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Attitudes Towards Aging - an Explanatory Mechanism for the Relationship Between Perceived Age Discrimination and Successful Aging

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Abstract

Purpose: The aim of the present study is to investigate how age discrimination affects successful aging, but also whether internalizing negative attitudes towards old age explains the relationship between the two variables.

Materials and Methods: The study involved 391 people aged between 35 and 90, 315 women and 76 men. The tools used were The Fraboni Scale of Ageism, Attitudes to Aging Questionnaire, and Successful Aging Inventory.

Outcomes: According to the results, there was no statistically significant correlation between perceptions of age discrimination and successful aging. Also, there was a statistically significant negative correlation between negative attitudes towards aging and successful aging. Finally, there was a statistically significant positive correlation between the perception of age discrimination and negative attitudes towards aging.

Conclusions: The approach in the present study allows for a deeper understanding of subjective perceptions of one's own aging. The study investigated two variables that may have relevance in understanding subjective successful aging - perceived age discrimination and negative attitudes toward aging. The results allow us to better understand the antecedents of successful aging and their importance.

Keywords: successful aging; age discrimination; negative attitudes towards aging; life course; personal attitudes

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INTRODUCTION

In the context of an accelerating pace of population aging, seen in an increase in both the length of life and the proportion of older people, health and social systems face the growing challenge of managing these changes in population distribution appropriately. According to the World Health Organization, by 2050, the proportion of people over 60 will double to 22% and the number of people over 80 will triple to 426 million by 2050 (World Health Organization, 2022). Moreover, while this trend has so far been observed mainly in developed countries, the WHO warns that it will now be more pronounced in underdeveloped and developing countries (WHO, 2022), thus putting additional pressure on already vulnerable systems.

As life expectancy increases, expectations of the quality of years added increase in turn, so the field of gerontology is increasingly concerned with identifying ways in which this goal can be achieved (Vaillant & Mukamal, 2001). As a result of these attempts, the term 'successful aging' has emerged. Successful aging is a concept adopted in the social sciences as an alternative to 'healthy aging', used more in the medical sciences, which aims to capture the physiological and psychological characteristics of successful aging (Rowe & Kahn, 1997), but also to set a benchmark for identifying those factors that need to be addressed by the systems responsible for facilitating it. Interest in successful aging should be all the greater as studies show that poor quality of life for older people has a negative social impact, so that a longer life, while reflecting societal development, is not a sufficient goal (WHO, 2022). Beyond individual factors that may influence the aging process, such as resilience, depression or level of physical functioning (Jeste et al., 2013), attention is now turning to societal factors and the responsibility of each of us in building a society conducive to satisfying aging (Rowe & Kahn, 2015). Beyond the predominantly negative discourse about the effects of the growing older population, such as economic pressure and the inability of the younger population to support the older population (Olshansky et al., 2016), it is important to bear in mind that aging is not necessarily a period of stagnation and that the older population has an important social role, and can become more generative the better it gets through old age and the better this potential is received and used (Rowe & Kahn, 2015).

The conceptualization of successful aging has been the subject of intense debate ever since the concept first emerged. It became established particularly after Rowe and Kahn's (1997) conceptualization, and included three main categories of characteristics: avoidance of disability and illness, a high level of cognitive and physical functioning, and active involvement in life (which in turn includes two elements: maintaining interpersonal relationships and involvement in productive activities such as volunteering). In other words, in order for a person to be said to have aged successfully, they need to be as functionally unaffected as possible by physical or cognitive impairments and remain as active as possible. While not a fundamentally flawed approach, criticisms have highlighted, on the one hand, its incompleteness, e.g. excluding entirely the subjective perception of quality of life of older people, and, on the other hand, its discriminatory nature by focusing too much on medical aspects of functioning. In fact, research results have shown that only a very small percentage of the elderly population meets these criteria, suggesting a conceptualization that sets unrealistic or intangible standards for the vast majority of the elderly population. Moreover, the absence of illness or disability (a central component of Rowe and Kahn's conceptualization of successful aging) is not a significant predictor of life satisfaction or well-being in old age (Romo et al., 2013; Strawbridge et al., 2002). Indeed, the majority of participants believe they have aged successfully despite having a disability or chronic condition (Montross et al., 2006). If a person, for reasons beyond his or her control, such as social inequality, genetic vulnerability, hazard, or others, becomes profoundly functionally impaired in old age, he or she will, according to Rowe and Kahn's model, be excluded from the category of those who have aged successfully and stigmatized accordingly (Calasanti & King, 2021).

