HUMAN BEHAVIOR

Emotion and prosocial giving in older adults

A new study provides broad evidence that older people are more generous than their younger counterparts, but that they favor local over global giving. In light of population aging and the relative wealth controlled by older citizens, it is important to identify the factors that contribute to these differences.

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We are living in an era of unprecedented and global demographic change brought about by increases in life expectancy that have occurred as fertility has decreased. If current trends continue, by 2050 the global population over 65 years of age will double. The numbers themselves hold less societal relevance than the well-being and behavioral practices of older adults. To the extent that older adults are healthy and engaged, these numbers represent novel opportunities for families, workplaces and communities. However, common trends in social behaviors of older adults that contribute little to broader society will undoubtedly present new challenges. In one of the largest studies to date examining age differences in prosocial tendencies, Cutler et al.[1] conducted an online study of 46,576 participants of 18 to 99 years of age from 67 countries with data collected during the COVID-19 pandemic — a unique opportunity to assess helping tendencies during a universal threat to health and well-being. Here we discuss these latest findings and their implications in the context of existing literature on aging and prosociality.

Previous research on aging in social and emotional domains points to encouraging possibilities of an aging population. There is substantial evidence that advanced age is associated with higher levels of emotional well-being and greater emotional stability[2], a pattern that is evident even during the COVID-19 pandemic[3]. Age differences in social relationships also point to strengths. Compared to younger adults, older adults are more satisfied with their relationships[4], relatively expert in solving social conflicts[5] and more likely to forgive[6]. Socioemotional selectivity theory[7] maintains that age differences in social and emotional functioning reflect motivational shifts that come with shrinking time horizons. When time horizons are long and nebulous, as they typically are in youth, priority is placed on exploration, risk-taking and learning to prepare for long-term futures. When time horizons are constrained, as is typical with age, the priority shifts to present-oriented goals, which favor goals related to emotional meaning and satisfaction. Because emotional goals are realized most often through investments in social relationships and important causes, many have speculated that aging may be associated with heightened prosocial investments.

Although interest in age differences in prosociality is rising[8], the empirical literature remains relatively small. However, evidence generated by diverse experimental paradigms and methodologies points to an intriguing link between age and prosociality. Findings from two national daily diary studies in the USA suggest that older adults dedicate more time to formal volunteering and unpaid assistance (for example, babysitting or helping with shopping) than younger adults[9]. In a study that examined responsiveness to financial incentives in young, middle-aged and older adults,

