at least one person they knew as aging

Table 3. Correlations Among Key Variables ($N = 151$)

Variables	Mean (*SD*) or *n* (%)	1	2	3	4	5	6	7	8	9	10
1. Age	43.77 (22.88)	—									
2. Gender (female)	87 (57.6%)	.07	—								
3. Education (in years)	15.13 (2.60)	.20*	.00	—							
4. Subjective health	2.73 (0.95)	–.18*	–.04	.04	—						
5. Having any role model[a]	129 (85.4%)	.05	.07	.06	–.03	—					
6. Having a parents role model[b]	39 (25.8%)	.11	.04	–.01	.02	.24**	—				
7. Having a family role model[b]	89 (58.9%)	–.05	.07	–.08	.11	.50**	.49**	—			
8. Having a public figure role model[b]	20 (13.2%)	.00	–.14+	.05	–.08	.16*	–.19*	–.31**	—		
9. Number of reasons mentioned[c]	2.24 (1.37)	.00	.13	.12	.02	.62**	.22**	.38**	.08	—	
10. Negative views on aging	3.22 (1.21)	–.15+	.03	.03	–.08	–.08	–.17*	–.15+	.16+	–.19*	—
11. Attitude toward own aging	4.91 (1.13)	–.32**	–.12	.12	.33**	.00	.09	.09	.05	.15+	–.30**

Notes: [a]1 = having any role model, 0 = no role model. [b]1 = having at least one parent (family etc.) role model, 0 = not having a parent (family etc.) role model. [c]Individuals without role models were given a zero for role model reasons.
+$p < .10$; *$p < .05$; **$p < .01$.

Table 4. Regression Analysis: Role Model Features Predict Views and Attitudes (n = 135)

	Negative views on aging				Attitudes toward own aging			
Predictors	*B*	*SE*	β		*B*	*SE*	β	
Model 1: having a role model								
Age	−0.01	0.01	−0.17*		−0.01	0.00	−0.27**	
Gender (1 = male)	−0.04	0.21	−0.02		−0.23	0.18	−0.10	
Health status	−0.15	0.11	−0.12		0.33	0.09	0.28**	
Having a role model[a]	−0.46	0.29	−0.14		0.07	0.25	0.02	
Total R^2				.06+				.19**
Model 2: family role model								
Age	−0.01	0.01	−0.19*		−0.01	0.00	−0.27**	
Gender (1 = male)	−0.02	0.21	−0.01		−0.24	0.18	−0.11	
Health status	−0.12	0.11	−0.10		0.32	0.10	0.27**	
Having a family role model[a]	−0.46	0.21	−0.19*		0.14	0.18	0.06	
Total R^2				.07*				.19**
Model 3: number of reasons								
Age	−0.01	0.00	−0.17*		−0.01	0.00	−0.27**	
Gender (1 = male)	0.01	0.20	0.01		−0.27	0.18	−0.12	
Health status	−0.14	0.11	−0.11		0.33	0.09	0.27**	
Number of reasons[b]	−0.21	0.07	−0.23**		0.13	0.06	0.16*	
Total R^2				.09*				.22**

Note: Reduced sample size due to missing scores on health status. [a]1 = having any role model, 0 = no role model. [b]1 = having at least one parent (family etc.) role model, 0 = not having a parent (family etc.) role model. cIndividuals without role models were given a zero for role model reasons.
+p < .10; *p < .05; **p < .01.

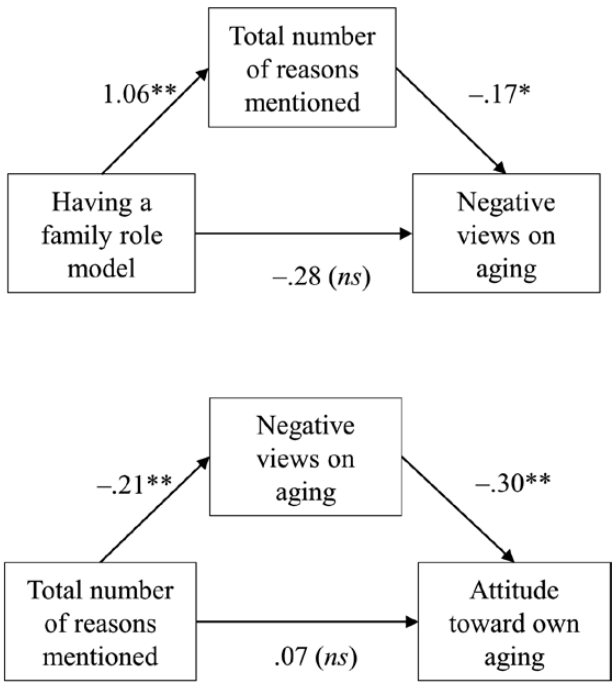

Figure 1. Mediation models support the expected indirect effects: The effect of having a role model on negative views on aging is mediated by total number of reasons (upper panel). The effect of total number of reasons on attitudes toward own aging is mediated by negative views on aging (n = 135). Unstandardized coefficients (B) are reported. All models controlled for age, gender, and subjective health. *p < .05; **p < .01; ns = nonsignificant at p < .05.