In an attempt to refine previous conceptualizations, Pruchno et al. (2010) proposed a two-dimensional model of successful aging that captures both its objective and subjective nature. The authors showed that successful aging consists of two dimensions: (1) objective success, in the form of high functional abilities, absence or reduced presence of pain and illness, and (2) subjective success, assessed by the individual person. In this model, the subjectivism of assessing the success of the aging process leaves room for personal perspectives on what successful aging means, thus bypassing conceptual debates on the subject (Pruchno et al., 2010).

Longitudinal studies highlight the heterogeneity of the successful aging process, revealing not only its different components, as most models do, but also the different routes of these components. For example, Hsu et al. (2012) identified four groups differentiated by trajectories of different dimensions of successful aging. The dimensions considered were the presence of chronic disease, physical functioning difficulties, depressive symptoms, social support, participation or involvement in social life, and economic satisfaction. The majority group was made up of people with a lower increase in chronic illness and physical difficulties, a low level that remains relatively low over time, a high and slightly increasing level of social support, a lower decrease in social involvement and a high and stable level of economic satisfaction. Although the other groups identified have been so named due to different trajectories on some dimensions, they are not fundamentally excluded from the category of successful aging. For example, two groups stood out with a marked increase in the frequency of chronic diseases, depressive symptoms and physical difficulties. They are distinguished from the group that fits neatly into the multidimensional model of successful aging by the fact that they tend to be more woman, older and less educated. These results highlight, on the one hand, a momentarily natural decline in functionality associated with advancing age, but also possible antecedents that can be taken into account in interventions (educational level and gender, with the need to explore the reasons, most likely social, why female gender is more likely to be a risk factor) (Hsu et al., 2012).

The diversity of these conceptualizations, however, reflects the multidimensionality and complexity of the concept. In an attempt to capture this complexity Troutman et al. (2011) set out to construct a tool based on a conceptual framework that takes into account the most relevant components of successful aging, as highlighted by models in the literature, while taking into account people's subjective perspective on their well-being and thus including those whose physical or cognitive performance has deteriorated with advancing age. Thus, from the authors' perspective, successful aging involves the effective use of coping mechanisms and available resources to adapt to environmental demands. These coping mechanisms will manifest themselves in four domains: functional performance, intrapsychic factors, spirituality and gero-transcendence. *Functional performance* refers to the use of per-

sonal capacity for awareness and decision-making to respond to the physical and cognitive decline naturally associated with aging. We thus find that, in contrast to Rowe and Kahn's predominantly medical model, in this conceptualization what matters more than the lack of functional deficits is how the person manages to mobilize their available resources to adapt to them. *Intrapsychic factors* include those individual characteristics (such as resilience) that protect the person from the negative consequences of aging and help them to deal more effectively with the problems they face. In a rather complementary manner to the conceptualizations to date, Troutman et al. have added two other components: *spirituality*, referring to the perspective and behaviors associated with belief in or relationship with a higher entity, and *gero-transcendence*, which involves a change in world and life view from a materialistic and rational one to a rather existential one (Troutman et al., 2011).

One possible mechanism by which social attitudes can affect successful aging is the internalization of social attitudes towards aging and the adoption of negative self-perceptions in old age. Although studies to date have not effectively investigated the relationship between discriminatory attitudes towards old age and attitudes towards one's own old age, there is a slight conceptual overlap in the literature between the two, which may indicate the implicit assumption that they are not only related but are one and the same. However, we believe that although one's attitudes towards oneself as an older person and towards old age in general might coincide, they do not overlap entirely. Similar to other negative social attitudes (e.g. gender, physical attractiveness or ethnicity discrimination), age discrimination can lead to internalizing negative attitudes and attributing them to the self (Carrard et al., 2019). For example, Bergman et al. (2013) showed that in cultures where individuals perceive low levels of age discrimination, fewer negative attitudes towards aging develop (i.e. lower levels of age anxiety and concern about one's own appearance in old age). Further, a negative attitude towards one's own abilities and characteristics in old age can affect the (psychological, social) functioning of older people and thus successful aging. Indeed, research results have shown that negative self-perceptions as an older person are associated with poorer physical and psychological functioning (Wurm & Benyamini, 2014). Also, people who predominantly associate their own aging with physical and social decline have lower

life expectancy compared to those who develop positive attitudes (Levy et al., 2002). In other words, attitudes towards how a person ages can affect their quality of life in old age or successful aging.