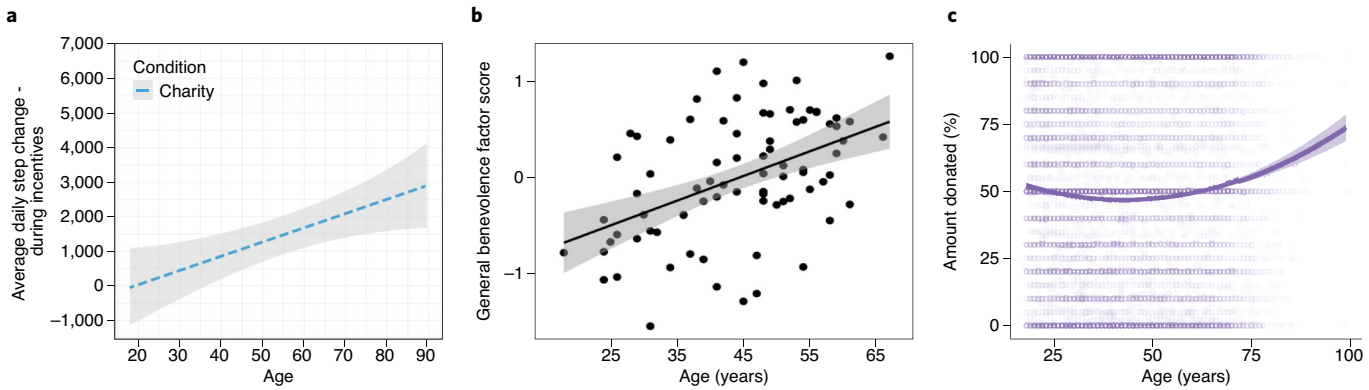

Fig. 1 | Age has been positively associated with prosociality across diverse methods, based on behavioral observation, neural activation and self-reporting. **a**, Raposo et al.[10] examined age differences in responses to financial incentives to increase walking as measured by accelerometers. In one condition, participants were told that they could earn money for charities by increasing daily step counts. Older people significantly increased walking. Younger people did not. Shaded regions represent ±95% confidence intervals. Copyright © 2021 by American Psychological Association. Reproduced by permission from ref. [10]. **b**, Hubbard et al.[12] found a linear association of age with general benevolence as indexed by neural activation. Participants observed monetary transfers to themselves or to charities, while activity in reward regions of the brain was monitored with functional MRI. Prosociality was operationalized as the difference in neural activity between the charity and personal-gain conditions. Copyright © 2016 by American Psychological Association. Reproduced by permission from ref. [12]. **c**, Cutler et al.[1] found that older adults reported donating more to charities than younger adults. Image reproduced with permission from ref. [1], Springer Nature America, Inc.

older — but not younger — adults increased step counts (measured by accelerometers) when earnings were directed to charities[10] (Fig. 1a). In another recent study by Cutler et al.[11] that used computational reinforcement learning models, the authors found that, relative to younger adults, older adults learned more efficiently when rewards were earned for another person instead of themselves. One especially compelling set of findings based on neuroimaging has revealed greater neural activation in reward centers in the brain in older, as compared to younger, adults when observing windfalls being given to charities[12] (Fig. 1b).

As intriguing as this evidence is, much of the extant research on aging and prosociality is based on relatively small samples drawn from high-income countries, which leaves unanswered questions about the broad generalizability of its findings. Hence, the size and the diversity of the global sample studied by Cutler et al.[1] makes a major contribution to the literature. The authors assessed age differences in prosocial concerns with two self-reporting measures, one focused on social distancing during the pandemic and another based on a modified dictator game in which participants answered a hypothetical question about how much of a windfall (operationalized as receipt of the median daily wage for participants' respective countries) they would allocate to a charity. The charities were described as aid organizations intended to provide medical support for COVID-19 in the participants' own countries or countries around the world. Thus, in addition to overall giving, the paradigm provided a way to examine the extent to which contributions reflected national versus international giving.

In this study[1], Cutler and colleagues find broad evidence that older adults display greater concern for others than their younger counterparts, and these findings hold after controlling for a range of background variables including wealth, risk of contracting and dying from COVID-19, self-reported physical health, and national prevalence of COVID-19 at the time of the data collections. Specifically, the authors find that older adults socially distanced and donated to charities more than younger adults (Fig. 1c). Importantly, their findings also revealed that contributions made by older adults favored national over international charities. The authors conclude that although older adults are more prosocial, they have stronger in-group preferences. Because social distancing benefits both the self and others, we argue that the charitable donation measure is a more valid measure of prosociality and limit our commentary to this finding.

The findings hold both theoretical and practical importance that merits consideration of alternative explanations and additional investigation. In the authors' interpretation, based on a factor that combined survey responses to questions about national identities, narcissism and political ideology, older people were more conservative and had stronger national identities. The authors acknowledge that findings may reflect cohort effects, and we expect that cohort effects may be especially likely in this case given that older people today were born and raised in worlds with far fewer global connections than cohorts born more recently. People are more likely to feel affectively positive toward diverse cultures after repeated exposure to them than when such exposure is limited. A widely replicated psychological phenomenon, known as the 'mere exposure' effect[13], shows that repeated un-reinforced exposure to stimuli promotes liking for the stimuli[14]. From an evolutionary perspective, exposure (that is, familiarity) signals safety whereas novelty primes caution.

For accurate interpretation, it is important to distinguish preference from bias. The former is associated with approach and related to positive affect, whereas the latter connotes negative affect and unfair treatment. From a developmental perspective, age-related constraints on perceived time horizons heighten the priority placed on emotionally meaningful goals and activities. Because familiarity breeds liking, over the course of a lifetime, helping well-known charities or loved ones is likely to become especially meaningful. Rather than actively disregarding the well-being of unfamiliar people and places (avoidance), the passage of time probably heightens concern for well-known loved ones and places (approach).

Regardless of the reasons, from a practical perspective, in a world in which older people collectively hold massive wealth, it is important to understand how and why they direct their resources. It is good news that older adults are inclined to make charitable contributions, but — to the extent that their wealth is solely directed to kin or provincial concerns and away from global challenges such as climate change, poverty and global health — there may be negative consequences. However, if the in-group focus of their giving does not reflect bias and older adults instead selectively invest in emotionally meaningful people, places and causes, then increasing the meaningfulness of global concerns may enhance giving. ❐

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Competing interests

The authors declare they have no competing interests.