well. These results confirm Horton and colleagues' (2008) findings based on 20 older individuals, but with a substantially larger sample. They also extend that work by showing that successful aging role models are held by adults of all ages.

Successful aging role model preferences were consistent with studies from other domains. Paralleling prior research, participants preferred role models they knew personally (e.g., Horton et al., 2013) and of their own gender (Lockwood et al., 2005). Individuals choose role models that facilitated identification, which enhances role model effectiveness.

Strengthening evidence from Horton and colleagues' (2008) smaller study, our findings indicate that role models were about 10 years older than the older study participants. That young and middle-aged participants chose role models substantially older than themselves (68 years old for young, 80 years for middle aged) is not surprising, yet interestingly, young individuals focused on people in the third age rather than conceiving successful aging simply as "successful development." Middle-aged and older participants chose old–old role models, maybe reflecting that very old age has become an realistic option for many due to demographic changes. Holding old–old successful aging role models may be especially useful in counteracting aging stereotypes, which are most likely to be applied to individuals over age 80 (Hummert, 1990).

Family Members as Primary Role Model Types

Parents and grandparents were each mentioned as role models by about one fourth of the sample, followed by other

relatives and nonfamily acquaintances. That people chose close contacts as role models echoes studies from other areas, but specific role model types differed. Lockwood and colleagues (2005) found that friends outnumbered family members as health role models, while here the reverse was true. Concentration on family member role models thus seems specific to the aging context and corroborates other evidence that individuals report learning most about aging within their families (Jopp, Lampraki, & Meystre, 2016). Furthermore, unlike family members, friends tend to be of similar ages, potentially reducing their usefulness as role models of aging especially among younger individuals.

That younger participants frequently mentioned grandparents as role models may be because grandparents' ages make them highly relevant for evaluating aging processes. Assuming generation differences of 20–30 years, young participants' parents might be too young to adequately represent "old people." That older adults were more likely to mention other relatives as role models could reflect processes of adaptation to their own age-related changes or to changes in their environment (Hooker, 1999), such as death of a parent who previously served as a role model. Also, because today's older generations are healthier (Cho et al., 2012) and more likely to reach old age than their parents, older study participants may have deemed their own parents suboptimal as exemplars of longevity. Their choice of other relatives may be due to desire for personal connection with role models. Also, in advanced age, family ties become more important, whereas nonfamily relationships are less available (Jopp, Park, Lehrfeld, & Paggi, 2016) and less emotionally meaningful (Carstensen, Isaacowitz, & Charles, 1999).

Finally, that mothers/grandmothers were chosen more frequently than fathers/grandfathers could be due to our sample's slight overrepresentation of women, coupled with tendencies to pick same-gender role models and/or the fact that women's greater longevity makes them more available as models of successful aging.

Reasons for Role Model Choice

Echoing prominent successful aging theories (e.g., Rowe & Kahn, 1998), role models were mostly chosen based on their good health, the prime indicator of aging well, followed by high activity engagement and rich social networks. Other commonly mentioned reasons, such as positive attitude, quality of life, independence, and life management/coping, reflect important aspects of successful aging reported in studies of lay perspectives (e.g., Jopp et al., 2015; Knight & Ricciardelli, 2003). Specific reasons did not differ significantly across age groups, which is consistent with evidence that individuals' definitions of successful aging are quite similar across the life span (Jopp et al., 2015). Furthermore, we found no age differences in number of reasons for role model choice. Given Gibson's (2003) findings on older adults' highly specific selection of job-related role models, we had expected older adults to mention more reasons for role model choice, reflecting more elaborate ideas about successful aging. That this was not the case could be supporting evidence that age groups had rather similar criteria.