Thus, the aim of the present study is to investigate how age discrimination affects successful aging, but also whether internalizing negative attitudes towards old age explains the relationship between the two variables. The following hypothesis will thus be tested: the perception of age discrimination leads to negative attitudes towards aging, and these attitudes affect the subjective perception of aging in older people.

MATERIALS AND METHODS

The study involved 391 people aged between 35 and 90, with a mean of 58.53 and a standard deviation of 11.32. Of these, 315 (80.6%) were women and 76 (19.4%) were men; 251 (64.2%) were married, 81 (20.7%) were divorced, 43 (11%) were unmarried and 16 (4.1%) were widowed. 6 (1.5%) had completed primary school, 86 (22%) had completed secondary school and 299 (76.5%) had a higher education. 146 (37.3%) were from rural areas and 245 (62.7%) were from urban areas. All participants consented to participate in the study.

Perceptions of age discrimination were measured with the Fraboni Scale of Ageism (FSA; Fraboni et al. 1990). The items have a scale from 1 to 5, with 1 meaning total disagreement and 5 meaning total agreement.

Negative attitudes toward aging were measured with the *Attitudes to Aging Questionnaire (AAQ-24;* Laidlaw, Power, Schmidt & WHOQOL-OLD Group, 2007). The items have a scale from 1 to 5, with 1 meaning total disagreement and 5 meaning total agreement.

Successful aging was measured with the *Successful Aging Inventory* (Troutman, Nies, Small, & Bates, 2011). The scale contains 20 items on a scale of 0 to 4, with 0 meaning almost never/strongly disagree and 4 meaning almost always/strongly agree.

OUTCOMES

The 391 participants had scores ranging from a minimum of 1 to a maximum of 4 on perceptions of age discrimination, with a mean of 2.09 and a standard deviation of .54, from a minimum of 1 to a maximum of 4.88 on negative attitudes toward aging, with a mean of 2.40 and a standard deviation of .85, and from a minimum of 3.10 to a maximum of 5 on successful aging,

with a mean of 4.16 and a standard deviation of .41. The results are shown in Table 1.

Table 1. Descriptive analysis of the data

| | Minimum | Maximum | Medium | Standard deviation |
|----------------------------------|---------|---------|--------|--------------------|
| Perception of age discrimination | 1.00 | 4.00 | 2.09 | .54 |
| Negative attitudes towards aging | 1.00 | 4.88 | 2.40 | .85 |
| Aging successfully | 3.10 | 5.00 | 4.17 | .41 |

Zero correlations between the variables included in the study were analyzed. There was no statistically significant correlation between perception of age discrimination and successful aging. There was a statistically significant positive correlation between perception of age discrimination and negative attitudes toward aging, with an $r = .11$ and a $p < .05$. There was a statistically significant negative correlation between negative attitudes toward aging and successful aging, with an $r = -.12$ and a $p < .05$.

Table 2. Correlations between variables

| | 1 | 2 | 3 |
|-------------------------------------|-------|-------|-------|
| 1. Perception of age discrimination | (.71) | | |
| 2. Negative attitudes towards aging | .11* | (.85) | |
| 3. Aging successfully | -.03 | -.12* | (.79) |

As there were no significant correlations between all three variables, the mediation analysis could not be tested as not all the conditions for mediation analysis were met. Therefore, a number of possible moderating effects of certain categorical variables included in the study were tested below: gender, marital status, education and background.