Role Models and Views on Aging

Individuals who held family role models of successful aging had less negative general views of aging, and this effect was stable when controlling for age, gender, and subjective health. This corroborates findings from other domains on the usefulness of role models (e.g., Chen et al., 2013; Chlosta et al., 2012) and supports Levy and Banaji's (2004) proposal that positive exemplars help reduce negative aging stereotypes. Further, mediation models identified mechanisms that could attenuate negative views on aging: Family role models were associated with having more reasons for role model choice, which was in turn associated with less negative views. It could be that by allowing more in-depth, long-term observation of aging, and perhaps communication and advice as well, family role models encourage more differentiated concepts of aging, reflected in increased reasons for role model choice. That these elaborate concepts lead to less negative general views on aging parallels previous evidence that age bias weakens when more extensive information is considered (Kite et al., 2005).

Richer and more differentiated concepts of successful aging were also associated with more positive attitudes toward one's own aging, though this effect was mediated by negative general views on aging. This is consistent with Levy's (2009) stereotype embodiment theory, which assumes that negative views on aging are internalized and integrated into self-perceptions about one's own aging, creating self-fulfilling prophecies for health and other outcomes via behavioral (e.g., lifestyle; Levy & Myers, 2004) or psychological pathways (e.g., coping; Wurm et al., 2013). Thus, future investigations may address whether having a richly detailed "possible successful-aging self" leads to more beneficial behavioral and cognitive strategies and enables people to age more successfully.

Limitations

Some limitations merit discussion. First, although our sample is the largest to date in a study of successful aging role models, it is a convenience sample. We recruited people to a study about aging, and this could have drawn unusually interested or knowledgeable participants. Also, the sample was highly educated, which could have led to more detailed aging views. Still, we found a substantial minority (15%) without role models. Additionally, the number of reasons mentioned was normally distributed around the average of 2.59 (SD = 1.15; range = 0–6), so the sample was not particularly prolific in generating successful aging themes and was far from producing a ceiling effect. Thus, although study findings should be replicated with a more

representative sample, we believe our results provide a useful basis for future research.

Second, the fact that participants were asked specifically about role models of successful aging probably explains why an overwhelming majority mentioned positive role models. Future studies should use more neutral wording (e.g., Horton et al., 2008), as prior work found age differences in the valence of role models. In addition, testing any role models and family role models concurrently failed due to lack of significance of the regression model. This may be due to limited sample size, but future studies should examine whether having family role models conveys superior benefits and why.

Third, the present study does not indicate direction of causality, that is, whether role models influence views on aging or whether views on aging suggest particular role models. Also, given prior evidence that individuals construct role models in adaptive ways, it would be useful to examine in more detail what motivates preferences for successful aging role models. For instance, prior studies show that people find "super-star" role models unhelpful if they feel incapable of achieving similar success (Horton et al., 2013; Lockwood & Kunda, 1997), and it would be interesting to see if a similar dynamic explains why some individuals claim to have no successful aging role model. Thus, longitudinal studies investigating how role models are chosen and modified over time would be very useful in developing this field of research.

Conclusions

Based on the most systematic investigation of successful aging role models to date, this study is the first to provide evidence that young, middle-aged, and older individuals have such role models and that family role models seem to mobilize especially detailed representations that offset negative views on aging, leading in turn to greater optimism about one's own aging. Our study thus demonstrates that the application of the role model concept is useful in the domain of successful aging, as it offers new insights on how individuals' general views on aging are adjusted based on role model information and how individuals may benefit from these for their own aging.

We hope that our findings will inspire studies of successful aging role models that are more representative and focus on the mechanisms by which role models potentially influence individuals' attitudes and behaviors. Integrating role models into a more comprehensive theory of successful aging is an additional valuable goal. As large numbers of Baby Boomers enter old age, it seems imperative to support them in deflecting harmful stereotypes and developing positive, detailed "possible selves" to use as blueprints for their own aging trajectories. Our study suggests that encouraging individuals to choose role models of successful aging may be an important step in this direction.

Supplementary Material

Please visit the article online at http://gerontologist.oxfordjournals.org/ to view supplementary material.

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D. S. Jopp planned and conducted the study, supervised data analysis, and wrote the article. S. Jung collected data, helped in data entry and cleaning, analyzed data, and contributed to writing. S. Mirpuri contributed to data processing and writing. D. Spini and A. K. Damarin planned and revised the article.

Conflict of Interest

The authors declare no conflict of interest.

References

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.

Bell, A. (1970). Role modelship and interaction in adolescence and young adulthood. *Developmental Psychology*, **2**, 123–128. doi:10.1037/h0028613

Bosma, N., Hessels, J., Schutjens, V., van Praag, M., & Verheul, I. (2012). Entrepreneurship and role models. *Journal of Economic Psychology*, **33**, 410–424.