The correlation between perception of age discrimination and successful aging was insignificant for both men ($r = .07, p = .53$) and women ($r = -.06, p = .31$). The correlation between perception of age discrimination and successful aging was insignificant for married ($r = -.01, p = .94$), unmarried ($r = .03, p = .84$), and divorced ($r = -.02, p = .88$) individuals. There was a statistically significant negative correlation between perceived age discrimination and successful aging for widowed persons ($r = -.50, p = .05$). The correlation between perception of age discrimination and successful aging was

insignificant for elementary school graduates ($r = -.48$, $p = .34$), high school graduates ($r = -.11$, $p = .32$), and college graduates ($r = -.01$, $p = .90$). The correlation between perception of age discrimination and successful aging was insignificant for both rural ($r = -.01$, $p = .95$) and urban ($r = -.05$, $p = .41$) individuals.

The correlation between negative attitudes toward aging and successful aging was insignificant for women ($r = -.08$, $p = .14$). There was a statistically significant negative correlation between negative attitudes toward aging and successful aging for men ($r = -.29$, $p = .01$).

The correlation between negative attitudes toward aging and successful aging was insignificant for married persons ($r = -.07$, $p = .24$), unmarried persons ($r = -.25$, $p = .11$), widowed persons ($r = .25$, $p = .35$), and divorced persons ($r = -.21$, $p = .06$). The correlation between negative attitudes toward aging and successful aging was insignificant for high school graduates ($r = -.60$, $p = .20$) and high school graduates ($r = -.02$, $p = .85$). There was a negative, statistically significant correlation between negative attitudes toward aging and successful aging for individuals with a college degree ($r = -.15$, $p = .01$).

The correlation between negative attitudes toward aging and successful aging was insignificant for rural individuals ($r = .08$, $p = .31$). There was a statistically significant negative correlation between negative attitudes towards aging and successful aging for people in urban areas ($r = -.23$, $p < .01$).

CONCLUSIONS

Successful aging has become a major topic of interest in the international scientific literature due to the accelerated aging of the population. This concept, consisting of three components (avoidance of disability and illness, a high level of cognitive and physical functioning, and active involvement in social relationships and personal or professional projects), refers to older people's subjective perception of their level of physical and cognitive functioning and activity level (Rowe & Kahn, 1997). Existing research has identified a number of factors that may influence successful aging. A major category of antecedents of successful aging are cumulative stressors over the life course (traumatic events, narrowing of the social circle, physical ailments), but their impact may be mitigated by external resources (financial, social, access to health services and technology) or proactive adaptations that older people can

make to adjust to the new life stage. In addition to this set of factors, research has also identified some important demographic characteristics, such as educational attainment (more than 12 years of education usually aids the aging process), ethnicity (Caucasians having a more favorable pathway) and high economic status (Strawbridge et al., 1996).

A possible factor relevant to the subjective perception of successful aging that has been overlooked in the literature is ageism, referred to in English as "ageism", which includes generalized attitudinal and thought patterns (stereotypes and prejudices) and behaviors towards certain categories of people based on their age. Existing studies already support negative consequences of age discrimination, such as health problems, devaluing attitudes to their lives, lack of employment opportunities, denial of access to adequate health services, decreased longevity, reduced quality of life, risky health behaviors, poor social relationships, illness, mental illness and cognitive decline (Chang et al., 2020). Discrimination against this social group has also been associated with the presence of disease, mortality, mental health problems, cognitive functioning, quality of life, and health behaviors (Hu et al., 2021). According to existing theories, there is a possibility that perceptions of age discrimination affect successful aging by internalizing negative attitudes toward aging.

The objective of the present study was to test the mediating role of negative attitudes toward aging in the relationship between perceived age discrimination and successful aging. To date, existing research has not effectively investigated the relationship between discriminatory attitudes towards old age and attitudes towards one's own old age. According to the results, there was no statistically significant correlation between perceptions of age discrimination and successful aging. This result is not in line with already existing data suggesting significant relationships between discrimination and depressive symptoms, general mental health (Allen et al., 2022), anxiety symptoms (Freeman et al., 2016), feelings of loneliness and isolation (McHugh, 2003). It is possible that in the case of aging, individuals do not perceive elder discrimination as a barrier to successful aging, but rather other factors already identified in the literature, such as health challenges or lack of resources.