Campbell, D. E., & Wolbrecht, C. (2006). See Jane run: Women politicians as role models for adolescents. *Journal of Politics*, **68**, 233–247. doi:10.1111/j.1468-2508.2006.00402.x

Carstensen, L. L., Isaacowitz, D. M., & Charles, S. T. (1999). Taking time seriously: A theory of socioemotional selectivity. *American Psychologist*, **54**, 165–181. doi:10.1037/0003-066x.54.3.165

Chasteen, A. L., Schwarz, N., & Park, D. C. (2002). The activation of aging stereotypes in younger and older adults. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, **57**, 540–547. doi:10.1093/geronb/57.6.p540

Chen, E., Lee, W. K., Cavey, L., & Ho, A. (2013). Role models and the psychological characteristics that buffer low-socioeconomic-status youth from cardiovascular risk. *Child Development*, **84**, 1241–1252. doi:10.1111/cdev.12037

Chlosta, S., Patzelt, H., Klein, S. B., & Dormann, C. (2012). Parental role models and the decision to become self-employed: The moderating effect of personality. *Small Business Economics*, **38**, 121–138. doi:10.1007/s11187-010-9270-y

Cho, J., Martin, P., Margrett, J., MacDonald, M., Poon, L. W., & Johnson, M. A. (2012). Cohort comparisons in resources and functioning among centenarians: Findings from the Georgia Centenarian Study. *International Journal of Behavioral Development*, **36**, 271–278. doi:10.1177/0165025412439967

Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, **20**, 37–46. doi:10.1177/001316446002000104

Cross, S., & Markus, H. (1991). Possible selves across the life span. *Human Development*, **34**, 230–255. doi:10.1159/000277058

Gibson, D. E. (2003). Developing the professional self-concept: Role model construals in early, middle and late career

stages. *Organization Science*, **15**, 591–610. doi:10.1287/orsc.14.5.591.16767

Gibson, D. E. (2004). Role models in career development: New directions for theory and research. *Journal of Vocational Behavior*, **65**, 134–156. doi:10.1016/s0001-8791(03)00051-4

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine.

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis*. New York, NY: The Guilford Press.

Hooker, K. (1999). Possible selves in adulthood: Incorporating teleonomic relevance into studies of the self. In F. Blanchard-Fields & T. Hess (Eds.), *Social cognition and aging* (pp. 97–122). San Diego, CA: Academic Press.

Hooker, K., & Kaus, C. R. (1992). Possible selves and health behaviors in late life. *Journal of Aging and Health*, **4**, 390–411. doi:10.1177/089826439200400304

Hoppmann, C. A., Gerstorf, D., Smith, J., & Klumb, P. L. (2007). Linking possible selves and behavior: Do domain-specific hopes and fears translate into daily activities in very old age? *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, **62**, 104–111. doi:10.1093/geronb/62.2.p104

Horton, S., Baker, J., Côté, J., & Deakin, J. M. (2008). Understanding seniors' perceptions and stereotypes of aging. *Educational Gerontology*, **34**, 997–1017. doi:10.1080/03601270802042198

Horton, S., Dionigi, R. A., & Bellamy, J. (2013). Women aged 75 and over: Attitudes towards health-related role models and female master athletes. *The International Journal of Interdisciplinary Social and Community Studies*, **7**, 33–47.

Hummert, M. L. (1990). Multiple stereotypes of elderly and young adults: A comparison of structure and evaluations. *Psychology and Aging*, **5**, 182–193. doi:10.1037/0882-7974.5.2.182

Hummert, M. L., Garstka, T. A., Shaner, J. L., & Strahm, S. (1995). Judgments about stereotypes of the elderly attitudes, age associations, and typicality ratings of young, middle-aged, and elderly adults. *Research on Aging*, **17**, 168–189. doi:10.1177/0164027595172004

Hurd, N. M., & Zimmerman, M. (2010). Natural mentoring relationships among adolescent mothers: A study of resilience. *Journal of Research on Adolescence*, **20**, 789–809. doi:10.1111/j.1532-7795.2010.00660.x

Ibarra, H. (1999). Provisional selves: Experimenting with image and identity in professional adaptation. *Administrative Science Quarterly*, **44**, 764–791. doi:10.2307/2667055

Jopp, D. S., Lampraki, C., & Meystre, C. (2016). Sources of information about aging in young, middle-aged and older adults. Manuscript submitted for publication.