There was a statistically significant negative correlation between negative attitudes towards aging and successful aging. Therefore, these personal attitudes seem

to play a more important role in successful aging and not the social factors initially proposed (in this case, the perception of age discrimination). Finally, there was a statistically significant positive correlation between the perception of age discrimination and negative attitudes towards aging. This correlation supports the results of previous studies, in which age discrimination has been associated with negative attitudes toward aging (i.e., lower levels of aging anxiety and concern about one's appearance in old age) (Bergman et al., 2013). Similar studies suggest that discrimination may lead to the internalization of negative attitudes and their attribution to the self (Carrard et al., 2019). It should be noted that these correlations identified in the present study were low.

The hypotheses of the study were not supported. There was no negative association between perception of age discrimination and successful aging, therefore we could not test the second hypothesis that negative attitudes towards aging mediate the negative relationship between perception of age discrimination and successful aging. However, a number of possible moderating effects of categorical variables were tested. The correlation between perception of age discrimination and successful aging was insignificant for married people, unmarried people and divorced people. There was a statistically significant negative correlation between perceived age discrimination and successful aging for widowed people. This result suggests that this group of people may be vulnerable to the negative effects of age discrimination, but the present study did not allow us to identify some explanatory mechanisms for this relationship.

The correlation between negative attitudes toward aging and successful aging was insignificant for women. There was a statistically significant negative correlation between negative attitudes towards aging and successful aging for men. The correlation between negative attitudes towards aging and successful aging was insignificant for people who had graduated from secondary school and for people who had graduated from high school. There was a statistically significant negative correlation between negative attitudes towards aging and successful aging for people with a higher education. The correlation between negative attitudes towards aging and successful aging was insignificant for rural people. There was a statistically significant negative correlation between negative attitudes towards aging and successful aging for urban people.

This study has a number of theoretical and practical implications. First, successful aging has been measured in a subjective manner. As noted in the introductory section, most research has studied successful aging from a medical or functional perspective. The approach in the present study allows for a deeper understanding of subjective perceptions of one's own aging. Second, the study investigated two variables that may have relevance in understanding subjective successful aging - perceived age discrimination and negative attitudes toward aging. The results of the study suggest that attitudes about aging are a factor associated with successful aging, only that the association is quite low. Perceived age discrimination does not correlate with successful aging. These results allow us to better understand the antecedents of successful aging and their importance. Finally, the study identified some moderators in the relationship between the two possible antecedents of successful aging, highlighting specific situations in which they might be relevant. The perception of age discrimination is negatively associated with successful aging only in widowed people. Negative attitudes towards aging are negatively associated with successful aging only among men, the tertiary educated and urban dwellers.

This study also has a number of practical implications. The study suggests that the two factors considered (perceptions of age discrimination and negative attitudes towards aging) are generally not strongly associated with successful aging. However, moderation analyses show that in specific situations these two factors are associated with the central variable of the present research. Therefore, this study provides valuable information for psychology practice as it allows us to identify vulnerable groups for whom these two antecedents might have a greater impact. For example, the data suggest that, for widowed people, perceptions of age discrimination have a medium negative association with successful aging. These individuals may need additional psychological support in old age to enjoy a successful old age. As for negative attitudes towards aging, they seem to influence successful aging only for men, for people with higher education and for urban people. Therefore, psychologists could design interventions that target these attitudes for people who fall into these categories, allowing for tailoring of interventions.

The present research has a number of limitations, which can be addressed in future studies. First, the study was cross-sectional, with data collected at a

single time interval. Therefore, we cannot confidently draw causal conclusions. It is possible that the relationships between the variables make sense in both directions. Future studies could investigate relationships between similar variables over longer periods of time. Second, the data were collected based on self-report questionnaires, so there may be measurement bias and the study may be vulnerable to common method error. Although one of the advantages of the study is the subjective, hence self-reported, analysis of successful aging, this could also be a limitation. Finally, the study highlighted some specific situations where the research variables had significant correlations. However, due to the exploratory nature of these moderation analyses, some explanation for these relationships could not be

identified. Future studies could test some explanations for the fact that perceptions of age discrimination are negatively associated with successful aging only in widowed people and for the fact that negative attitudes towards aging are negatively associated with successful aging only in men, college-educated and urban people.

Conflict of interest statement

I undersign and certificate that I do not have any financial or personal relationships that might bias the content of this work.

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