Jopp, D. S., Park, M. K., Lehrfeld, J., & Paggi, M. E. (2016). Physical, cognitive, social and mental health in near-centenarians and centenarians living in New York City: Findings from the Fordham Centenarian Study. *BMC Geriatrics*, **16**, 1. doi:10.1186/s12877-015-0167-0

Jopp, D. S., Wozniak, D., Damarin, A. K., De Feo, M., Jung, S., & Jeswani, S. (2015). How could lay perspectives on successful aging complement scientific theory? Findings from a U.S. and a German life-span sample. *The Gerontologist*, **55**, 91–106. doi:10.1093/geront/gnu059

Kagan, J. (1958). The concept of identification. *Psychological Review*, **65**, 296–305.

Kite, M. E., Stockdale, G. D., Whitley, B. E., & Johnson, B. T. (2005). Attitudes toward younger and older adults: An updated meta-analytic review. *Journal of Social Issues*, **61**, 241–266. doi:10.1111/j.1540-4560.2005.00404.x

Knight, T., & Ricciardelli, L. A. (2003). Successful aging: Perceptions of adults aged between 70 and 101 years. *The International Journal of Aging and Human Development*, **56**, 223–245. doi:10.2190/cg1a-4y73-wew8-44qy

Ko, H., Mejía, S., & Hooker, K. (2014). Social possible selves, self-regulation, and social goal progress in older adulthood. *International Journal of Behavioral Development*, 38, 219–227. doi:10.1177/0165025413512063

Lawton, M. P. (1975). The Philadelphia Geriatric Center Morale Scale: A revision. *Journal of Gerontology*, **30**, 85–89. doi:10.1093/geronj/30.1.85

Levy, B. R. (2003). Mind matters: Cognitive and physical effects of aging self-stereotypes. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, **58**, 203–211. doi:10.1093/geronb/58.4.p203

Levy, B. (2009). Stereotype embodiment: A psychosocial approach to aging. *Current Directions in Psychological Science*, **18**, 332–336. doi:10.1111/j.1467-8721.2009.01662.x

Levy, B. R., & Banaji, M. R. (2004). Implicit ageism. In T. D. Nelson (Ed.), *Ageism: Stereotyping and prejudice against older persons* (pp. 49–75). Cambridge, MA: MIT Press.

Levy, B. R., & Myers, L. M. (2004). Preventive health behaviors influenced by self-perceptions of aging. *Preventive Medicine*, **39**, 625–629. doi:10.1016/j.ypmed.2004.02.029

Lockwood, P., Chasteen, A. L., & Wong, C. (2005). Age and regulatory focus determine preferences for health-related role models. *Psychology and Aging*, **20**, 376–389. doi:10.1037/0882-7974.20.3.376

Lockwood, P., & Kunda, Z. (1997). Superstars and me: Predicting the impact of role models on the self. *Journal of Personality and Social Psychology*, **73**, 91–103. doi:10.1037/0022-3514.73.1.91

Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*, **41**, 954–969. doi:10.1037/0003-066x.41.9.954

Meisner, B. A. (2012). A meta-analysis of positive and negative age stereotype priming effects on behavior among older adults. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, **67**, 13–17. doi:10.1093/geronb/gbr062

Miles, M. B., & Huberman, M. (1994). *Qualitative data analysis: A sourcebook of new methods*. Beverly Hills, CA: Sage.

Morgenroth, T., Ryan, M. K., & Peters, K. (2015). Motivational theory of role modeling: How role models influence role aspirants' goals. *Review of General Psychology*, **19**, 465–483. doi:10.1037/gpr0000059

Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, **90**, 751–783. doi:10.1037/0022-3514.90.5.751

Rowe, J. W., & Kahn, R. L. (1998). *Successful aging*. New York, NY: Pantheon Books.

Sargent-Cox, K. A., Anstey, K. J., & Luszcz, M. A. (2012). Change in health and self-perceptions of aging over 16 years: The role of psychological resources. *Health Psychology*, **31**, 423–432. doi:10.1037/a0027464

Smith, J., & Freund, A. (2002). The dynamics of possible selves in very old age. *The Journals of Gerontology, Series B: Psychological Science and Social Sciences*, **57**, 492–500. doi:10.1093/geronb/57.6.p492

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Monterey, CA: Brooks/Cole.

Wurm, S., Warner, L. M., Ziegelmann, J. P., Wolff, J. K., & Schüz, B. (2013). How do negative self-perceptions of aging become a self-fulfilling prophecy? *Psychology and Aging*, **28**, 1088–1097. doi:10.1037/a0032845

Zirkel, S. (2002). Is there a place for me? Role models and academic identity among white students and students of color. *Teachers College Record*, **104**, 357–376. doi:10.1111/1467–9620.00166